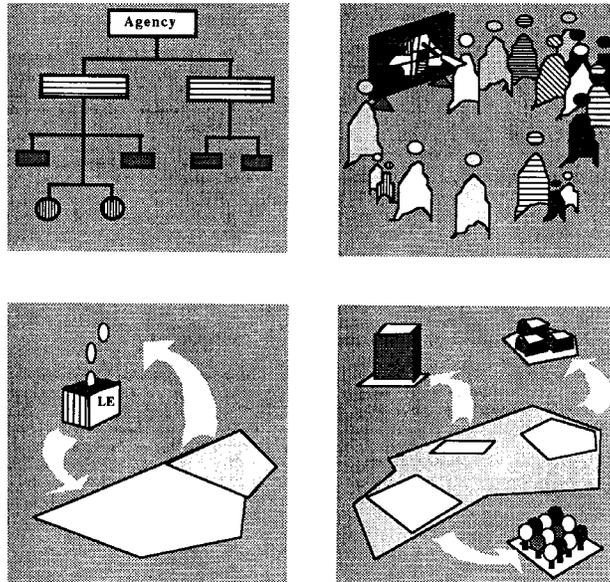


## II. STRATEGY



### HAI EL SALAM PROJECT CONCEPT

The Hai El Salam project area is an unplanned northern extension of Ismailia on desert land which lies one to two kilometres from the centre of town (see figure 2.1). To the east and south it abuts built-up areas of the city, to the west agricultural land and to the north desert land. Hai El Salam is a traditional informal housing area. The built-up fabric of the project area ranges from a densely developed, mainly housing area to the south to a sparsely inhabited desert fringe in the north.

The original name of Hai El Salam, "El Hekr", came from the Arabic word for the tax which is levied on informal settlers to give them temporary rights to stay on the land. The area has been renamed "Hai El Salam" literally meaning "District of Peace" by the local council in 1977 when it was designated as a demonstration project by an administrative order of the Governor under the Local Government Law 52 of 1975 (a law that aims at the decentralisation of administration and the strengthening of governorates).

#### ***Project rationale***

The Hai El Salam project combines both upgrading of the existing settlement and the development of its un-built fringe for the following reasons:

- Upgrading usually entails the removal of some dwelling units for street alignment or the provision of services or utilities, hence there would be a need to relocate their inhabitants which could be done preferably near the site.
- Services, requiring large sites such as schools, are lacking in the existing area and could be provided for in the new extension.
- Implementation of both upgrading and new development could be undertaken by one organization.
- Development of a new area adjacent to the squatter area provides a legal alternative that could prevent further squatting.

#### ***Objectives***

The objectives for the project were derived from the Master Plan, and may be stated as follows:

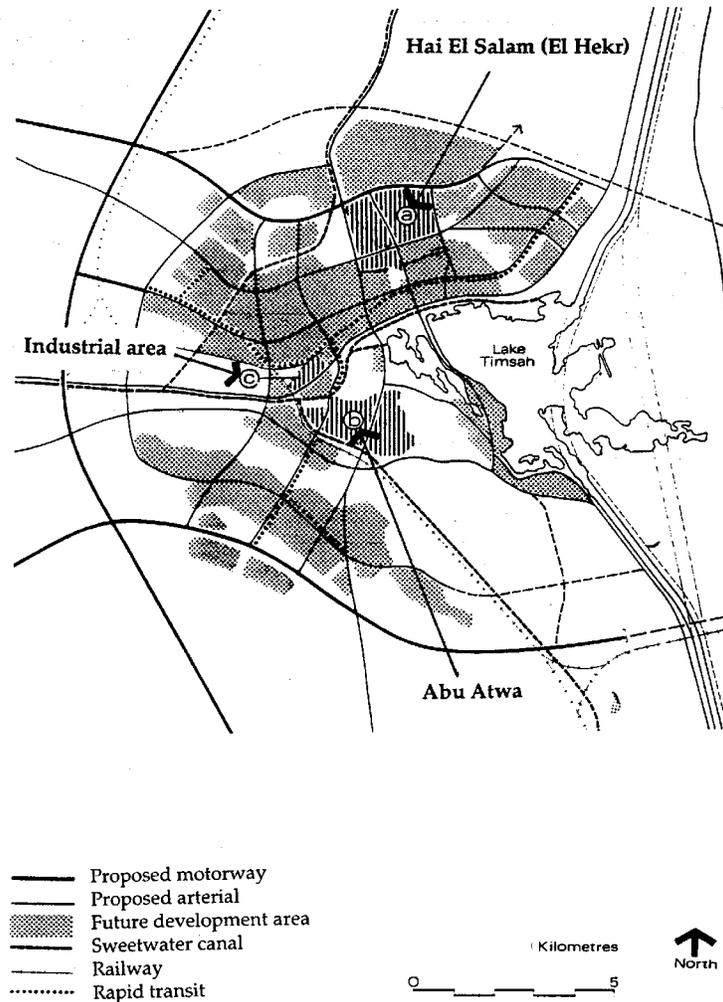
Proposals should:

- Be relevant to low-income groups, which form the majority of the population.
- Be capable of implementation with minimum subsidy.
- Be based on the best possible understanding of the existing situation in its social, cultural, economic and physical aspects.
- Be able to be administered without the need for a high level of sophistication and continued support from outside expertise.
- Be realistic, i.e., should be implementable within the existing administrative and executive structures and not require fundamental legal or organizational reform.
- Be capable of implementation as soon as possible.
- Be capable of modification from experience and with changing external factors.

- Be replicable, in form and content, at other sites in the future.

### **Approach**

The housing needs of low-income groups in particular were intensely researched, and options for levels of services to be provided with respect to affordability were considered. The ability to pay being an important factor made it obvious that there was a need to improve the economical situation of these lower income groups by providing new income-generation potentials.



**Figure 2.1. Location of Hai El Salam (El Hekr)**

*Source: Arab Republic of Egypt, 1975: December*

### **Housing policy**

The master plan proposed a housing policy to provide the housing units needed to meet the growing demand as follows:

"The most effective level of government action for housing is an indirect one, concentrating on providing access to the necessary resources and on the provision of infrastructure at levels and times which match users' preferences and demands. This implies that government should redirect its housing efforts away from direct provision and towards the encouragement of the private and informal sectors."

The informal sector, characterized by progressive incremental construction of housing by small contractors and the owners themselves, is well established. The advantages of this system of housing provision are fundamental to both the user and to the country:

- Owner-built, incremental construction tailors the house to the household's priorities and allows flexibility to meet changes.

- The system allows the household to treat housing as an investment and regard it as an income-generating product.
- Informal construction is cheaper than formal construction and utilises appropriate materials and technologies.
- Incremental, informal housing is accessible to low-income groups without subsidies.

### **Research**

A thorough understanding of the housing system was a prerequisite of the approach outlined above. Consequently, the research comprised a three-stage survey. Questionnaires were designed, based on case studies carried out during the Master Plan phase. First, a "scanning survey" comprising a short questionnaire with basic demographic and economic questions was used on a medium-sized random sample of Hai El Salam population. Long in-depth interviews of 15 families, used as case studies, were then conducted, based on the first survey which served as a framework. The case studies served as a tool to get a better understanding of the housing history of those families and their aspirations. "Detailed studies" then followed as a more systematic approach. From these three levels of survey, a basic housing policy was developed.

### **Replicability**

The Hai El Salam project aimed at demonstrating, first, the applicability of this approach to Ismailia's housing problems and, secondly, its suitability as a model for the central ministry to adopt for other urban areas within Egypt. Within Ismailia the administration accepted the idea as a general principle. A second project at Abu Atwa was slow to start in the late 1970s, but partly due to the success -at least from the Governorate's point of view -of the Hai El Salam project, it has been given full encouragement. Further areas had also been identified for upgrading, including the worst housing area of Ismailia (Manshaat Shohada). Certain factors, however, made replicability in a wider sense harder to achieve.

First, Hai El Salam was chosen as a first demonstration project area partly because it was expected to be easy to implement. It had no physical or tenure problems which would hinder the planning process or require sophisticated technical solutions. Secondly, both the Hai El Salam and the Abu Atwa projects had benefited from small amounts of "inception" capital and technical assistance provided through the British Overseas Aid Programme. While these conditions may not be repeated, it would seem that the Hai El Salam project had indicated an alternative method of providing access to housing at minimal cost to the Governorates.

The Hai El Salam project concept is widely implemented today in Ismailia as a large number of urban and rural areas have been designated as projects to follow the same principles as those in the pilot project. Several urban upgrading projects are being implemented while plans, are being made for five more urban areas. Five additional rural areas are earmarked for the creation of similar projects each in turn including two to four villages.

### **Flexibility**

During the first three years, the project experienced changes in its administrative structure, organization and contents. The standard plot shapes were altered to comply with pressure from the plot awardees. Alterations had been made in the way applications were handled to give the Agency more flexibility and to enable more to participate in the draw for plots. New building regulations were also enforced, and as a result block layouts and footpath widths were altered. These alterations also facilitated easier surveying for the less-skilled technical staff. In addition, the Agency broadened its involvement into other problems in the area including waste disposal and maintenance. A new organizational structure evolved to cope with these changes.

## **SOCIAL PROFILE AND TARGET POPULATION**

Surveys were carried out by the consultants to identify the socio-economic characteristics of the existing population and to identify the target population for the future development of the area. Surveys were carried out by a team of teachers from the area under the guidance of social workers during the summer school vacation. This ensured easy accessibility and acceptability by the residents in addition to a high degree of reliability in the results of the survey (see "Community participation" later in this chapter).

### **Population**

Hai El Salam was first occupied in 1937, and had grown to an estimated 37,000 people at the time of the survey. It was anticipated that the population of the combined existing and new development areas would increase to approximately 90,000 by the year 2000. This population estimate assumes that all designated land is developed before 1990.

<b>Year</b>	<b>Population</b>
1977	37,000
1980-1985	58,250
2000	89,700
<i>Source: Arab Republic of Egypt, 1978: vol.2</i>	

Households have an average size of 5.6 persons, and have tended to settle and reside in Hai El Salam in related groups. This gave rise to sections that were still predominantly occupied by family groups or groups of families with common origins elsewhere, many of them from Upper Egypt. The population of Hai El Salam as a whole was slightly younger than that of Ismailia.

Over half of those interviewed in the scanning surveys, which covered the whole of Hai El Salam, have lived there for more than 10 years. One fifth have lived in the area for less than two years, principally moving to Hai El Salam to own a house of their own, or to save so as to be able to achieve home ownership eventually.

The distribution by neighbourhood of the existing and projected populations are shown in figure 3.4. Gross densities in the existing areas, in 1977, were estimated to range from 200 persons per hectare to 500 persons per hectare in the southern area of *imaras* (apartment buildings) and were expected to range from 400 persons per hectare to 650 persons per hectare by 2000. In the new development area, gross densities were 270 persons per hectare at initial occupation and increased to 400 persons per hectare after 10-15 years.

### ***Economic characteristics***

The ability of the exiting and projected populations to pay for improvements, and similarly the ability to pay for plots and superstructure in the new development areas, has been determined by analysis of the income and expenditure characteristics of the existing populations of the project areas. It has been assumed that the incomes of this target population will remain constant in real terms over the following 15 years. Estimates of the proportions in income groups which are economically mobile and which have a propensity to consume in terms of housing improvements or new plots have been made on the basis of the occupational structures and income groups in the areas.

In Hai El Salam, having taken into account the high proportion of government employees and the proportion of informal private-sector employees (and employers) who tend to have higher incomes, the following estimates were made in 1977. 57.3 per cent of the households were of very low income (less than £E25 per month (1977, US \$35.7) with no expectation of an improvement in their status. Households with very low to low incomes (between £E26 and £E39 (1977, US \$37 and \$55.7) experiencing or expecting an improvement in their status were estimated to make up 28.5 per cent of the population. Thirdly, households with low to moderate incomes (£E40-£E69 per month (1977, US \$57-\$98.5) with no expectation of an the improvement in their status were estimated to make up 12.6 per cent of the population. Finally, 1.6 per cent of the population were of moderate incomes (£E70+ per month (1977, US \$100), experiencing or expecting an improvement in their status.

Employment for the population is found principally in central Ismailia, including Arashia, adjacent to Hai El Salam. Half of all earners in the area are in government employment which, although lowly paid, secure and provides regular incomes. The private informal sector provides employment for a further third of all earners, though this sector appears to be relatively under-developed in the area. Most people working in central Ismailia walk to work.

Most households live in individual houses but one fifth occupy shared dwellings. Approximately one quarter of households rent accommodation, including 15 per cent renting individual houses.

From the surveys there was a clear consensus in the area on priorities for improvements. While the condition of the housing in the area is generally not felt to be a problem by households (though they aim to make improvements when they can afford them), the provision of water, surfaced roads and sewerage were felt to be the priorities for government-aided improvement. The land tenure of nearly all households in Hai El Salam is provisional, but despite this a land market exists. Security of land tenure is an underlying concern for people throughout the area.

Hai El Salam is very deficient in the provision of facilities. There is only one primary school in the area although a preparatory school is currently being built. Limited schools exist in adjacent Arashia. One small social unit in Arashia serves Hai El Salam partially, and public health services for the area rely entirely on the hospital in Arashia.

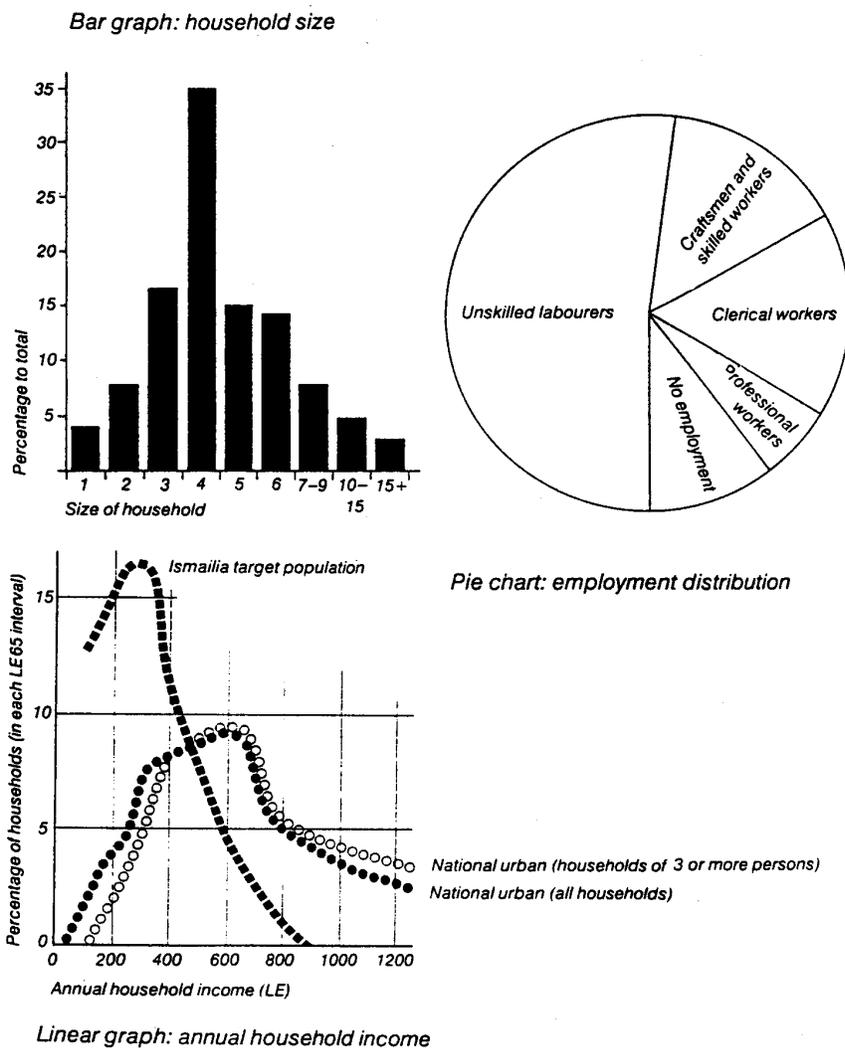
### ***Target population***

The target population was taken as the existing population of Hai El Salam which falls mostly within the 30 per cent income bracket of Egyptian population (see figure 2.2), with a mean household income of £E25 per month in 1977 (1977, US \$35.7). The project, however, was not designed exclusively for this income group as families with higher income levels in Ismailia also required plots for housing. This was seen as a good opportunity to undertake cross-subsidy of the plots for lower income groups. This meant that a certain proportion of plots would be sold with few restrictions at a higher price, and the "profits" would allow is lower prices to be charged for plots for the lower income groups. An income "ceiling" was proposed for the subsidised plots. The different prices related to different locations and standard of services.

In addition to the benefit of cross-subsidy, allowing access to higher income groups helps to remove the pressure which they would otherwise bring to bear to replace or buy out the low-income groups. This is a phenomenon which has been recorded in many low income housing projects in third-world countries. Yet another advantage is that instead of developing a large single income-group ghetto, a reasonably balanced section of the city can develop.

**Figure 2.2 Hai El Salam household income, size and employment distribution – 1977**

Source: Davidson, Forbes, and Geoff Pane (ed.), 1983



## ADMINISTRATION

Existing agencies in Egypt traditionally involved with urban development (the Ministry of Redevelopment, the Governorate or the City Council) lacked the needed funding to undertake large-scale projects and were constrained by their centralised nature of operation. To address these issues a new organization in the form of a development authority was proposed by the master plan. Local Government Law 52 of 1975 empowers the Governor to establish semi-autonomous agencies to plan and manage the development of projects within the Governorate. Thus, this new organization, a project agency, was to have the power to recycle funds locally thus becoming capable of running the

project.

### ***Project agency***

The project agency, in order to manage the project successfully and implement it speedily, needed to be able to operate free from the restrictions of the local bureaucracy. The proposed organization for the Hai El Salam Project Agency is shown in figure 2.3. This mandated autonomy not only from the responsible department within the central or local government for the decision-making process, but also financial independence. Thus the Agency would acquire the power of buying and selling land, entering into contracts and managing its own budget. The Agency, it was acknowledged, could not act in total isolation without cooperating with various existing authorities and agencies responsible for the control and development of land and utilities. Therefore it was suggested that the Agency should be governed by a board of directors, who could act as the governing board for other similar project agencies, and who would include senior representatives of the Governorate, the City Council, the Housing Directorate, Amlak Department (the department responsible for land), the local office of the Ministry of Finance and the Project Manager. This Board would be directly answerable to the Governor.

The responsibilities of the Agency included:

- The complete detailed planning of layouts;
- The survey, allocation and sale of plots;
- the drawing-up of contracts;
- The collection of payments and the borrowing of money;
- Negotiations with the Agencies responsible for the provision of utilities and co-ordination with the City Council;
- The representation of inhabitants' needs to the authorities responsible for the provision of social facilities;
- The provision of technical assistance to plot holders.

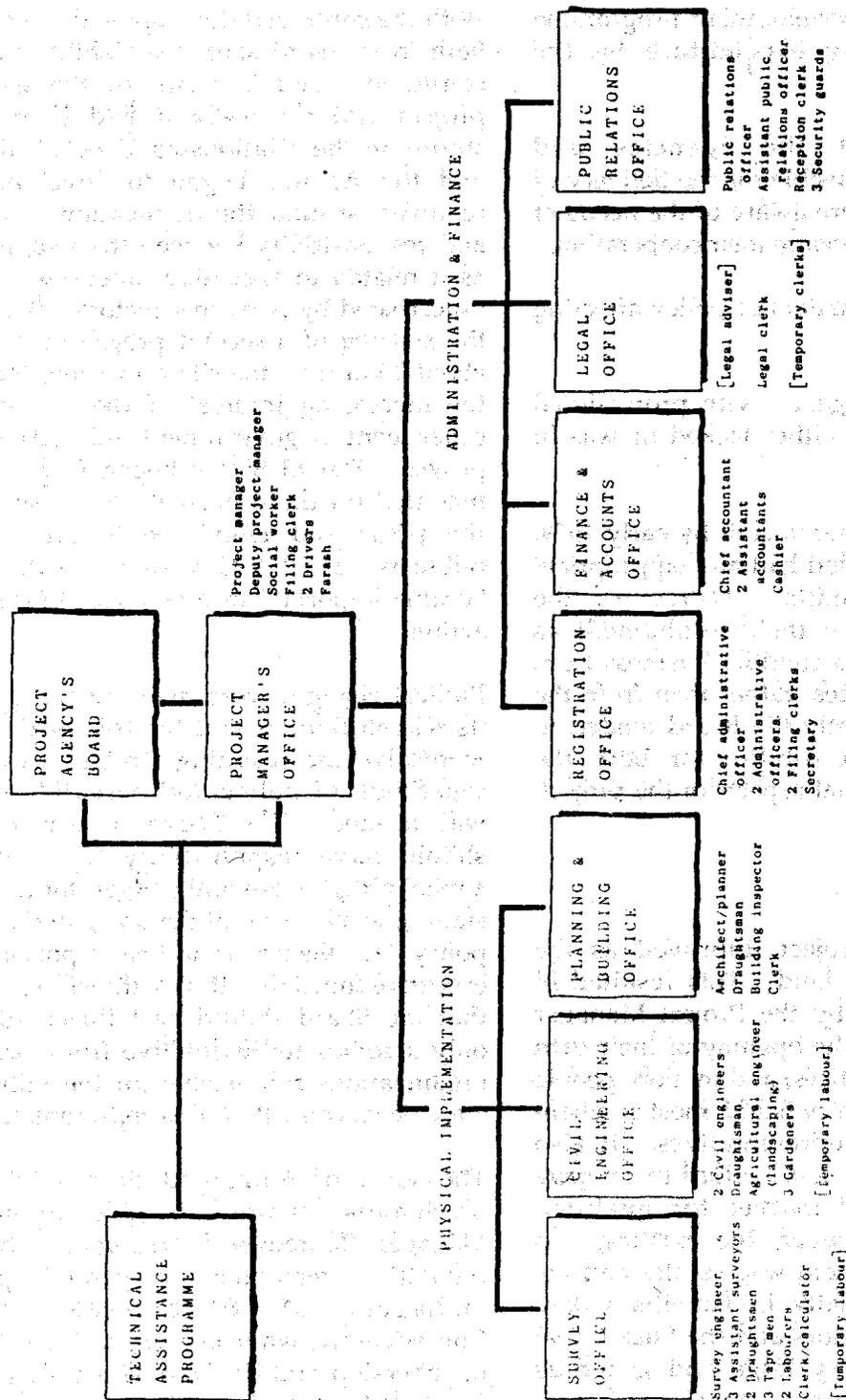
The Engineering Office was perceived mainly as a supervisory office, handling contracts and providing technical assistance to plot holders. The Legal Affairs Office was to be concerned with the preparation of contracts for plot holders and most essential in the first two to three years of the project. The Finance Office was to focus on the recollection of payments, budgeting and all financial transactions in addition to setting up any building loan programme. The Public Relations and Applications Office would be the "front" office, accepting applications and answering queries. About 10 of the 36 persons making up the Agency would be professionals.

### ***Project Agency Board***

The Project Agency Board and the Agency itself were not established until 1978, a year after Hai El Salam was first declared a project area. Control over the development, purchase and disposal of the land was given to the Board. It initially consisted not only of the people proposed in the consultants proposal, but also the Chairman of the City Council who replaced the General Secretary of the Governorate, the Chairman of the District Council, the senior representative of the Ministry of Construction and New Communities, a representative from the Survey Department, members of the Party, the Governor's Chief Engineering Advisor and the Agency's Legal Advisor. In 1979 the Board was further extended to include representatives of the Suez Canal Authority and the Electricity Supply Company.

The Board's functions initially were:

- To authorise the development programme and any resulting expenditure by the Agency;
- To ensure that the agencies and departments responsible for the delivery of certain services were aware of the needs of the project and so ensure their co-operation;
- To decide on all matters of policy affecting the project;
- To provide the Agency with professional expertise which it either lacked or was in short supply.



**Figure 2.3. Initial proposed Hai El Salam Agency organization**

Source: Arab Republic of Egypt, 1978: vol.1.

The Agency had a skeleton staff by early 1979. However, those seconded had an inappropriate level of technical skills. Moreover, the management staff saw their secondment as temporary and tried to conduct business from their Governorate offices, rather than from the site office. Consequently the Board tended to assume greater responsibility for both the technical and managerial aspects of the project.

### **Agency evolution**

The status of the project improved as the Agency began selling land. This resulted in increased attendance by the Project Manager (further enhanced by the opening of their own custom-built project offices) and in more people being added to the Agency Board, most of whom were local political representatives. It also meant that the Agency could afford to compete in the private-sector market for qualified technical staff. However, the existing gap between local-

government wage scales and the private sector, especially in Ismailia where both the Arab Contractors and the Suez Canal Authority (SCA) -very large and generous employers of technical personnel -are based, was so great that even with the secondment bonus of 50 per cent of base salary, it meant that the engineer needed to be paid as much or more than the Project Manager. Consequently, little effort was made by the Agency or Board to pursue prospective employees. When, eventually, due to considerable pressure from the technical assistance programme and a realisation that in-house engineers would be cheaper than hiring their own consultants, they did hire their own engineers, the role of the Board changed little and the technical staff tended to be under-utilised.

With the continued development of the Agency both in terms of staff, their abilities and self-confidence, and in terms of the size of the project and the work it had to undertake, strains in the relationship between the Board and the Agency began to develop. These revolved around the delineation of authority and responsibility between the two, especially as it related to executive functions. This was exacerbated by two other factors. The first was the starting of a second project in Abu Atwa, about 3 km from the city centre and the second, the increasing interest of the Governor and other central-government ministries in the project. Hai El Salam began to be regularly included on the official tours of Ismailia and the press and television began to give it publicity. For the Governor and the Party, it became important as a symbol of Governorate action.

Radical changes were made to the Board and its responsibilities and the role of the Agency to resolve the resulting strains. A complete separation of policy and executive functions was needed. The Board, it was proposed, should have responsibility for: approving annual programmes and budgets for the Agency; staffing levels; special bonuses; and matters of policy. The agency would be responsible for all executive functions. It was, therefore, suggested that the Board should be reduced to include only a senior representative from each of the organizations responsible for the utilities plus a few local council or area representatives.

The Governorate opposed this as it felt that too much authority would be given to the Project Manager. Moreover, it was pointed out, fiscal regulations restricted the spending power of managers of Governorate projects. Consequently, while cutting back on the Board membership and developing a separate board for each Project, the revised structure did not include all the technical people required to vet authoritatively the proposed programmes and budgets. Instead, executive committees were created to control day-to-day expenditure for each Project. The new executive committees consisted of the Board Chairman, the Project Manager and the Project's Finance Director.

The full Board was responsible for the approval of the programmes, the budget and matters of policy and was to monitor the progress of the work, but did not interfere with any executive function.

One consequence was the loss or restriction of one channel of participation by the public in the project through the local council representatives on the Board. However, it is culturally acceptable for individuals to make representation to the highest levels directly and informal contacts and relationships influence many decisions.

## ***Agency concept evaluation***

### ***Advantages***

The concept of creating an agency proved successful in the Ismailia case in that it provided a management approach which shifted from development inertia to a much more active role. Consequently, six new project- specific development agencies, similar to that at Hai El Salam, were created within Ismailia.

The location of the Agency in the project area had many positive implications. This meant that the team of seconded government staff had to work together away from their normal offices, thus building motivation and teamwork. Physical and social problems were being witnessed daily by the team. In addition, the staff on the team became very accessible to the population of the area.

Technical assistance and training from the consultants and later from the Regional Planning Office formed by professionals seconded from the General Organization of Physical Planning (GOPP) played a positive role in upgrading the capacities of local professionals on the Agency team. The local staff helped to develop the new pattern of routines and working culture. This made management very robust and its success is witnessed in its continuation and expansion even without further external assistance. Different skills were transferred to local staff as they were provided with formal training sessions that were related to real local situations and problems.

### ***Disadvantages***

Since senior members of the Agency held positions within the Governorate they perceived -it seemed -that the project posed a threat to their future careers. They believed their promotion was jeopardised by their absence. Since they saw

the secondment as a temporary one, they tried to conduct business from their Governorate offices, rather than from the site office defeating somewhat the purpose of location of the Agency in the project site.

The growth of the Board, due to the need to include representatives from different agencies and political figures, meant that it became unwieldy and decisions were difficult to reach. Most proposals put to the Board were delegated to ad-hoc sub-committees or taken by the Board Chairman.

## COMMUNITY PARTICIPATION

The Hai El Salam area was created and developed entirely by the efforts of the community that resides in it. Any professional intervention would have to include that community to be ensured success. The involvement of the residents of the area from the initial stages of the project, together with the involvement of key political figures such as the Governor, proved to be very fruitful.

### ***Planning stage participation***

The consultant team emphasised the importance of community participation from the planning stages. School teachers from the community, for example, were recruited to conduct the socio-economic survey of the inhabitants. This proved to be useful during the data-collection stage in many ways: teachers were trusted by the community; they had instant access to the families of the pupils they taught; they collected data more accurately; and they served as good communicators whereby they informed the inhabitants about the project and were able to get their cooperation.

**Photo 2.1 Community and politician involvement – Ismailia's Governor distributing title deeds**

**Photo 2.2 Project Agency new building in main centre (left)**



Representatives were selected from the area residents to coordinate with the Agency. These representatives were



usually natural social leaders within the community identified during the surveys. These representatives acted as a liaison between the residents and Agency and had an active role in defining problems and obstacles and resolving them. Community representatives, who formed a people's committee, were instrumental in pay for upgrading costs.

### ***Discussion of proposals***

Once proposals were formulated by the consultants, the Governor and the area citizens discussed planning alternatives. This approach immediately gave the project a high status of credibility and interest by the residents, and guaranteed a high degree of cooperation. The citizens were encouraged to select one of the options presented. Although the

community's participation in the decision-making meant that more time would be spent on the process, it was regarded as extremely important institutionally by the consultants.

Community feedback on various project aspects led to design alterations. Roads, for example, were designed to resemble traditional alleys where they had irregular shapes and, in some instances, had dead ends, the intention was to encourage traditional patterns of living and the provision of open play space. The residents preferred straight streets that they thought portrayed a more "modern" and legal image. This resulted in implementing wider and more straight streets than those designed originally.

Plot sizes in the new extension which were designed to have a frontage of 6m for reduced infrastructure costs, were regarded as too restrictive in the design of buildings. The frontages were therefore increased to 7.5m not making a significant change to the infrastructure costs incurred by each plot but improving the development options of the plots themselves.

The project became more defined with the residents' involvement. This was a key issue in the timely implementation of the different stages. For example, those residents that had to give up their land for the improvement of the street network in exchange for another plot were cooperative and even participated in the demolition of their old structure. They recycled the building components and were helped by the Agency in moving their belongings.

### ***Communication***

Communication played an active role to ensure the involvement of the community. The location of the Project Agency's office within identifying the realistic ability of residents to the settlement was a vital aspect ensuring the continued communication with the community and its participation. Access to the project staff and the plans played a positive role in the participation process. Several means of communication were utilised during the different phases of the project. These included:

- Word-of-mouth in public meetings, via the community representatives and in meetings with individuals;
- Project documents, fact sheets and information bulletins displayed at the Agency office;
- News media, including newspapers and television, were ceremonies of deed distribution and the such were broadcast.

### ***Participation of politicians***

Participation of the politicians also played an important role in the project implementation. Being associated with a project that has a high profile and a large number of beneficiaries is very appealing to politicians particularly if it entails media exposure. On the other hand, the involvement of politicians helps achieve goals as political clout is necessary to motivate various agencies that provide services to the community. As the project developed, it became a showpiece and dignitaries were invited to visit the settlement giving it increased strength and credibility.

The participation of a mix of beneficiaries from different social strata in the project played a positive role in the success of the project. Members of the middle class have a louder political voice than lower income groups that could be tapped to help implementing the project.

The people's committee of community leaders is encouraged by the Governorate to continue participating in running the project once the community is fully-fledged. The Governorate is seeking to increase the participation of its citizens in the management of their residential environment.

## **FINANCING: COSTS AND SUBSIDIES**

The implementation of the project's concepts was made possible through the sale of land. The land on which the existing settlement was located, as well as its extension to the north, was originally government-owned land transferred to the project by Gubernatorial Decree No.811 of 1978. Thus a major source of funding for the project came from the sale of land to the original settlers and to the newcomers to the extension. Cross-subsidy between the different income groups in the project was proposed to make housing accessible to the lowest income groups.

The involvement of the Central Government through the Ministry of Housing (MOH) has been mainly supportive through the provision of technical assistance. It was represented on the Agency Board through the Director of Housing who was responsible to his central Ministry. Under the Local Government Act of 1979, the Governorates had total responsibility for meeting the housing needs within their areas and so had greater autonomy in financial and planning matters. The Housing Department came under the direct control of the Governor, but the size of budget available still depended on the decision of the Ministry of Planning on the National Budget and the proportional allocation of resources determined by all Governors. The degree of autonomy was limited to additional funds from the

Governorate's own revenue-raising activities, such as the sale of land. The 1989 Local Government Act specified that all monies from the sale of urban land should be placed in a special Housing Fund to be used for the development of "economic housing". "Economic housing" tends to refer to traditional public housing of a certain limited floor area (72m<sup>2</sup>). However, the Law has been interpreted quite broadly, in spirit if not in word, in Ismailia.

The role of the Governorate in housing -and specifically the Governor, through the People's Council (the principal elected body for the Governorate) -has been strengthened; in other areas of urban development and infrastructure the Law is too vague or completely fails to address itself to the problem. In Ismailia, water is provided by the Suez Canal Authority(SCA) over which the Governor has no control and only limited influence. Electricity is supplied by an autonomous public-sector company which is likewise beyond the direct control of the Governor. Responsibility for sewerage and drainage lies with the City Council and the National Authority for Potable Water and Sewerage (NAPWAS). While sewerage development can be controlled indirectly by the Governor through the City Council, the existing legislation makes little provision for independent action or initiative. Local sources of revenue, outside the sale of land, do not generate sufficient capital to enable the Governorate to initiate work outside that approved at central-government level. Consequently, the Agency was unable to act quickly in the development of the utilities and it was for that reason that representatives of both SCA and the Electricity Company were brought on to the Board. One consequence of all this was that the original assumptions on which the pricing of the project were based have been changed. For example, the project was expected to pay for the distribution system for electricity within Hai El Salam, including the trunk lines and the transformers. Likewise, the SCA agreed that only it should provide the water network, yet to a lower level of provision than in the plan. When negotiations between the Agency, and the organizations responsible for the utilities failed to reach agreement, the only way open to the Project Agency was to appeal to the Governor to use his authority within the Party.

Level of infrastructure provision	Costs per plot (1977 LE)**		
	72m <sup>2</sup> plot	108m <sup>2</sup> plot	135m <sup>2</sup> plot
<b>Level I</b>			
- administration, markers, compensation. Registration	17	25	31
- pit latrines (includes capitalised running costs)	105	105	105
- standpipes	14	21	26
- stage I local roads	17	26	32
<b>Total</b>	<b>153</b>	<b>177</b>	<b>194</b>
<b>Level II</b>			
- Level I plus:	153	177	194
- Electricity	53	53	53
- Landscaping	3	5	6
<b>Total</b>	<b>209</b>	<b>235</b>	<b>253</b>
<b>Level III</b>			
- Level II plus:	209	235	253
- paved district streets	11	16	20
- stage II local roads	27	41	51
<b>Total</b>	<b>247</b>	<b>292</b>	<b>324</b>
<b>Level IV</b>			
- Level II (less pit latrines) plus:	104	130	148
- reticulated water network*	34	50	62
- water connections	65	65	65
- reticulated sewerage network	53	79	79
- sewerage connections	95	95	95
<b>Total</b>	<b>351</b>	<b>419</b>	<b>469</b>
<b>Level V</b>			
- Level IV plus:	351	419	469
- paved district streets	11	16	20
- stage II local roads	27	41	51
<b>Total</b>	<b>389</b>	<b>476</b>	<b>540</b>
<b>Level VI</b>			
- Level V plus:	389	476	540
- trunk sewers	36	54	68
- trunk water mains	36	54	67
- paved access roads	41	61	76
<b>Total</b>	<b>502</b>	<b>645</b>	<b>751</b>

Level VII			
- Level VI plus:	502	645	751
- service core	163	163	163
Total	665	808	914
* (excludes standpipe provision)			
** (In 1977 1 LE = £ 0.75 Sterling)			
<i>Source: Davidson, Forbes, and Geoff Pane (ed.), 1983</i>			

Level of infrastructure provision	Percentage of households affording each level		
	72m <sup>2</sup> plot	108m <sup>2</sup> plot	135m <sup>2</sup> plot
Level I	96	93	87
Level II	87	81	78
Level III	79	72	66
Level IV	41	30	23
Level V	35	21	15
Level VI	17	11	6
Level VII	10	4	1

*Source: Davidson, Forbes, and Geoff Pane (ed.), 1983.*

The system of costing was based on assumptions about the level of income of the target population and the proportion of the income that could be spent on housing, both for the land and the building with all services. A system of pricing was established differentiating between the existing area and that for new housing. A base price was fixed and an additional premium added in the new areas for plots fronting main roads. The income expected from the sale of plots was estimated to be sufficient for the project to pay for the running of the Agency, the development of transitable roads, low-tension electricity distribution systems and street lighting and a water reticulation system serving communal water faucets on a 100m grid throughout the area. Sufficient capital would be available after this to pay for either some improvement of the water-supply system, the paving of roads or the introduction of some sewerage reticulation. However, it was pointed out, this choice would need to be made early in the project to ensure no waste, such as the destruction of paved roads when installing main pipes or sewers.

The division of costs was based on the general rule that off-site and main distributors of utilities would be paid by the utility company and would be recovered through user charges. Local on-site distribution would be paid by the plot holder. The incremental nature of the housing system was strongly considered in the land allocation and infrastructure provision. Additional future storeys, and improvement of, sewage disposal from initial pit latrines or septic tanks to a waterborne system are allowed if and when such changes become feasible. Table 2.2 shows the different levels of infrastructure provision and the cost per plot for each option. Table 2.3 shows the ability to pay for different levels of infrastructure by household. While the Agency would provide land for the community facilities, the construction costs would be covered by the responsible ministry or department.

While this meant that those given plots in this area paid a far higher proportion of the construction and servicing costs than those in traditional government housing, there were still elements of subsidy, internally through the differential land costs and the sale of some choice plots on the open market, and externally with the Governorate providing the land.

The reorganisation of the local-government responsibilities, the rapid rate of inflation and the lack of local-government financial autonomy has resulted in various changes. First, the base price for land was raised to take account of inflation. The differential price system for the land was modified to be more sensitive to the shadow price of land in different parts of the project site. This was later standardised according to the width of roads.

The distribution of costs between the Project Agency and the local-government departments and utility companies was changed. Although the city administration was responsible for street lighting and sewers and the Suez Canal Authority was responsible for water, the Project Agency paid the major part of all costs for street lighting and water. No decision had been made on how the costs of the sewerage would be borne, for the city alone could not afford the development of the system. While Ismailia was a subject of a United States Agency of International Development (USAID)-funded water and wastewater upgrading and extension project, the estimated costs of the work in Hai El Salam were considerably more than the costs estimated in the demonstration projects. This was in part due to inflation, and in part due to the conditions of the USAID.

Another unplanned cost borne by the Agency was for some of the community facilities. The cost of the main mosque,

the market and part of the costs of the youth centre, and police and fire stations had been paid by the Agency. The Agency had also had to pay some money back to the Governorate. However, as the major part of the staff were seconded and, hence, partly paid for by the Governorate, this could be seen in lieu of payment.

Overall, while the expenditure system had not followed the original plan exactly, in effect through a rather random and approximate way the actual burden of costs had not departed "in spirit" from the intention of the plan.

### **Project financing status, 1990**

The Governorate of Ismailia issued a study in May 1990 entitled *The Development and Upgrading of Urban and Rural Areas. Case " Studies (Hai El Salam - Fanara Village)*. This study was presented at a seminar on the exchange of experience and replicability of local development projects within the Suez Canal Region. The study summarises the project and gives an account of the achievements to date.

### **Sources of funding**

The project funding policy depends on several funding sources.

#### **Sale of land to squatters**

The first source of funding Comes by legalising the situation of squatters and selling the land to them in return for legal tenure and the provision of services. This applies to the old sector of the project and Covers about two thirds of the project area. These plots were cheaply priced with 10-year payment plans. 5488 plots were sold with a total area of 895,249m<sup>2</sup> generating an income of £E 2,014,311 (1980, US \$2,877,587).

#### **Sale of newly-developed land**

The second source of funding comes from the sale of developed plots in the new extensions, about one third of the project area. Sale of newly- developed land would occur according to two mechanisms:

- (a) Sale by auction  
Prime lots, located on main streets and with a potential of economic activities were sold by auction. 215 plots were sold with a total area of 38,191m<sup>2</sup>, generating £E 3,215,566 (1980, US\$ 4,593,666).
- (b) Sale by lottery  
The Governorate made land available to the residents throughout the city at low prices ranging from £E2 to 4/m<sup>2</sup> (1980, US \$2.85 to5.7/m<sup>2</sup>) and reaching up to £E 10/m<sup>2</sup> (1980, US\$14.3) for the prime lots. 2065 plots were sold with a total area of 1,086,846m<sup>2</sup> generating an income of £E 1,421,120 (1980, US \$ 2,030,171).

These funds were placed in a special bank account under the disposition of the Project Agency, separated from other governorate funds. The monies collected were earmarked for the implementation and improvement of infrastructure and the provision of services.

	Number of plots sold	Area of plots sold (m <sup>2</sup> )	Income generated (£E)	Income generated (1980 US \$)
Sale to squatters	5,488	895,249	2,014,311	2,877,587
Sale by auction	215	38,191	3,215,566	4,593,666
Sale by lottery	2,065	1,086,846	1,421,120	2,030,171
Total	7,768	2,020,276	6,650,997	9,501,424

*Source:* Ismailia Governorate, 1990