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The Aga Khan Award for Architecture

CLIENT'S RECORD

CONFIDENTIAL

I. IDENTIFICATION

Project Title: East Wahdat Upgrading Programme

Street Address:

City: Amman Country: Jordan

Telephone: Telex:

II. PERSONS RESPONSIBLE

A. Architect Urban Development Department

Mailing Address: P.O. Box 927198

City: Amman Country: Jordan

Telephone: 899361 Telex: 22249 UDDJO

B. Client Urban Development Department

Mailing Address: P.O. Box 927198

City: Amman Country: Jordan

Telephone: 899361 Telex: 22249 UDDJO

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

Name: Halcrow Fox & Associates/Jouzy & Partners

Mailing Address: Urban Development Department , P.O. BOX 927198

City: Amman Country: Jordan

Telephone: Telex:

D. Contractor China State Construction

Mailing Address: P.O. Box 19051

City: Amman Country: Jordan

Telephone: 665461 Telex: 23308 CSCEC JO

E. Master Craftsman

Mailing Address:

City: Country:

Telephone: Telex:

(Please continue overleaf if necessary)

East Wahdat Upgrading Programme, Amman, Jordan

III. USE

A. Specify type(s) of Use: Residential (major)/Commercial (minor)

B. User/Occupant

1. Occupation/Profession Low income families - Full range of occupancy

2. Income Level (check one) ____ High ____ Medium __/__ Low ____ Mixed

C. Specify any change(s) between planned and actual use: None

IV. PROJECT TIMETABLE

(Please specify year and month)

A. Design: Commencement 9/80 Completion 8/81

B. Construction: Commencement 9/82 Completion 6/84

C. Date of Project Occupancy Not applicable here as beneficiaries are existing residents on the site.

V. PROJECT ECONOMICS *

(Please specify amount, currency and date of transaction)

	Amount	Currency	Date
A. Total Initial Budget	1 635 000	JD	1980
B. Total Actual Costs	1 513 000	JD	1987
C. Actual Cost per sq. m. (Residential only)	23	JD	1987
D. Analysis of Costs			
1. Land	633 000	JD	1987
2. Infrastructure	406 000	JD	1987
3. Superstructure	220 000	JD	1987
4. Design Supervision	48 000	JD	1987
5. Professional Fees (Management fees & Interest)	206 000	JD	1987

E. Cost Comparison

1. Please indicate how the costs of this project relate to typical building costs in the country (check one):

____ Average ____ Above Average __/__ Below Average

F. Sources of Funds

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

21% Private Sources 79% Public Sources

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

____ local 70% national 30% international sources

(Please continue overleaf if necessary) * Figures quoted above do not include costs of schools and community buildings & commercial facilities except that related to land.

East Wahdat Upgrading Programme, Amman, Jordan

VI. CONSTRUCTION DETAILS

A. Site and Building Area (please indicate in square metres)

1. Total Site Area: 9.1 hectares
2. Total Ground Floor Area: No superstructure is provided
3. Total Combined Floor Area (including basement(s), ground floor(s) and all upper floors): /

B. Construction and Technology

1. Describe the structural system and the basic method of construction

Infrastructure - minimum cost system meeting residents basic needs and minimizing disruption of existing settlement pattern and the need for dismantling & relocation.
Superstructure - Improvement and/or extension of existing buildings undertaken by beneficiaries on a self help basis utilizing building material loans & technical assi provided by the UDD.

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

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)

Materials Used for Infrastructure Components

Roads	: 15-20 cm	base course
	5 cm	asphalt mix
Footpaths	: 10 cm	base course
	7 cm	concrete
Drainage system	: concrete pipes 400-600mm except on steep slopes where ductile cast iron pipes are used.	
Sewerage system	: "	"
Water supply	: galvanised steel pipes ranging from 3" ft. mains supply to ½ ft. for house connection.	

Note:

* All materials are locally produced except ductile CI pipes.

D. Type of labour force (please indicate percentage)

26% Skilled Workers 74% Unskilled Workers

E. Origin of labour force

/ Domestic _____ Foreign

(Please continue overleaf if necessary)

VII. GENERAL GEOGRAPHY AND CLIMATE

A. Please describe the local geographic characteristics:

The project site covers an area of approximately 8 hectares. It is located towards the south-eastern edge of the built up area of Amman, close to Al Awda commercial area, and to the Wahdat Refugee Camp. The site lies with an undulating valley formation with discending slopes of up to 20% running from north to sowth-west across the site.

B. Please describe the local climatic characteristics:

Prevailing climatic conditions are those of typical mediterranean climate; hot dry summer and cold wet winter with two short transitional periods in between. Mean daily maximum temperature averages 32 d.c. in summer and 13 d.c. in winter.

VIII. EVOLUTION OF DESIGN CONCEPTS

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

(See attached Annex A).

Please continue overleaf if necessary

VIII. Evolution of Design Concepts

Population growth in Jordan, swollen by immigrants from Palestine in 1948 and occupied territories of the West Bank in 1967, has been extremely high in recent decades. Most of the growth has taken place in the Amman Urban region, which had an average annual growth rate of around 6% up to 1980.

Rapid expansion of the urban areas of Jordan, particularly of Amman, brought about a growing shortage of housing and infrastructure amenities, especially for lower income groups, and by 1980 it was estimated that about 25% of the Amman region urban population lived in uncontrolled housing and squatter settlements, in which insecurity of tenure, overcrowding, limited infrastructure/public services and poor housing/environmental conditions were the main problems.

High urban land prices, coupled with restrictive planning and building regulations and inadequate access to financial markets, combined to deny the lower income urban population access to affordable shelter. The existing public sector housing programme was unable to cope with the demand amongst lower income groups, while smaller private sector construction activity was entirely directed towards the middle and upper income groups.

The 1970's saw a steady evolution of Government policy in the urban sector and a growing concern to find solutions to problems of urban poverty. In 1979 the Government commissioned a study to find low cost replicable solutions for the provision of infrastructure and shelter in urban areas. The steering committee set up to supervise the study, included representatives of all public agencies. Government eventually adopted recommendations of this steering committee. These formed the basis for formulation of a comprehensive urban development strategy, and initiation of the first Jordan Urban Development Project (UDP1), in which the effectiveness of upgrading and sites and service projects as means of meeting the pressing need for low cost urban shelter was to be demonstrated. In 1980 a special agency, the Urban Development Department (UDD), was set up within the Municipality of Amman, to undertake implementation of the UDP1 project.

The primary objective of UDP1 was to provide shelter and related infrastructure and community facilities to lower income urban households at affordable prices with a minimum of subsidy to ensure project replicability. The project was designed to provide a minimum, acceptable standard of shelter and infrastructure, leaving responsibility for further refinement and expansion of housing units to individual beneficiaries in accordance with their needs and financial constraints. Building materials and home improvement loans were provided for under the loan for this

purpose. In addition, to ensure improved productivity, and thus in turn the willingness and ability of residents to pay for and improve project areas on a self help basis, a programme of small business loans and vocational/commercial training was also incorporated in the project. The project was made up of three sites and services areas and four proposed upgrading areas. East Wahdat was one of these.

In 1982, prior to inception of the project works at East Wahdat, there were approximately 500 families living in some of the most depressed and blighted conditions in the Amman region. Most houses were shanty structures, built of corrugated metal sheets, which also in some cases formed flimsy plot enclosures.

As all of the existing 4,000 inhabitants of East Wahdat were illegal squatters, existing regulations did not allow the Municipality of Amman to extend infrastructure and public utilities to the area. As a result there were only a few paved roads along the boundaries of the site.

The area also had no water or electricity supply. Water had to be bought and carried from adjacent areas, and then stored in barrels. There was also no drainage or sewer system in the area, and open sewers discharged effluent from other adjacent established areas, including the Wahdat refugee camp, into the site. In the rainy winter months the situation deteriorated further. The lack of drainage resulted in flooding of many parts of the site, as a result of which many roads and paths became impossible. Poor environmental conditions and inadequate public utilities provision were further compounded by overcrowded living conditions. The average household size was seven persons, of which half were children below 15 years of age, living at an average occupancy of more than four persons per room.

As a first move to developing the project, UDD established a field-office in the site. Land surveys and Vital socio economic data had to be gathered through painstaking interviews with a population fearful of eviction. The greatest effort at this stage was conducted by the UDD social workers. Each family had to be carefully interviewed to identify all problems and to establish an accurate income profile of the area.

Special regulations had also to be drawn up with municipal legislators to allow a reduction in land allotments, and an easing of building restrictions in order to facilitate an affordable, self- help approach to building construction.

According to the needs of the population, flexible upgrading development proposals were designed to fit existing land plots appropriated according to individual needs and income. Such plots varied from a minimum of 60 square meters to a maximum of about 200 square meters.

Upgrading of the site involved consideration of several factors:

a. The proposed development plan was simple and incorporated prevailing Arab/Muslim customs and traditions, especially in terms of the definition of residential space;
b. Consultation with the community was undertaken at all key stages in the project development process;
c. Each plot was provided with a sanitary core and front boundary wall, and was connected to water supply, electricity and sewers;
d. Roads and footpaths were built to give easy access to each plot;
e. The price of each plot, included the cost of all infrastructure facilities as well as the cost of land, and was carefully controlled to ensure it was easily affordable by all residents;
f. The project not only provided adequate land for housing, but also for other necessary public utilities, such as a womens' training centre, health clinic, shopping facilities and a social centre;
g. The project not only organized the sub-division of land and the provision of basic infrastructure, but it also provided advice and financial assistance to residents wishing to extend or improve their dwellings;
h. Manpower development and income earning opportunities were enhanced by the introduction of training programmes for under and unemployed residents. Special attention was paid to an increase in womens' participation in economic activity.

Once the people of Wahdat realised they had a chance to own their homes and improve their living conditions, they began to work doubly hard. Many found better paying means of livelihood, and were assisted in this partly by the vocational training programme. Wives sold any gold or jewelry they had left from their dowries. Families borrowed from relatives, friends, and employers, and pooled their resources to build and improve their dwellings.

Upgrading of East Wahdat has been accomplished rapidly, with the minimum of disruption and disturbance. Residents were not removed to make way for construction works, but instead developed a unique method by which they accomplished home improvement.

With the help of neighbors, existing shanty dwellings were removed and carried to the corner of the plot as a temporary shelter. The resulting vacant space was used to build the first room of a new dwelling. The family then moved into this new structure dismantled the original shanty, and then completed the rest of the house.

East Wahdat upgrading was completed in mid 1984. Since then, most of Wahdat 524 family population have either rebuilt or improved their dwellings benefitting from both the technical assistance provided by the UDD and also of the building material loans.

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.)

By far, the most important achievement of the project is the fact that it had made it possible for squatters to own the land that they have illegally occupied and also to build and improve their existing dwellings and live in dignity and self respect without fearing the threat of eviction; a dream which would not have materialised without this project.

Other important aspects include:-

a. Impact on Welfare
Important improvements took place place in the physical environment, general well being and health of households according to a monitoring survey implemented in 1985, after about four years of upgrading. The tangible improvement in health, reflected in a sharp drop in infant mortality rate, from 68 per thousand in 1981 to 55 per thousand in 1985 is an important indicator of the project's success.

b. Maintenance of Islamic/Arabic Traditions & Lifestyle
The design of new dwellings has given greater emphasis to the preservation of local Arab and Islamic way of life. Introversion and privacy were major considerations in the philosophy of the design. A single house has a separate entrance, a courtyard, and surrounded by an external wall.

c. Income Generation
The project has successfully included a number of income generating components such as, vocational training and commercial facilities. The use of bazzars to sell handcraft materials is another source, although intermitent, of income generation.

d. Self-help
Once the problem of land tenure was secured and squatters became owners of the land they live on, they were encouraged to improve their homes, and action they were eager to take once they are no longer threatened by eviction.

Such reaction has resulted in a highly vivid construction activity on this site, over 75 percent of the plots have construction dated exclusively from after 1981 registration survey.

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

The client and users are both extremely happy with the outcome of the project. The client satisfaction is clearly manifested by the extension of the approach and concepts already developed to new locations and on a nation-wide scale.
The satisfaction of the client is also clear from the strong participation and interaction of beneficiaries with the project resulting in a very speedy site development and improvement.

Please continue overleaf if necessary

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.

   1. Health and Population in squatter areas of Amman. A reassessment after four years of upgrading.

3. Please indicate other sources of information on the project, e.g. publications, contacts, etc.

   - Jordan Urban Development Project
     World Bank Staff Appraisal Report, June 1980

   - Jordan Urban Project/Final Report, October 1979
     by Halcrow Fox & Associates/Jouzy & Partners.

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) Ghassan Jadallah Date January 28, 1988

All Materials should be forwarded to:

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