

#### **ISMAILIA DEVELOPMENT PROJECTS**

This paper briefly summaries the approach adopted by the Consultants and highlights the main development recommendations and proposals. Throughout the paper reference to Project Reports are noted - these do not form part of the submission for an award but are available for reference if required. The Urban Projects Manual forms part of the submission.

## **ISMAILIA DEVELOPMENT PROJECTS**

### **Introduction**

Total global population in 1985 was estimated to be 4.8 billion. Trends suggest that this figure will increase to some 6.1 billion by 2000 and 8.2 billion by 2025. More than 60 per cent of this increase will occur in developing regions with population levels in 2000 equal to 1985 total global figures. Further, cities in these regions will, on present trends, absorb an extra 0.75 billion people, and Africa, East and South Asia will absorb over 70 per cent of the total increase and over 55 per cent of the urban population by 2000.

The ability of governments to manage and accommodate this scale of growth will be limited by fairly low rates of economic growth, by critical environmental concerns and resource constraints and the effect these will have on achieving sustainable and affordable development in the long-term.

Rapid growth of urban populations is outstripping the supply of land, shelter, infrastructure and services; the creation of job opportunities; and the institutional and technical capacity of public agencies. It is increasingly acknowledged that conventional architectural solutions, urban policies and investment programmes, narrowly focussed in specific sectors, have failed to: significantly benefit local problems; to contribute to economic growth; to strengthen institutional capacity; or to benefit the majority of the urban populations, namely, low to moderate income groups.

These failures are manifest in many forms:

- ineffective mechanisms for mobilizing local resources and recovering costs
- overstressed municipal management
- institutional weaknesses, inadequate staff resources
- restricted access to land for the urban poor
- inadequately developed and inappropriate urban information systems and standards
- little appreciation of infrastructure and maintenance requirements

Global initiatives on a number of levels are being called for. The New Agenda for Human Settlements, based on new perceptions of development issues and priorities since the UNCHS (Habitat) Conference of 1976, calls for enabling strategies, decentralisation of powers to local public agencies, and urban management and development policies and programmes to be developed and implemented. In this respect, innovative programmes designed to harness the resources of the private sector to establish priorities within and across sectors enabling inter-sectoral choices at the local level and strengthening of manpower resources, are high priorities.

To implement these initiatives requires a greater appreciation of the complex range of issues involved and a greater commitment by all parties with an interest in the development process - politicians, government officials at all levels, multilateral and bilateral agencies, the private sector and academic and training institutions. The task presents a formidable challenge.

### **Background**

The need to house Egypt's growing population is confronting the Egyptian Government with an enormous task. To meet the resulting demand for new housing, especially for low to moderate income families, and employment opportunities will require a considerable political commitment on the part of Government and other responsible public and private agencies. The housing crisis is exacerbated by a number of factors/ policy constraints, principally - the urgent need to rectify the existing housing shortage and improve existing housing stock; the lack of executive agencies with adequate statutory powers and professional and technical staff; by inadequate infrastructure and social services provision and a shortage of vacant land readily available to accommodate planned urban expansion. Furthermore, housing construction costs have escalated as have land prices, and many, if not the majority, of low to moderate income families now find it difficult if not impossible to enter the housing market. Central to the issue is the Government's lack of political commitment to the shelter needs of the poor.

To illustrate the scale of the Egyptian Government's problem, Greater Cairo is growing by over 400,000 persons per year and could exceed 16.5 million by the year 2000. It has been estimated that the urbanised areas of Greater Cairo are expanding at a yearly rate of 1,200 hectares. Half of this expansion takes place on agricultural land and eighty per cent of agricultural land losses are due to 'informal'/ owner builder development. The remaining twenty per cent consists largely of industrial developments which are also illegal. Currently all housing built on agricultural land and at least seventy-five per cent of all new housing construction is being built by the private 'informal' sector and built outside statutory legal controls. Tenure rights are unresolved and most 'informal' development lacks the provision of basic infrastructure and social services. Secondary cities, Delta and rural towns and villages are also suffering from the pressures of uncontrolled and unprecedented growth.

## **The Ismailia Development Projects**

The Ismailia Development Projects are the only self-financing 'sites and services' and squatter settlement upgrading projects to be successfully implemented in Egypt. The Hai El Salaam and Abu Atwa Projects had, by 1986, enabled over 100,000 low-income people, one third of Ismailia's population, to gain access to land with secure tenure and basic and affordable levels of infrastructure provision. Social services have been provided and employment created. The Projects optimise the strength and dynamism of the 'informal'/ owner builder sector and are considered a 'development model' with considerable potential elsewhere in Egypt, and in other developing countries.

The Hai El Salaam and Abu Atwa Projects were identified as part of the Consultant's planning study for the Ismailia Region in 1974-76. Following the approval of the sub-regional study the British Government was approached to fund a project incorporating innovative self-financing development concepts capable of early implementation. In 1977 the British Government appointed the Consultants to prepare a demonstration project and subsequently funded technical assistance to assist in the implementation of the projects, 1978-82, and also funded the Urban Projects Manual, published by Liverpool University Press, 1983. The UNDP/ OPE funded two further technical assistance programmes, the first, to establish the Planning and Land Development Agency, 1981-83, and second, the Centre for Development of Physical Planning in Region 3, 1983-84.

The Ismailia Development Projects address the following critical development issues and problems:

- illegal squatter encroachment
- land tenure, adjustment and delivery
- inappropriate standards - planning, building, services and infrastructure
- urban management - financial, legal and institutional
- the provision of municipal infrastructure and services
- the role of the 'informal'/ owner builder housing sector - small scale/ individual
- employment
- affordability

Innovative semi-autonomous projects have been established in Hai El Salaam and Abu Atwa and local staff trained. Since 1982 the Project Agencies have been managed without expatriate technical support. In 1981 the Planning and Land Development Agency was established to co-ordinate and direct planning, land development and infrastructure issues on a Governorate-wide basis. This Agency incorporates the self-financing concepts developed for the Hai El Salaam and Abu Atwa Projects and has been managed without expatriate support since 1983. The Centre for Development of Physical Planning in Region 3 was formally established in Ismailia in 1986 under Law 3/82.

## **Ismailia Master Plan Study**

### **Evolution of Design Concepts**

The planning, design philosophy and innovative concepts behind the projects formed an integral part of the Ismailia Master Plan Study (1976).<sup>1</sup> An important recommendation of the Master Plan Study drew attention to the potential housing crisis if Government adhered to its policy of direct provision of highly subsidised housing units. The Consultants proposed that existing housing policy should be more flexible, give aid and support to different agencies, whether public or private including the small scale and 'informal'/ owner builder housing sector, together with the provision of land with secure tenure and affordable levels of infrastructure provision and basic services.<sup>2</sup>

The Master Plan recommended that Government policies were needed in the following areas if innovative recommendations were to be implemented:

- Land - the provision of land under suitable tenure;
- Infrastructure - the staged and incremental provision of affordable public utilities and services;
- Building Materials - improvement in pricing, supply and distribution;
- Credit - the creation of financial credit systems accessible to all households irrespective of income;
- Standards - simplification of planning, building, construction and infrastructure standards and procedures for obtaining approvals;
- The role of the 'informal'/ owner builder housing sector.

### **Ismailia Demonstration Projects**

The Demonstration Project was prepared over a twelve month Study period.<sup>3</sup> Initially the Consultants concentrated on two tasks: site selection and defining project objectives.

#### **Project Site Selection**

To enhance political support and the support of existing communities the Consultants considered it important that the sites selected satisfied the following objectives:

- tackle immediate planning and social problems which the Governorate was unable, administratively, financially or technically, to address;
- be successful in the short-term and capable of early implementation;
- further the realisation of the Master Plan recommendations.

1 Ismailia Master Plan Study, 1974-76. MOHR ARE/ UNDP OPE funded. (IMPS)

2 IMPS, Volume 1: Supplement, and Volume 8: Housing

3 Ismailia Demonstration Project, 1977-78. MOHR ARE/ ODA UK funded. (IDP)

Two potential sites were identified which appeared to be dynamic in terms of urban development, included existing illegal squatter areas in need of upgrading and improvement and adjacent empty desert land with potential for future development. Two sites were selected - refer Fact Sheet 1, 2 and 3:

- El Hekr, an uncontrolled northern extension area of Ismailia (renamed Hai El Salaam); and
- Abu Atwa, a cluster of rural/ agricultural settlements some 4 kilometres south of Ismailia.

#### Project Objectives

Project objectives were derived from the Master Plan, in particular, policy issues relating to housing, implementation, and the importance of a stable and expanding economic base. The principle objectives agreed by local Government and Governorate officials were that development proposals<sup>4</sup>:

- must be relevant to low-income groups, which formed the majority of the population;
- must be capable of being implemented with minimal government subsidy;
- should be based on the best possible understanding of the existing local situation, particularly, political, social, economic, cultural and physical considerations and constraints;
- should be able to be managed without the need for a high level of sophistication and/ or continued support from outside expertise;
- should be realistic, that is, capable of being implemented within existing administrative and executive structures and not require fundamental legal or organisational reform;
- should be capable of being implemented at the earliest possible time;
- must be capable of being modified with experience and changing external factors;
- should be replicable in form and in content at other sites in the future.

#### Social Surveys

With reference to the first and third objectives above the Consultants recognised that in order to cater for the needs of low-income groups a full understanding of the local situation was essential. During the preparation of the Master Plan a comprehensive range of social surveys were carried out by the Consultants.<sup>5</sup>

4 IDP, Volume 1, Section 1.1, pgs 2-3

5 IMS, Volume 8, Introduction, pgs 2-3; Section 4, pgs 41-65

An important conclusion derived from the surveys was '... that the existing informal and locally sponsored housing systems were capable of accommodating the vast majority of Ismailia's population ...'. A primary objective of the surveys carried out during the Demonstration Project was to obtain further relevant information on which specific proposals for improving and reinforcing the existing housing systems could be based.<sup>6</sup>

The Consultants placed considerable importance on these surveys, in particular, collecting information on: existing household characteristics; the nature of the housing systems; and the needs/ aspirations of the people.

Five principle categories of information were collected:

- general socio-economic and demographic characteristics of the population;
- detailed information about:
  - . how the housing systems and markets function
  - . how the 'actors' in the process behave, including, users, investors, builders, suppliers, community organisations, and government agencies
  - . how effective housing demand is being met at the present time
- the causes of the shortages and poor functioning of the housing system;
- identification of household needs, priorities and resources, and the resulting housing demand - for new housing, upgrading of existing housing and the environment;
- identification of the principle 'actors' who would be instrumental in meeting these demands and of the ways and means of increasing their effectiveness. Special emphasis was placed on the small scale housing supply agents and on local community organisations.

To obtain information the Consultants carried out three separate but related surveys:

- a scanning survey - a precoded survey of 200 households;
- a detailed Improvement Area survey - this survey focussed on the populations of typical consolidating areas in both Hai El Salaam and Abu Atwa. The survey was based on a 10 per cent sample;
- in-depth Household Case Studies - these covered a total of 30 households, 15 each in Hai El Salaam and Abu Atwa.

6 IDP, Working Paper . Social Survey Questionnaires, June 1977  
IDP, Volume 1, Section 1.2, pgs 8-10; Volume 2, Section 2.1, pgs 1-71;  
Volume 3, Section 3.9, pgs 134-166  
The Urban Projects Manual

## Social Characteristics and Assumptions

The Consultants identified important indicative social characteristics and made assumptions which had a significant bearing on the proposals.<sup>7</sup>

- Population . Ismailia City

1974                    132,000

1978                    150,000

- Population . Project Areas (1978)

Hai El Salaam        37,000

Abu Atwa             20,000

- Household Size . Project Areas

Hai El Salaam        5.6 persons

Abu Atwa             6.5 persons

- Incomes . Earners by Income Range (%) . Project Areas - refer Fact Sheet 4

LE/ Month	15	16-25	26-40	41-70	71+
Hai El Salaam	70.4		25.6	4.0	-
Abu Atwa	34.5	48.2	11.7	5.2	0.4

The perceived income of 80 per cent the Hai El Salaam and Abu Atwa populations was equivalent to the lowest 30 per cent of the national figures with a medium income of LE 290 per annum, compared with LE 625 per annum national (1977) and 87 per cent below the World Bank's urban poverty threshold of LE 540 per family per annum.

- Household Incomes

The Consultants assumed that the target population of the new 'sites and services' areas would comprise 70 per cent of families with the same income characteristics as the existing inhabitants of the two Project sites, namely:

Monthly Income LE	Annual Income LE	Households in Income Range %
15	180	14
16-25	181-300	39
26-40	301-480	30
41-70	481-840	16
71+	840+	1

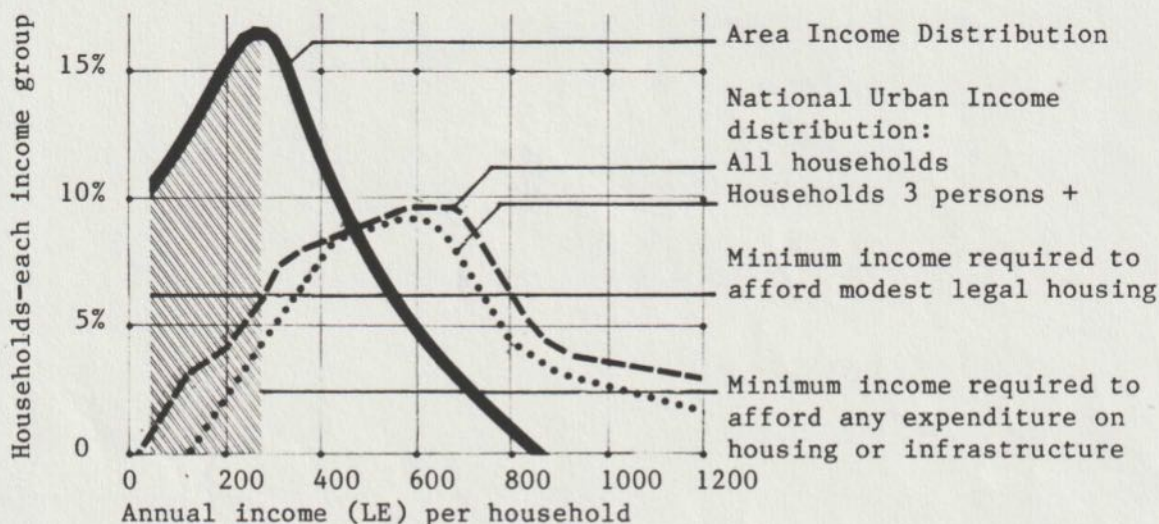
More than 80 per cent of all existing households fell within the LE 180-480 per annum range and over 70 per cent of all income earners had a monthly income of less than LE 25 per month.

<sup>7</sup> IDP, Volume 2, Section 2.1, pgs 1-71; and Section 2.4, pgs 95-135



In formulating proposals the Consultants assumed that incomes would remain constant in real terms for fifteen years, that is, incomes would rise at the same rate as inflation.

Area income distribution figures were compared with the National Urban Income Distribution figures.



- Ability to Pay for Shelter

The Consultants assumed that only 20 per cent of total income would be spent on housing, including affordable levels of infrastructure provision, by all households. Further, the Consultants assumed that existing settlers, the subject of proposals for upgrading, would spend a larger proportion of the 20 per cent available on infrastructure provision than would new settlers.

Based on an average monthly income of LE 25 per month the Consultants calculated that the amount available for housing was deemed to be equivalent to LE 5 per month. In designing the proposals the Consultants assumed that the proportion of this income available each month for housing and infrastructure provision was:

	Housing		Infrastructure		Total	
	%	LE	%	LE	%	LE
Existing Settlers						
Upgrading Areas	35	1.75	65	3.25	100	5.00
New Settlers						
'Sites and Services' Area	50	2.50	50	2.50	100	5.00

- Functional Use of Plots

During the social and physical surveys the Consultants paid particular attention to existing plot sizes, shapes, spatial organization and types of users. The range of existing plots sizes was found to be:

Hai El Salaam: 40-308 m<sup>2</sup> Abu Atwa: 31-329 m<sup>2</sup>

The Consultants took cognizance of the distribution and range of plot sizes in the existing areas, together with evidence concerning variations in household needs and resources, in proposing a wide range of plot sizes for the new 'sites and services' area.

- Plot Pricing and Payment Terms

The Consultants tested and costed various alternatives taking into account existing and preferred plot sizes, and desired and minimal levels of infrastructure provision to ensure improved health conditions.

The alternatives included the provision of the following range of plots:

	Range m <sup>2</sup>
Small	72 and 90
Medium	108, 112.5 and 135
Large	144 and 162
Concession	360, 432 and 576

To ensure payments were affordable at low income levels, covering a higher level of infrastructure provision - Level III and above (see below), plot prices were varied for plots in the new 'sites and services' area and for new plots in the upgrading area. Higher plot prices were proposed for good commercial locations and open market prices proposed for concession plots in key locations. Proposals for varying plot prices allowed internal cross-subsidy of lower priced plots, some 60 per cent of the total number of plots, thereby increasing the overall level of infrastructure provision affordable.

- Affordability

A principle objective of the Project was to ensure that the development should '... pay for itself and be capable of implementation with minimal government subsidy ...'.

The Consultants prepared detailed proposals for the full provision of urban utilities and infrastructure as a long term goal. The Consultants also concluded, based on detailed cost estimates and an analysis of the target population's ability to pay for housing, that full infrastructure provision could not be afforded initially and that only a minimal level of infrastructure provision could be provided without a substantial subsidy element. The Consultants recommended that full infrastructure provision be achieved incrementally over time consistent with the population's ability to pay for improved levels of provision.

Levels of Infrastructure Provision and Ability to Pay  
Existing Areas and New Development 'Sites and Services' Areas  
Total Cost Options (LE . 1977)

Level of Provision	Costs.LE per plot/ Percentage of families affording each Level	Existing Areas			New Development Areas		
		Plot Size			Plot Size		
		83	123	176	72	108	135
I	LE	<b>72</b>	<b>96</b>	<b>127</b>	<b>153</b>	<b>177</b>	<b>194</b>
	%	100	100	100	96	93	87
II	LE	<b>128</b>	<b>154</b>	<b>187</b>	<b>209</b>	<b>235</b>	<b>253</b>
	%	100	100	100	87	81	78
III	LE	<b>190</b>	<b>246</b>	<b>318</b>	<b>247</b>	<b>292</b>	<b>324</b>
	%	100	87	69	79	72	66
IV	LE	<b>423</b>	<b>522</b>	<b>651</b>	<b>351</b>	<b>419</b>	<b>469</b>
	%	48	33	17	41	30	23
V	LE	<b>485</b>	<b>614</b>	<b>783</b>	<b>389</b>	<b>476</b>	<b>540</b>
	%	38	25	13	35	21	15
VI	LE	<b>591</b>	<b>773</b>	<b>1010</b>	<b>502</b>	<b>645</b>	<b>751</b>
	%	24	14	5	17	11	6
VII	LE	-	-	-	<b>665</b>	<b>808</b>	<b>914</b>
	%	-	-	-	10	4	1

- Level I Administration, compensation, registration + pit latrines (capitalised running costs) + standpipes + Stage 1 basic local roads
- Level II Level I + electricity + landscaping
- Level III **Level II + Stage 1 district streets + Stage 2 improved local roads**
- Level IV Level II, less pit latrines + reticulated water network (excluding standpipes) + water connections + reticulated sewerage network + sewerage connections
- Level V Level IV + paved district streets + Stage 2 local roads
- Level VI Level V + trunk sewers + trunk water mains + paved access roads
- Level VII Level VI + service core to plots

● Plot Pricing

Based on a detailed analysis the Consultants proposed the following range of plot prices

LE per m <sup>2</sup> :	Ordinary Plot	Corner Plot
Small	2.25	2.50
Medium	4.00	4.50
Large	10.00	11.00
Concession	Open Market Price	Open Market Price

- Payment Terms

The Consultants proposed the following minimum payment terms:

	Down Payment %	Repayment Period Years
Small	10	10, 15, 25
Medium	50	10, 15, 25
Large	100	-
Concession	100	-

### Proposal - Policy Guidelines

To facilitate the early implementation of the proposals the Consultants examined the Governorate's institutional framework and administrative procedures and proposed the following innovative guidelines.<sup>8</sup> In summary:

- Institutional Guidelines

To facilitate the establishment of the projects at the earliest possible date no proposals or recommendations were made which would require legal or administrative changes at the national level.

- each project should be managed by a financially independent Project Agency with full responsibility for land management, financial and technical matters;
- each Project Agency should be on site;
- the Project Agencies should become executive entities under the control of the Secretary General of the Governorate;
- staffing of the Project Agencies should be met through secondment of local Government staff or through direct appointment;
- continuous monitoring should be the basis of and experience for similar projects to be established elsewhere in Ismailia and Egypt.

- Financial Guidelines

- each project should be financially independent;
- the minimum level of infrastructure provision should be financed by revenue generated from land sales;
- plot prices should reflect plot size and commercial potential to provide an element of internal cross-subsidy;
- plot prices should be amortised over time and linked with the eventual acquisition of the freehold title;
- a number of plots should be held by the Project Agencies for future sale on the open market;
- each project should be established and operated without depending on Government subsidies;
- full infrastructure provision, an ultimate Project goal, to be financed through a mix of user charges and Government subsidy.

8 IDP, Volume 1, Section 1.8, pgs 148-180

● Planning Guidelines

- well defined plots with secure tenure should be provided;
- a range of plot sizes should be provided for new settlers;
- the minimum affordable level of infrastructure provision should be provided which was capable of incremental and progressive upgrading consistent with the project population's ability to pay;
- statutory procedures should be kept to a minimum;
- building materials, at official prices, should be assured;
- credit for home improvements and progressive additions should be available.

● Economic Guidelines

The Consultants considered that the economies of the Project areas should be stimulated to provide a diverse range of employment opportunities and to increase local household earning potential.

- limited non-residential activities should be allowed on all plots;
- all settlers should be allowed to provide rental accommodation;
- measures should be introduced to increase the proportion of household expenditure spent in the Project areas through the provision of commercial and service centres, workshops and concession plots.

Summary of Proposals

The proposals, approved in early 1978, were designed to be self-financing to the level of infrastructure provision provided and to cater for a future population in Hai El Salaam of 90,000 and in Abu Atwa of 45,000.

The proposals cover:

	Upgrading Area	'Sites and Services' Area
Hai El Salaam	94 ha	132 ha
Abu Atwa	40 ha	114 ha

Number of Plots to be distributed:

	Upgrading Area	'Sites and Services' Area
Hai El Salaam	7000	3500
Abu Atwa	3500	1500 <sup>9</sup>

The preparation of the detailed policy recommendations and proposals was carried out by the equivalent of 5.3 expatriate professional advisors over an intensive twelve month period. The British Government funded foreign costs related to these services and the Egyptian Government funded local expatriate costs and local services and facilities.

9 Excludes potential new plots arising from the phasing out of the existing sewerage treatment works

### **Ismailia Technical Assistance Programme**

Following the approval of the detailed demonstration project proposals by the Local Council and the Governor, the British Government was approached to fund a technical assistance programme to assist the Governorate implement the proposals.<sup>10</sup> In October 1978 the Consultants were appointed to provide a team of technical advisors to assist in implementation, to effect innovative urban management procedures, and to train local staff - refer Fact Sheet 5. The British Government in supporting the programme also made a grant of £ 100,000, as 'inception capital', to facilitate project implementation. The money was used for the following specific purposes:<sup>11</sup>

- to cover the cost of building and furnishing Project Offices in both Hai El Salaam and Abu Atwa;
- to carry out essential land surveying and the purchase of survey equipment for the Project Agencies;
- to carry out initial land preparation.

Initially, the Consultants concentrated on the Hai El Salaam Project, establishing the Agency and developing administrative, financial, accounting and legal routines and in carrying out the survey of main streets and the first 500 new plots comprising the first phase. Although the Abu Atwa Project Agency was formally established in 1980, the Consultants did not give direct full time technical support until July 1981. From April 1982 both Project Agencies and Projects have been managed by local Governorate staff without expatriate technical support.

The achievements of the Project Agencies are well documented.<sup>12</sup>  
Refer - Fact Sheets 6, 7 and 8.

The experience of implementing the two Projects indicates that projects can be established with limited technical assistance within three to four years of the preparation of detailed recommendations and proposals. To sustain political commitment and momentum this period may be too short and depends very much on political issues, as well as, local technical capacity, capability and commitment.

Expatriate support was equivalent to 2.5 professional advisors working each year during the 3.5 years implementing the projects and training local staff. This level of support is considered minimal. The British Government funded foreign costs plus the grant of £ 100,000, and the Egyptian Government funded local costs.

10 Ismailia Technical Assistance Programme, 1978-82. MOHR ARE/ ODA UK funded. (ITAP)

11 ITAP, Year 3 Report, pgs 24-43

12 ITAP, Year 1, 2 and 3 Reports and Abu Atwa Final Report, March 1982; Article: 'Ismailia: Combined Upgrading and Sites and Services Projects in Egypt' - Low-Income Housing in the Developing World, John Wiley, 1984.

The proposals are the first and only self-financing squatter settlement and 'sites and services' projects to be successfully implemented in Egypt and the first projects to realise the potential and dynamic resources of the 'informal' sector. Their success derives in part from local political support for the projects, and in part from the fact that the projects were designed so as not to involve complex or sophisticated techniques. Urban management routines were developed with local staff seconded from local government with no previous experience in planning or land development.

The Consultants tried to build up local staff capacity in three ways:

- 'on-job' training - working with Agency staff on specific tasks;
- 'formal' training - regular weekly training sessions were held, covering a range of development issues, where the concepts behind the practical day-to-day work could be discussed and explained;
- through the publication of the Urban Projects Manual.<sup>13</sup>

#### **Urban Projects Manual**

The Urban Projects Manual is based on the approach developed by the Consultants in preparing the Demonstration Projects. The Manual was drafted during the 'technical assistance' programme and, in draft form, used extensively by the Consultants to explain the process involved in designing the projects - highlighting relationships between standards, infrastructure, income and affordability, and illustrating the range of options available and explaining relevant techniques.

The Manual is a technical guide to the preparation of self-financing projects for new development, 'sites and services', and squatter settlement upgrading relevant to low-income groups.

The Manual aims to provide the following:

- a logical approach to the identification of problems, the preparation of relevant and affordable project proposals and their implementation;
- a guide to the process involved in preparing a project - the tasks involved, the sequence for carrying out the tasks and in assessing priorities, and in taking decisions;
- an indication of the range of development options available;
- a description of relevant techniques, many of which are not normally taught or found in text books or manuals.

Since its publication the Manual has been widely used and disseminated through training courses in Egypt and internationally - refer Fact Sheet 9

13 Urban Projects Manual, Liverpool University Press, 1983

### **Ismailia Planning and Land Development Agency**

Following the Technical Assistance Programme the UNDP.OPE funded a further period of technical assistance to assist the Governorate establish the Planning and Land Development Agency. The continuation of the Consultants work was deemed to be necessary and resulted from the need to strengthen the Ismailia Governorate's overall planning, management and technical capability first initiated and promoted by the Consultants during the Technical Assistance Programme.<sup>14</sup>

The Planning and Land Development Agency has Governorate wide powers and responsibilities in planning, land management and delivery and employment. The Agency incorporates the innovative self-financing development concepts developed for the two Project Agencies and controls development in areas assigned to it using similar powers to those given to the Hai El Salaam and Abu Atwa Project Agencies. Internal cross-subsidy and financing between projects are being used as very effective tools for promoting development while meeting basic social needs and objectives. The Agency co-ordinates development in all key growth areas and sectors, covering a range of projects from income generating high-income land subdivisions for housing to industry, recreation, other squatter settlement upgrading and new 'sites and services' projects - refer Fact Sheet 1 for the location of projects. Many of the staff trained during the Technical Assistance Programme have been promoted to manage and staff this Agency - this programme is also a unique experiment in urban management in Egypt.

The realisation of the Project's principle objectives, '... that the projects must be implemented with minimal government subsidy, and be relevant to low-income groups ...' has been amply demonstrated. This was achieved in the first instance by gaining local political support, and with modest expenditure and sensitivity to local conditions. The success of the Ismailia experience reinforces the Consultants view that there is considerable potential locally and nationally for similar projects.

### **Centre for Development of Physical Planning in Region 3**

The Consultants prepared the Project for presentation to Government and the UNDP, 1983-84. The Centre was formally established in Ismailia in 1986.<sup>15</sup> Region 3 comprises the Governorates of Port Said, Ismailia, Suez, Sharkia and North and South Sinai. Under Law 3/ 82 the Centre's mandate covers:

- the preparation of a development plan for the region;
- the provision of planning technical assistance to the Governorates and Municipalities in the Region;
- upgrading the planning staff of the Governorates/ Municipalities through the provision of in-service training, the preparation of manuals, etc.

14 Planning and Land Development Agency, 1981-83, MOHR ARE/ UNDP funded

15 Centre for Development of Physical Planning, 1986-, MOHR ARE/ UNDP funded



## AWARDS



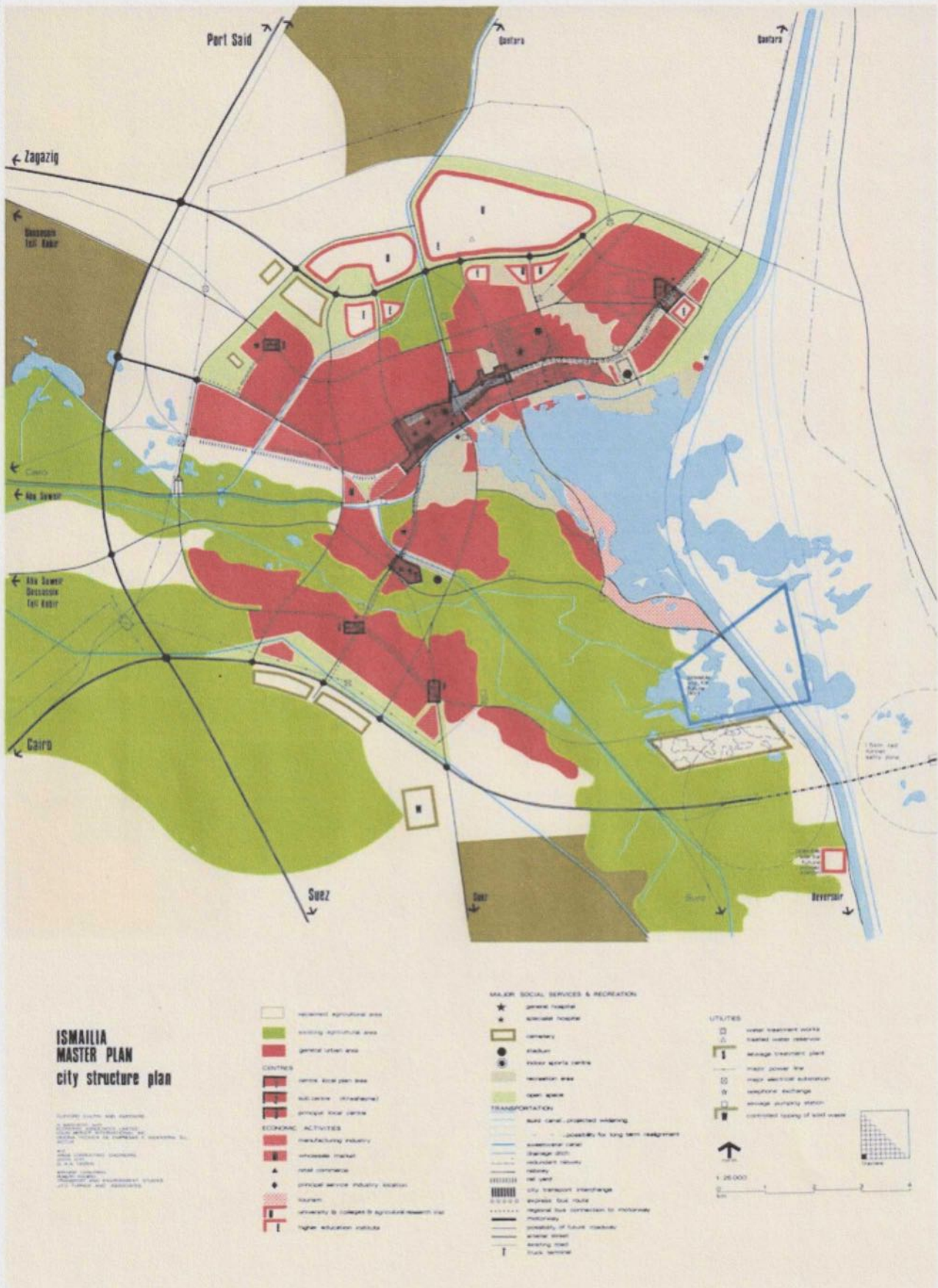
National Architecture Awards 1987  
The ACI Award for Architectural Innovation  
The Royal Australian Institute of Architects  
Ismailia Development Projects



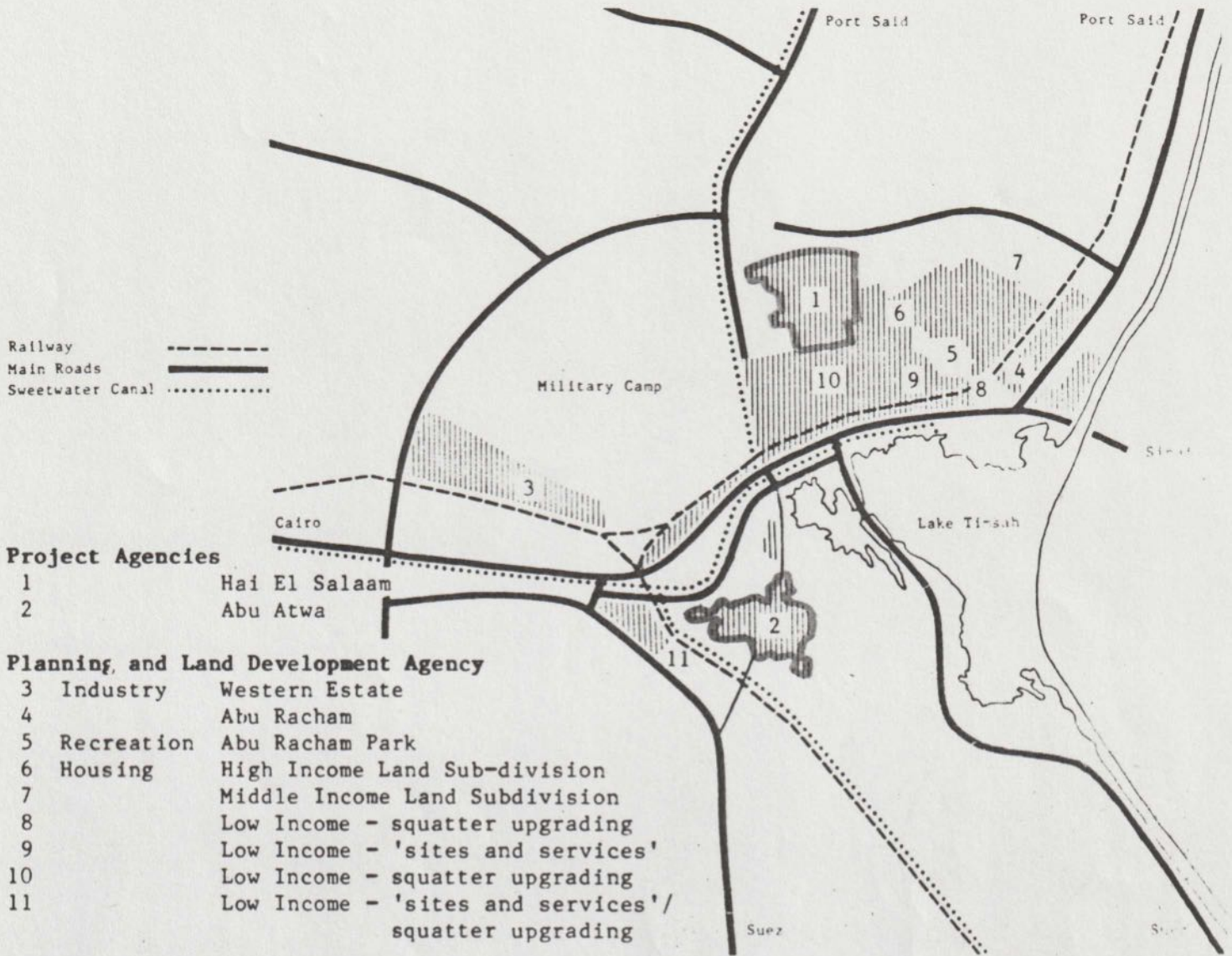
The Aga Khan Award for Architecture 1986  
Honourable Mention  
Ismailia Development Projects



Ismailiyya Development Project, Ismailiyya, Egypt



Ismailiyya Development Project, Ismailiyya, Egypt





### Hai El Salaam Project Site

Total Project Area: 226 Ha  
Upgrading Area: 132 Ha  
Sites and Services Area: 94 Ha

Population . (1979): 37,000  
(1985): 63,000



North

- Electricity**  
 ● Substation  
 11 kv Transformers  
 11 kv Cables (not shown)
- Ground Water**  
 ● Pumping Station

- Roads**  
 — Sub-base  
 - - - Under Construction
- Water**  
 ● Standpipes  
 - - - Proposed

### HAI EL SALAM PROJECT SITE

Civil Works Progress - October 1981

**Area**  
 132 hectares - rationalisation/upgrading existing area  
 94 hectares - new land sub-division (sites and services)

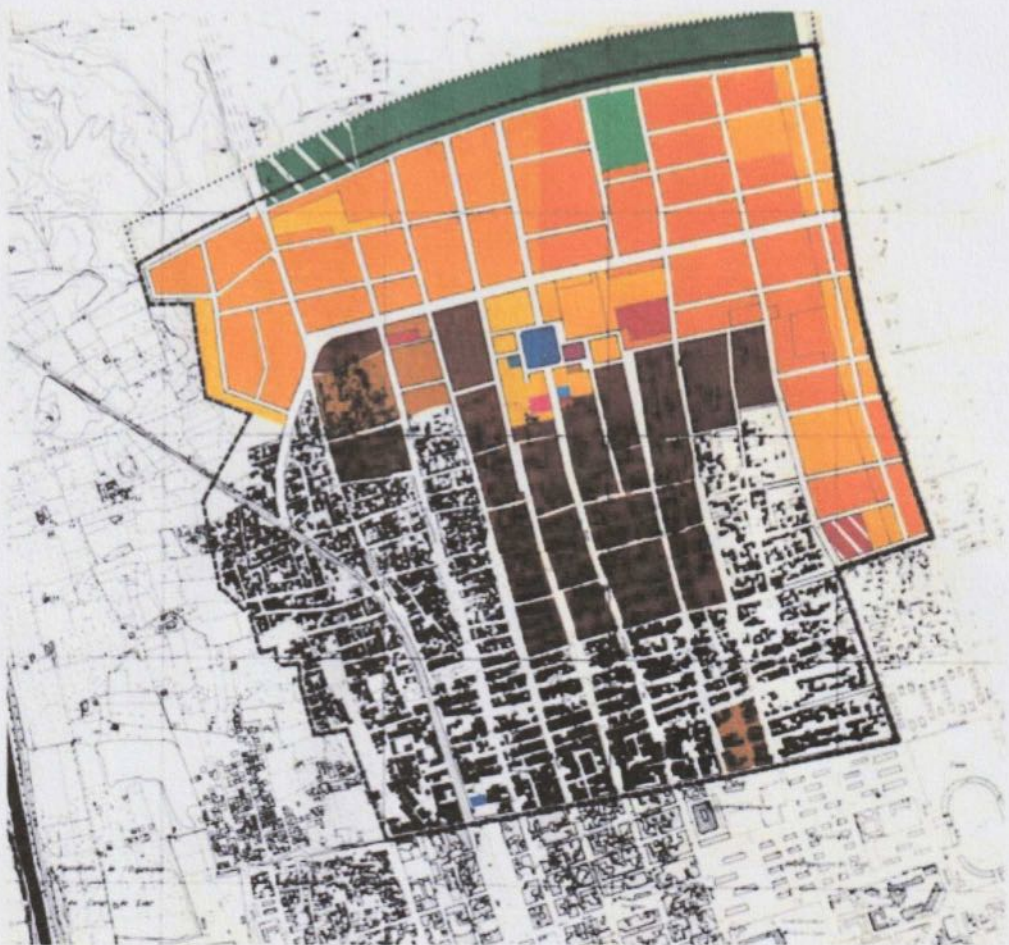
**Scale**

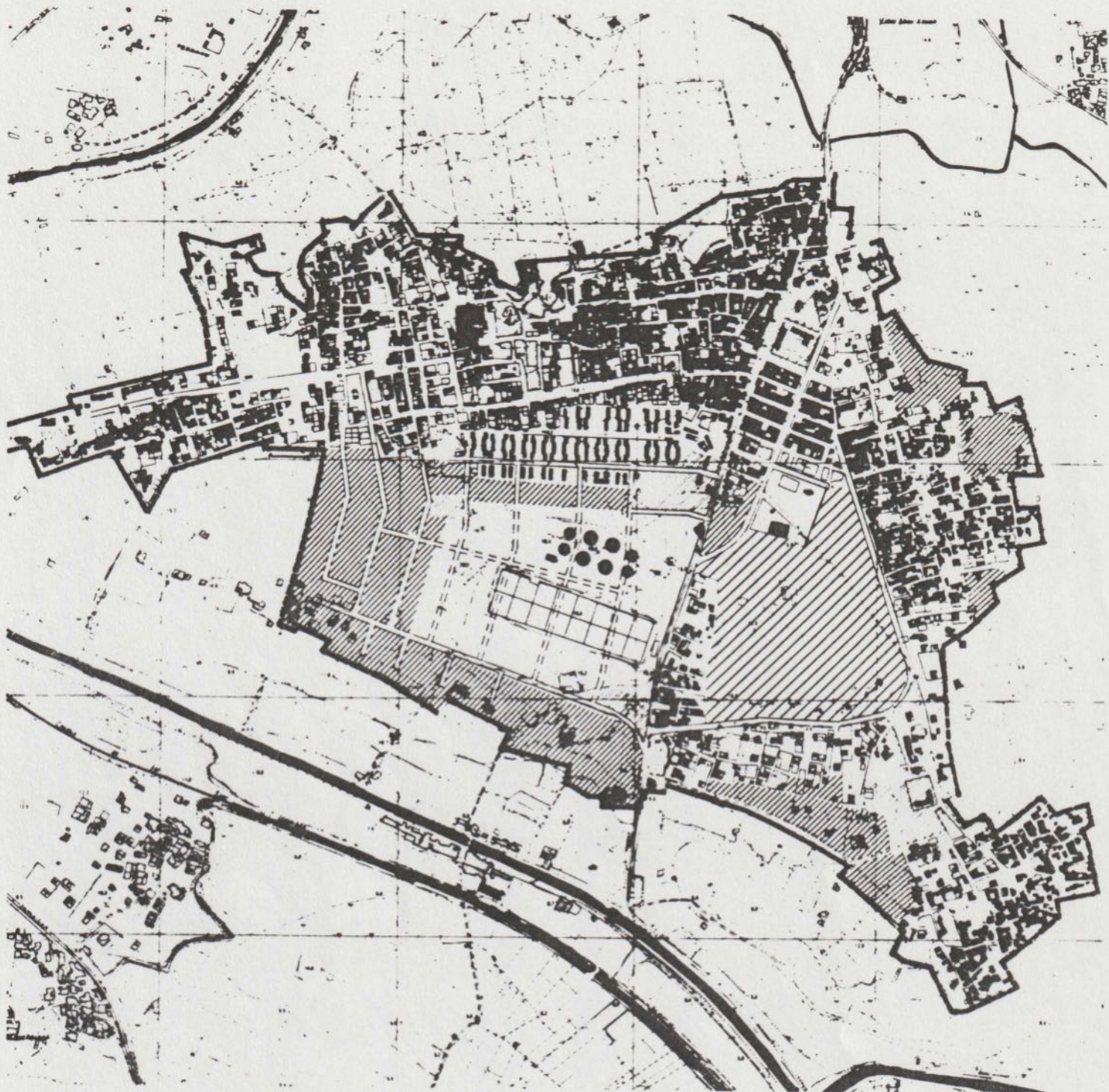


North

- Primary School
- Agency Office
- Polyclinic
- Social Centre
- Youth Centre
- Mosque
- Vocational School (Girls)
- Post Office
- Telephone Office
- Fire Station
- Market
- Forest Belt

- Existing Plots**
- Surveyed and being sold
  - Rationalisation complete
- New Plots**
- Surveyed
  - Sold and allocated





**Abu Atwa Project Site**

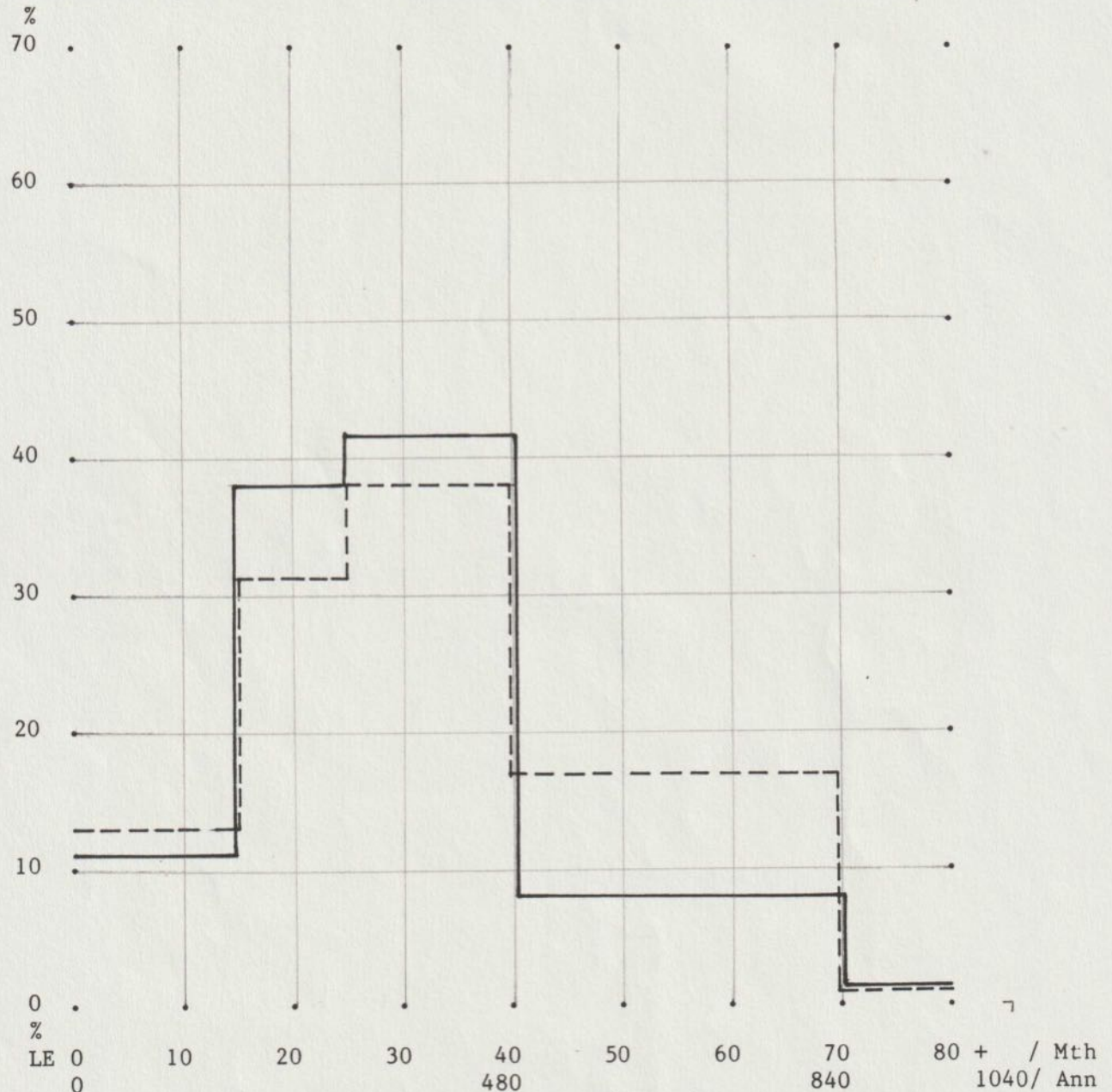
Total Project Area: 154 Ha  
Upgrading Area: 114 Ha  
Sites and Services Area: 40 Ha

Population . (1979): 20,000  
(1985): 27,000

Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt

Fact Sheet 4/ 1

Household Income - Percentage 1976/ 77



----- Hai El Salaam . Medium Hsehd Income LE 26-39/ Mth Range  
 Ave. Hsehd Size: 5.6 Persons  
 44% Hsehlds with Incomes less than LE 25/ Mth

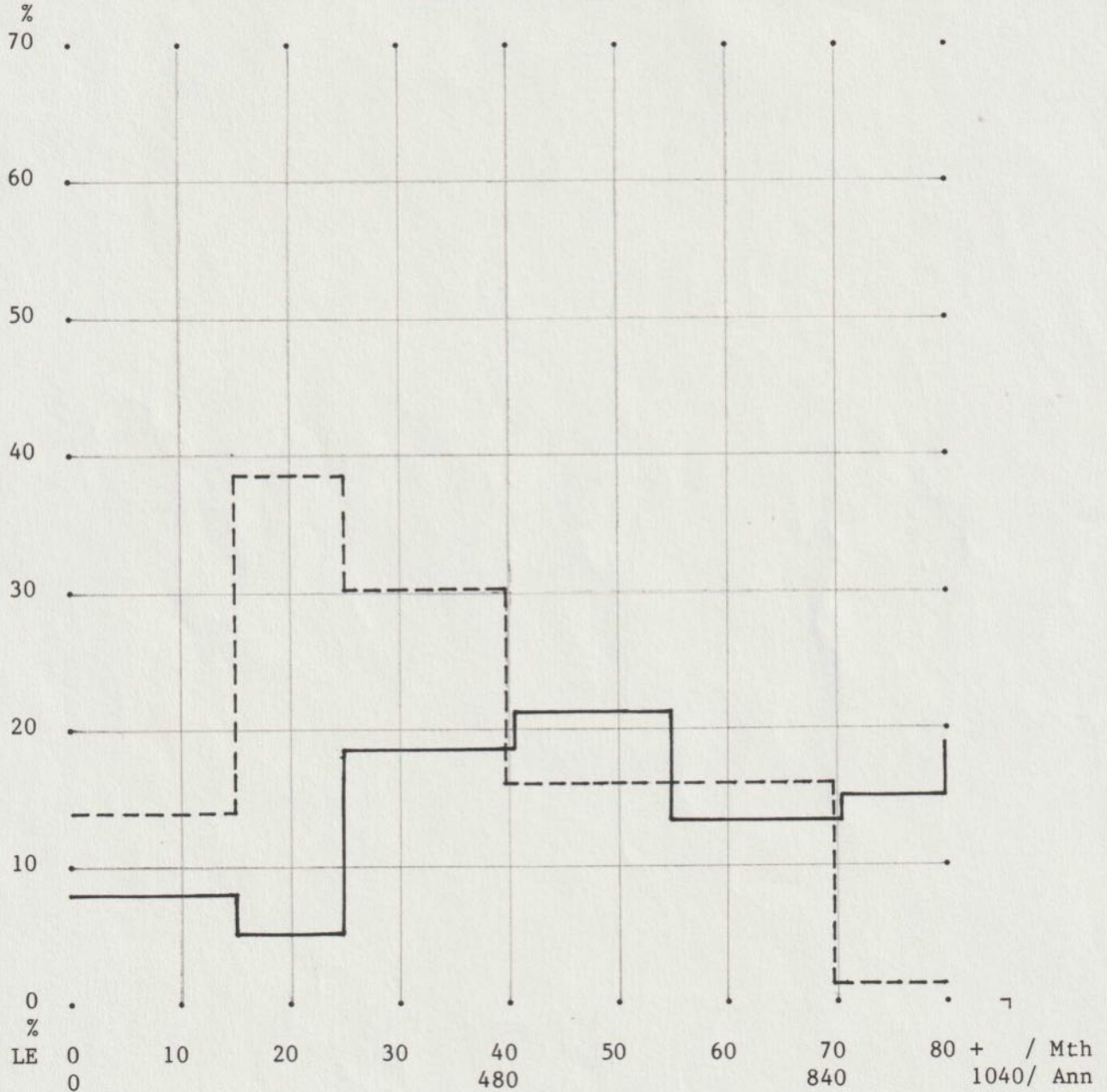
———— Abu Atwa . Medium Hsehd Income LE 26-39/ Mth Range  
 Ave. Hsehd Size: 6.5 Persons  
 49% Hsehlds with Incomes less than LE 25/ Mth



Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt

Fact Sheet 4/ 2

Household Income Distribution  
Target Population/ National Urban 1977



Hai El Salaam . Medium LE 290/ Ann - 83% Hsehlts less than LE 40/ Mth  
 ----- Abu Atwa  
 National . Medium LE 635/ Ann - 32% Hsehlts less than LE 40/ Mth  
 \_\_\_\_\_ All Hsehlts

# Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt

## Fact Sheet 5

## ORGANOGRAM . Refer: Urban Projects Manual Framework, pages: x-xi

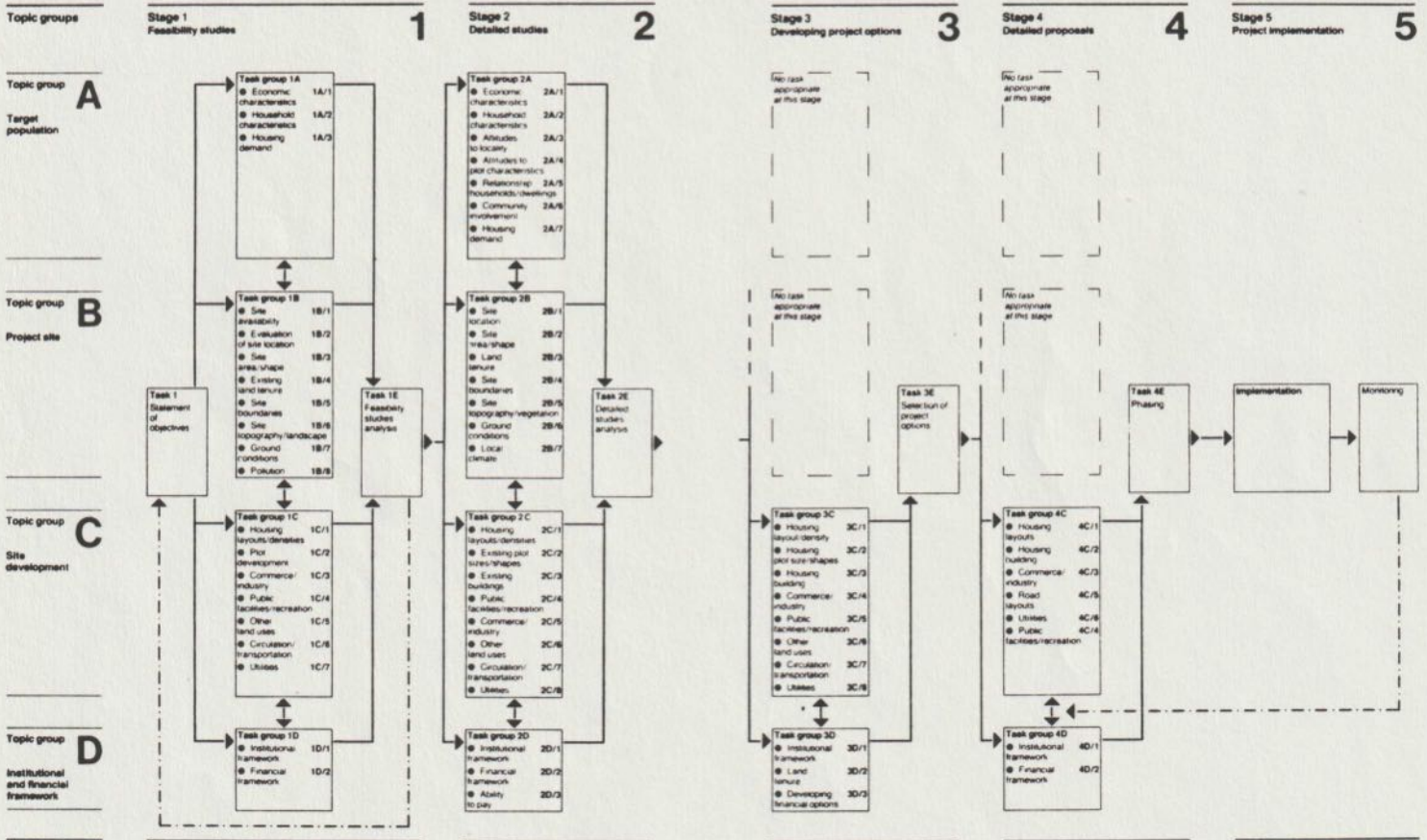
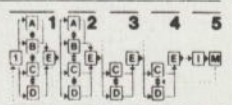
### x Framework

#### Manual framework

The framework shown here is the key to the organisation of material in the Manual. It is based on the work sequence likely to be undertaken in project preparation, but is, of necessity, a simplification. Not all Tasks and Task groups shown in one column will be carried out at exactly the same time, but there should be the maximum of co-ordination between those working on different Tasks. It is vital that co-ordination occurs during analysis, selection and implementation.

Full descriptions of Tasks and their page numbers are given in the Contents, pages iv and v.

The small scale version of the framework, at the top of each page, indicates the specific Task group being discussed and its relationship to other Task groups in the overall technical process of project preparation.



**Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt**

**Fact Sheet 5**

**ORGANOGRAM** . Refer: Urban Projects Manual  
Framework, pages: x-xi

**Stage 5 . Project Implementation**

Topic

Task

Group

Group

- |                            |           |   |
|----------------------------|-----------|---|
| <b>A Target Population</b> | <b>5A</b> | <ul style="list-style-type: none"><li>. Formulate basis of Plot application procedures/ establish/ approve criteria for selection</li><li>. Prepare Application Forms - information on incomes/ family size important to determine applicant's priority for plot/ housing need</li><li>. Select plot applicants</li><li>. Monitor application/ selection process to better understand/ improve system</li></ul>   |
| <b>B Project Sites</b>     | <b>5B</b> | <ul style="list-style-type: none"><li>. Survey and Plot Marking master survey/ position control points<br/>road alignment/ right-of-ways/ public spaces</li><li>. Register, survey existing dwellings to assist plot rationalization procedures/ process</li><li>. Use aerial photographs for control and survey purposes, in particular, plot encroachment</li><li>. Prepare new plot layouts</li><li>. Monitor process to improve techniques</li></ul>  |
| <b>C Site Development</b>  | <b>5C</b> | <ul style="list-style-type: none"><li>. Hold public meetings to explain project objectives/ programme/ priorities, and to secure support for initiatives from officials/ community leaders/ plot beneficiaries/ others</li><li>. Initiate emergency plot registration scheme, survey plots/ deliver, prepare programme/ sites for emergency relocation</li><li>. Undertake plot rationalization</li><li>. Survey plots/ mark out new plots on-site</li><li>. Purchase relevant vehicles and machinery for Project Agencies</li><li>. Prepare/ implement initial Civil Works programme bearing in mind incremental approach/ affordability constraints<br/>Roads - 1st priority/ subsequent phases, agree standards of provision/ phasing prepare contract documentation, negotiate, supervise contract implementation</li></ul> |

## Stage 5 . Project Implementation

Topic Group                      Task Group  
C Site Development      5C ... continued

Water - agree standards of provision, negotiate with relevant authority to implement Stage 1 Standpipe provision  
Sewerage - determine city-wide priorities/ programme, provide on-site advice/ guidance on location/ method of constructing pit latrines, initiate suction tanker and solid waste collection

Electricity - agree standards of provision, negotiate with relevant authority, supervise implementation of Stage 1 provision

Landscaping - allocate sites, initiate plant/ nursery scheme, prepare priority sites/ implement programme

Public/ Community/ Social Buildings - decide policy with respect to support to community building programme (sites/ financial/ other), allocate sites where appropriate, prepare contract drawings/ documentation/ award contract/ supervise construction of Project Offices/ other buildings

- Initiate programme to assist plot allottees with model house plans/ construction drawings to enable purchase of building materials at government fixed prices and loans/ advice on construction

## D Institutional

5D

- Draft and issue necessary formal decrees to establish Projects/ financial framework/ designate Project sites
- Decide responsibilities/ procedures for Project Agency Board/ Project Agency, appoint Board members, including Chairman/ Executive Committee
- Establish management structure/ staffing levels of Agencies/ levels of responsibility/ remuneration and staff incentives/ bonuses etc
- Appoint Project Agency Managers and staff
- Establish departments: Administrative, Legal and Finance Offices; Survey Office; Engineering Office; Public Relations Office; Monitoring/ Research Office
- Prepare preliminary budget/ initial and longer term capital works programme/ allocate resources/ agree priorities

## Stage 5 . Project Implementation

Topic Group

Task Group

D Site Development 5D ... continued

- . Hold discussions with Banks/ others to establish loans programmes for households, including plot purchase/ building materials

**E Monitoring and Evaluation**

5E

- . Establish basis for continuous monitoring and evaluation, test against original Project objectives/ build results into subsequent activities/ programmes
- . Continuous 'hands-on' training programme initiated for staff with limited experience to strengthen capability/ capacity

**F Other Activities**

5F

- . Over the period of Technical Assistance the Consultants gave advice to the Governorate and the City Council on development planning, land management and other important issues. As a result of this continuous advice the Governorate established the Ismailia Planning and Land Development Agency. This Agency incorporates the lessons of the two Projects, in particular, self-financing concepts, and is responsible for land delivery and planning on a Governorate-wide basis.
- . The Urban Projects Manual was also produced and used as course material in evening classes run by the Consultants and aimed at strengthening the Agency's self-sufficiency and capacity.

## Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt

### Fact Sheet 6

### Summary of Progress - 1979 to 1985

This information was compiled in August 1985 by staff of the Ismailia Planning and Development Agency, Ismailia Governorate, Egypt.

Population	1979	1985	2000
Ismailia City	150,000	250,000	560,000
Hai El Salaam	37,000	63,000	90,000
Abu Atwa	20,000	27,000	44,000

#### Income per annum . Target Population

Range	LE 180 to 830
Medium	LE 290

	Hai El Salaam	Abu Atwa
<b>Area (Ha)</b>		
Total Project Area	226	154
Upgrading Area	132	114
New Development - 'sites and services'	94	40

#### Project Agencies

Established	12/1978	7/1980
Effectively Operating as Proposed	7/1979	4/1981
Fully Staffed	7/1980	12/1981
Independent of Technical Assistance	4/1981	3/1982
Inception Capital (ODA.UK Grant)	LE 100,000	LE 67,000
Staffing: Technical/ Managerial	26	17
Support	40	22

#### Plots to be Allocated

Upgrading Area	7,000	3,500
New Development - 'sites and services'	3,500	1,500

#### Plot Allocation

Title Granted in Upgrading Area	4,700	2,010
New Plots	2,250	325
Relocation Plots (New)	800	300
Concession Plots	180	60

#### Revenue

Total from Sale of Plots		
1979 to 1985	LE 2,020,000	LE 1,150,000

#### Private Investment in Projects

Plot Development (*)		
New Plots only	LE 26,000,000	LE 4,700,000

**Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt**

**Fact Sheet 7**

**Hai El Salaam . Breakdown of Project Costs**

**1982 Estimate in Egyptian Pounds (LE)**

Item	Total Costs  (LE)	Share of Total Costs (LE) attributed to:	
		Project Agency	Other Funding
<b>LAND</b> (Opportunity Cost)	325,000	-	325,000
<b>ADMINISTRATION</b> (Capitalised)	300,000	250,000	50,000
<b>PROFESSIONAL FEES</b> (Consultants)	650,000	-	650,000
<b>INFRASTRUCTURE</b>			
Roads	1,200,000	1,200,000	-
Water	1,300,000	250,000	1,050,000
Sewerage	2,000,000	200,000	1,800,000
Electricity/ Street Lighting	700,000	550,000	150,000
Landscaping	200,000	200,000	-
<b>Total Infrastructure</b>	<b>5,400,000</b>	<b>2,400,000</b>	<b>3,000,000</b>
<b>PUBLIC FACILITIES</b>			
Education	850,000	50,000	800,000
Health	120,000	20,000	100,000
Community Development	250,000	200,000	50,000
Religious	200,000	200,000	-
Other	150,000	100,000	50,000
<b>Total Public Facilities</b>	<b>1,570,000</b>	<b>570,000</b>	<b>1,000,000</b>
<b>INVESTMENT IN HOUSING STOCK</b>			
Upgrading/ Rebuilding	40,000,000	-	40,000,000
New Housing	45,000,000	-	45,000,000
<b>Total Housing Stock</b>	<b>85,000,000</b>	<b>-</b>	<b>85,000,000</b>
<b>TOTAL</b>	<b>93,245,000</b>	<b>3,220,000</b>	<b>90,025,000</b>

	Hai El Salaam	Abu Atwa
<b>Infrastructure Provision</b>		
from Agency Revenue		
Roads . Surfaced	25 km	3.5 km
Consolidated	35 km	10.0 km
Water . Pipes Laid	70 per cent	400 metres
Standpipes (No. installed)	37	15
Electricity . Street Lighting	80 per cent	70 per cent
<b>Service Facilities</b>		
from Agency Revenue		
Public Bakery	1	-
Workshops	-	20
<b>Recreation Facilities</b>		
from Agency Revenue		
Green Belt	1	-
Tree Planting (Ha)	22	1
Cafeteria	-	1
<b>Community Facilities</b>		
Land allocated by Project Agencies		
Schools	5	4
Youth Centres	2	4
Social Centres	1	1
Markets	2	1
Mosques	2	1
Health Centres	1	1
Fire Stations	1	1
Police Stations	1	1
<b>Building and Facilities</b>		
Paid for by Private Investment		
Mosques	25	4
Recreation Areas	1	3
Bakery	-	1
Pit Latrines	all	all

The Projects are on-going. In a survey carried out in August 1983, it was estimated that approximately 100,000 people had benefitted for the programme since October 1979.

(\*) Estimate - figures should not be used to determine average expenditure per plot as investment is much higher on the more expensive plots.



Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt

Fact Sheet 8

Hai El Salaam . Breakdown of Project Costs

1977 Initial Estimate in Egyptian Pounds (LE)

Item	Total Costs  (LE)	Share of Total Costs (LE) attributed to:	
		Project Agency	Other Funding
<b>LAND</b>			
(Opportunity Cost)	325,000	-	325,000
<b>ADMINISTRATION</b>			
(Capitalised)	150,000	100,000	50,000
<b>PROFESSIONAL FEES</b>			
(Consultants)	500,000	-	500,000
<b>INFRASTRUCTURE</b>			
Roads	900,000	750,000	150,000
Water	850,000	200,000	650,000
Sewerage	1,100,000	200,000	900,000
Electricity/ Street Lighting	500,000	100,000	400,000
Landscaping	60,000	60,000	-
<b>Total Infrastructure</b>	<b>3,410,000</b>	<b>1,310,000</b>	<b>2,100,000</b>
<b>PUBLIC FACILITIES</b>			
Education	500,000	-	500,000
Health	80,000	-	80,000
Community Development	100,000	-	100,000
Religious	80,000	-	80,000
Other	150,000	75,000	75,000
<b>Total Public Facilities</b>	<b>910,000</b>	<b>75,000</b>	<b>835,000</b>
<b>INVESTMENT IN HOUSING STOCK</b>			
Upgrading/ Rebuilding	16,000,000	-	16,000,000
New Housing	20,000,000	-	20,000,000
<b>Total Housing Stock</b>	<b>36,000,000</b>	<b>-</b>	<b>36,000,000</b>
<b>TOTAL</b>	<b>41,295,000</b>	<b>1,485,000</b>	<b>39,810,000</b>

**Hai El Salaam and Abu Atwa Projects, Ismailia, Egypt**

**Fact Sheet 9      Publications, Seminars, Research Papers, Articles,  
Lectures, Papers and Student Study Tours**

**Publications**

Ismailia: Combined Upgrading and Sites and Services Projects, Egypt  
Forbes Davidson  
Low Income Housing in the Developing World . (Chapter 7)  
Edited: Geoff Payne . John Wiley and Sons Ltd . 1984  
Urban Projects Manual  
Clifford Culpin and Partners  
Edited: Forbes Davidson and Geoff Payne . Liverpool University Press . 1983

**Seminars**

The Role of Community Participation in the Preparation and  
Implementation of Development Programmes in Ismailia, Egypt  
Habiba Eid Mohamed Eid  
Regional Seminar . DANIDA.UNCHS . Nairobi, Kenya . October 1985  
Low-income Housing Provision and Improvement - Case Study . Ismailia, Egypt  
David Allen  
Third World Planning Seminar . University of Wales Institute of Science  
and Technology . Cardiff, Wales . September 1985  
Upgrading in Ismailia - A Tale of Two Projects  
Forbes Davidson  
Upgrading Seminar . Massachusetts Institute of Technology . Cambridge,  
Massachusetts, USA . August 1984  
Planning of Low-cost Sanitation Systems: The Experience of Hai El Salaam,  
Ismailia, Egypt  
Forbes Davidson  
Low Cost Sanitation Systems Seminar . Ministry of Development, Housing  
and Land Reclamation . Cairo, Egypt . October 1983  
Implementation of Planning: the Partners - Case Studies  
David Allen  
ISOCARP Annual Congress . Amsterdam, Netherlands . August 1983  
Institution Building for Urban Development - Ismailia as a Case Study  
David Sims  
Development Planning Unit Workshop, University College London . London,  
United Kingdom . July 1982

**Research Papers**

Self-help Communities: Ismailia Experience - an Evaluation of Outcomes .  
Dr. Magda Metwally . Department of Housing and Urban Planning, General  
Organization for Housing, Building and Planning Research, Egypt . 1987  
A Comparative Evaluation of three Upgrading Projects in Egypt  
A Replicability Analysis . S C Silcox . Ford Foundation Grant . 1985  
Some Aspects of the Housing Development Plan in Ismailia, Egypt  
Rosemary Boalch . B Sc Honours Dissertation . Durham University . 1983

### **Articles**

Urban Planning in Egypt

David Allen

Overseas Development . ODA . No.96 . February/ March 1984

Training for Urban Management - the Ismailia Experience

Forbes Davidson

Intermediate Technology . July 1983

Ismailia Sites and Services and Upgrading Projects - A Preliminary Evaluation

Alistair Blunt

Habitat International . Volume 6 No.5/6 . 1982

### **Lectures**

Architectural Association - Graduate School, London, UK

Institute of Housing Studies (BIE), Rotterdam, Netherlands

Massachusetts Institute of Technology . Cambridge, Massachusetts, USA

Oxford Polytechnic - Joint Centre for Urban Design, Oxford, UK

Technical University of Berlin, Berlin, West Germany

The Polytechnic of Central London, London, UK

The Polytechnic of North London, London, UK

The Polytechnic of the South Bank, London, UK

University College London - Development Planning Unit, London, UK

University of Newcastle upon Tyne - School of Architecture, Newcastle, UK

University of Reading - Department of Construction Management, Reading, UK

University of Wales - Institute of Science and Technology, Cardiff, UK

### **Papers**

Regional Seminar - DANIDA.UNCHS, Nairobi, Kenya . 1985

Third World Planning Seminar - UWIST, Cardiff, UK . 1985

Upgrading Seminar - MIT, Cambridge, Massachusetts, USA . 1984

5th International Conference on Urban Design - Washington, DC, USA . 1983

Low Cost Sanitation Systems Seminar - Cairo, Egypt . 1983

International Federation of Housing and Planning Conference - Lisbon, Portugal . 1983

International Society of City and Regional Planners Conference - Amsterdam, Netherlands . 1983

PTRC Summer Annual Meeting - Warwick, UK . 1981

Commonwealth Association of Architects Conference - Nairobi, Kenya . 1981

### **Student Study Tours to Ismailia, Egypt**

Helwan University, Helwan, Cairo, Egypt

Institute of Housing Studies (BIE), Rotterdam, Netherlands

Oxford Polytechnic, Joint Centre for Urban Studies, Oxford, UK

University of Alexandria, Alexandria, Egypt

University of Newcastle upon Tyne, School of Architecture, Newcastle, UK