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AUDIT OF  
HELWAN HOUSING AND  
COMMUNITY UPGRADING IN EGYPT  
PROJECT NO. 263-0066

Audit Report No. 6-263-89-1  
October 31, 1989

UNITED STATES OF AMERICA  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
OFFICE OF THE REGIONAL INSPECTOR GENERAL/AUDIT

October 31, 1988

MEMORANDUM FOR D/USAID/Egypt, Marshall D. Brown

FROM : RIG/A/Cairo, F. A. Kalhammer *Kalhammer*

SUBJECT : Audit of Helwan Housing and Community  
Upgrading in Egypt Project No. 263-0066

The Office of the Regional Inspector General for Audit/Cairo has completed its audit of the USAID/Egypt Helwan Housing and Community Upgrading Project No. 263-0066. Ten copies of the audit report are enclosed for your action.

The draft audit report was submitted to you for comment and your comments are attached to the report. The report contains five recommendations.

Recommendation Nos. 1, 3, and 4 are considered resolved, but cannot be closed until completion of planned or promised actions. Recommendation Nos. 2 and 5 remain unresolved. Please advise me within 30 days of any additional actions taken to implement Recommendation Nos. 1, 3, and 4, and further information you may wish us to consider on Recommendation Nos. 2 and 5.

I appreciate the cooperation and courtesy extended to my staff during the audit.

## EXECUTIVE SUMMARY

In August 1978, the U.S. Government and the Government of Egypt (GOE) signed the Helwan Housing and Community Upgrading Project Grant Agreement. The Executive Agency for Joint Projects (EAJP) was established by the GOE Housing Ministry to implement this project. The project purpose was to demonstrate the premise of a proposed new urban housing policy: that basic housing and community facilities could be provided for low-income families at a price they were willing to pay, and which would provide the GOE with substantial recovery of its investment. There were two major project components: development of a new community and upgrading of seven existing low-income areas in Helwan, which is located about 30 kilometers south of Cairo.

The total cost of the project was to be \$160 million shared equally by both governments. As of March 31, 1988 USAID/Egypt and GOE expenditures under the project were \$70,627,705 and the Egyptian pound equivalent of \$62,949,678, respectively. The original Project Assistance Completion Date (PACD) was August 31, 1983, which was extended to August 26, 1988.

The objectives of this program results audit were to determine whether the project was achieving its stated goals, and if those goals were being achieved in an efficient and effective manner. The audit showed that, after 10 years and the expenditure of about \$134 million, the project was still far from reaching its objectives. As of June 1988, not a single low-income family occupied a house in the new community and many of the promised services in the upgraded communities were years from being delivered.

The project was characterized by inordinate delays and questionable management decisions regarding, among other things, site selection, engineering, and the type and size of units to be built. Very little can be done about these matters now. The report recommends, therefore, that USAID/Egypt analyze the project's implementation history and issue a "lessons learned" paper to help A.I.D. avoid similar deficiencies in other low-income housing projects. The audit showed that many issues still need to be resolved in order to achieve the project's goals. Among them: (1) criteria for selecting the intended beneficiaries needed to be clarified; (2) 6 of 10 subdivisions in the new community had no housing plans; (3) the implementing agency cannot retain fund collections from project beneficiaries for further project use, as planned; and (4) \$7.4 million in completed sewer and water lines were not expected to enter into service until 1990 at the earliest.

The project agreement identified the total salary of the head of household as the basis for determining beneficiary eligibility. The project paper stated household income should be used. In actual practice, EAJP used a different standard--the basic salary of the head of household, not to exceed LE125 per month. The difference between the three measures could be substantial. Thus, there is limited assurance that the beneficiaries contemplated in the project agreement will actually be reached, or that those selected will be able to afford their loan payments and also meet other financial obligations. The report recommended that USAID/Egypt and the implementing agency reexamine the income data and assumptions underlying the eligibility criteria in order to identify the target group. The Mission was not in full agreement with this recommendation.

At the end of our fieldwork, housing plans for 6 of the 10 subdivisions in the Helwan new community had yet to be prepared. The original project design called for the construction of 7,200 core dwelling units for low-income factory workers. In three subdivisions we found multistory apartment buildings under construction. In another, urbanized lots were being offered for sale along with construction financing. We recommended that USAID/Egypt ensure the development of a housing plan for the remaining six neighborhoods. USAID/Egypt agreed with this recommendation and stated that the GOE has developed an individual plan for each of them.

According to the project design, the Executive Agency for Joint Projects (EAJP) was to administer a revolving loan fund; however, the availability of funds needed for such purpose is uncertain. This is because GOE regulations do not allow the implementing agency to retain repayments from beneficiaries. Under GOE regulations, EAJP is not authorized to retain any funds collected from the beneficiaries because EAJP is classified as a service agency. All collections of a GOE service agency are considered fiscal income and must be deposited in a special account in the Central Bank of Egypt. Project designers apparently never considered GOE regulations governing service agencies. We recommended that USAID/Egypt ensure the issuance of the appropriate authorization to allow EAJP to collect and use project revenues. The Mission agreed with the thrust of this recommendation.

Sewer and water lines to serve six upgraded communities in Helwan are not expected to be operational until about 1990-92 because there is no connecting system in place to carry off the waste. One of the project outputs was to upgrade some of the existing communities in Helwan by providing them with sewage and water conduits. Originally, the completed sewer lines were to rely on the Helwan Wastewater Master Plan, a project funded by the European Economic Community. When it was obvious that this system would not be completed on time, USAID/Egypt approved construction of a temporary off-site collector and a sewage treatment plant. After about 2 years of study, this decision was reversed in 1986. Thus, the completed sewage lines will remain unused for at least 2 to 4 years with the possibility of system deterioration. We recommended that USAID/Egypt consult with the GOE to solve this problem as soon as possible.

USAID/Egypt was in general agreement with the audit report and the intent of its recommendations. In summary, their response was as follows:

"Much of the audit report echoes the concerns of the Mission regarding this project. When judged in comparison with other construction projects, both the upgrading and the new community components have taken years longer than this construction should have taken. This has delayed achievement of some project objectives which could only be implemented after completion of initial infrastructure construction.

We would like to note, however, that this project was not just another construction project. The purpose of the project was to explore and test alternate approaches of utilizing scarce GOE resources, and to rely upon significantly greater participation by low income Egyptians in solving their housing problems. These approaches represented a significant, radical departure from the essential operating philosophy of the GOE in dealing with this segment of Egyptian society. The project resulted in the following discernible accomplishments:

- It demonstrated that a well focused project with modest resources can impact positively on the orderly growth of large informal squatter communities and raise the standard of living of their inhabitants;

- The New Communities project element effectively sold the "sites and services" concept to a skeptical Ministry of Housing heretofore committed to highly subsidized satellite cities and multistory walk-ups;
- The Upgrading of existing squatter homes element resulted in significant policy achievements in legalizing informal communities through legislative action (law 135/1981 and 31/1984), recognizing these as legitimate and permanent communities and entitling their residents to land tenure;
- Demonstrated the viability of small credit programs for both housing upgrading and for small scale enterprise development.

While most of the conclusions of the audit report are correct, the perspective may not be wholly appropriate. Judgment of the success or failure of the project to effect housing and land tenure policy may be premature. The frustrations, delays and difficulties of the infrastructure construction are only just now beginning to give way to achievement of project objectives, including some changes of attitude about the Helwan New Community and about housing policy."

The entire Mission response is included in this report as Appendix 1.

*Office of the Inspector General*

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PART I - INTRODUCTION

A. Background

On August 26, 1978 the U.S. Government, acting through the Agency for International Development (A.I.D.), signed a grant agreement with the Government of Egypt (GOE) for the Helwan Housing and Community Upgrading project. The GOE implementing agency was the Executive Agency for Joint Projects (EAJP). The project was intended to demonstrate the premise of a proposed new urban housing policy: that basic housing and community facilities could be provided for low-income families at a price they were willing to pay, and which provided the GOE with substantial recovery of its investment. The project had two major components: (1) development of the Helwan New Community with 7,200 fully serviced plots, community organizations, and public facilities for a population of about 110,000; and (2) community upgrading programs in seven existing low-income Helwan neighborhoods with a combined population of nearly 100,000, including credit for housing and small enterprise development, water, sewer, roads, public/community facilities, community organizations and vocational training. The project site is located in the Helwan area, about 30 kilometers south of Cairo.

The cost of the project, \$160 million, was to be shared equally by the GOE and A.I.D. As of March 31, 1988 USAID/Egypt had committed \$76,194,379 and expended \$70,627,705. As of the same date, the GOE had disbursed LE44,064,775 (\$62,949,678). 1/

The original Project Assistance Completion Date was August 31, 1983. The completion date had been extended several times to August 26, 1988.

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1/ In 1986 USAID/Egypt approved a conversion rate of LE0.70 = \$1.00 to measure the GOE's contribution to this project.

## B. Audit Objectives And Scope

The Office of the Regional Inspector General for Audit/Cairo made a program results audit of the Helwan Housing and Community Upgrading project. The objectives were to determine: (1) whether the project was achieving its stated goals; and (2) if so, whether those goals were being achieved in an efficient and effective manner. Audit fieldwork was done between September 1987 and March 1988.

The audit covered \$70.6 million and \$62.9 million in Egyptian pound equivalents disbursed by USAID/Egypt and the GOE, respectively, through March 31, 1988. The audit did not include a review of the appropriateness of project expenditures, but concentrated mainly on the New Community component. Audit work on the upgrading component was limited to the issue of the completed sewer and water lines that cannot be utilized for 2-4 years yet.

Interviews were held with USAID/Egypt project officials, the Chairman of the Executive Agency for Joint Projects (EAJP) and other officials, the Chairman of the Project Implementation Unit and several individuals on his staff, the joint venture of BASIL-WBTL-NASSAR (BWN)-the project's architectural and engineering consultant, Perini-the construction contractor, Cooperative Housing Foundation (CHF) the T/A consultant, and local contractors. We visited the project site several times and interviewed 21 project beneficiaries selected by GOE project officials. Basic project documents obtained from USAID/Egypt, EAJP, and contractors were reviewed. The audit was made in accordance with generally accepted government auditing standards. The review of compliance and internal controls was limited to the matters discussed in the report.

An Office of Inspector General survey report on the Helwan project was issued in 1981. Also, in June 1986, we raised concerns in correspondence with the Mission Director about the destruction of certain infrastructure work completed by a U.S. contractor.

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PART II - RESULTS OF AUDIT

The audit showed that, after 10 years and the expenditure of some \$134 million, the project was still far from reaching its objectives. As of June 1988, not one low-income family had occupied a house in the Helwan new community. Although numerous successful business development and home improvement loans had been made, many of the promised services in the upgraded communities were years away from functioning. There was no indication that the project would be replicated in other parts of Egypt or that the government's housing policy had been significantly altered.

The project was characterized by inordinate delays and questionable management decisions regarding, among other things, site selection and engineering. Not much can be done about these matters now. The report recommends, therefore, that USAID/Egypt critically analyze the project's implementation and prepare a "lessons learned" paper to avoid similar deficiencies in other Agency low-income housing projects.

The audit also showed that many matters requiring Mission input would remain unfinished after the project's scheduled completion date in August 1988. Among such matters: (1) the criteria for determining the targeted beneficiaries are inconsistent with the criteria set forth in project documents, for which reason the housing may not be within the financial reach of the targeted beneficiaries; (2) six out of ten neighborhoods in the new community had no housing plans; (3) the implementing agency could not retain funds collected from project beneficiaries for further project use, as planned; and (4) \$7.4 million worth of completed sewer and water lines are not expected to enter into service until about 1990-92.

This report recommends a reexamination of beneficiary eligibility criteria to ensure that project benefits are in fact affordable to those it serves and a housing plan for the remaining neighborhoods is adopted. This report also recommends obtaining the GOE's authorization for EAJP to collect and use project revenues, as well as the determination and recovery of the amount of collections EAJP had transferred to the Central Bank of Egypt. Finally, the report recommends resolution of the problem of unused infrastructure works.

## A. Findings and Recommendations

### 1. Project Objectives Were Not Achieved

When completed, this project was to have demonstrated the validity of a new housing policy that had been proposed for adoption by the Government of Egypt. The premise underlying the new policy was that socially acceptable, basic housing in the form of expandable core units on serviced lots could be provided to low-income families at prices they could afford. At the same time, by implementing such a policy, the GOE would be able to substantially recover its investment in such projects, which would permit their replication elsewhere.

Ten years later, and after the expenditure of over \$134 million in A.I.D. and GOE funds, the Helwan project remained far from complete. No core units had been occupied; hook-ups of improved neighborhood sewage systems were years away; no new GOE shelter sector policy had been adopted; and there was no indication the Helwan project would be repeated elsewhere in Egypt. The project's objectives were not realized for a number of reasons, including: questionable site selection, poor planning and coordination with other infrastructure work in the area, frequent management turnover, inadequate market studies, damage to infrastructure works after they had already been built, and others.

As a result, the housing needs of low-income Helwan residents remained unmet; full project completion lay years distant; and the impact of much effort and money on GOE housing sector policymakers appeared to have been minimal at best.

#### Recommendation No. 1

We recommend that USAID/Egypt analyze in detail the history of the Helwan project, and prepare and distribute to Bureau and Agency officials a "lessons learned" paper that would help avoid similar deficiencies in future low-income housing projects.

#### Discussion

As of June 1988, about \$134 million had been spent on the Helwan housing project. Much of the money went for activities that had yet to result in anything meaningful for

the low-income families the project was supposed to serve. In short, after 10 years of project implementation, not a single family was living in the Helwan new community, although most of the money had been spent (see pictures following).

The project purpose was to demonstrate that a new housing policy could be successful in Egypt. This policy would show that the GOE could, with certain credit arrangements, enable low-income families to own a piece of land on which to build their homes. This policy was also to lighten the subsidy burden the GOE faced in housing projects. The project paper stated that a demonstration of the extent to which this change in housing policy was successful would be the replication of such housing projects in other parts of Egypt.

The project's goals and objectives were to be achieved through two major components. The first component was developing a Helwan New Community of about 7,200 core dwellings to accommodate, when fully expanded, about 110,000 people. The second component was community upgrading in seven existing low-income Helwan areas with a combined population of about 100,000. The upgrading component included credit for housing and small enterprise development. It also included construction of sewer and water networks, road, public/community facilities, community organizations, and vocational training centers.

There were numerous and varied reasons why the Helwan project had not reached its stated goals. The audit disclosed a pattern of mismanagement, wavering policy direction, bureaucratic inertia, and questionable engineering decisions, compounded by high turnover of project officials within both the GOE and USAID/Egypt that obviated management continuity. It would be difficult to present in detail all of the factors which have prevented successful project completion to date. This section limits itself to describing some of the more important problems which, in the opinion of the auditors, directly affected project implementation. These problems need to be analyzed in depth and shared within the Agency so as to avoid similar mistakes in other low-income housing projects. The remainder of the report discusses current matters that need to be addressed by the Mission because they affect the ultimate outcome of the project.



Photos show incomplete construction and empty serviced plots. (June 23, 1988)

a. Questionable Site Selection

One of the criteria, according to the project paper, for selection of a site on which the low-income housing would be built was "[Virtual absence of] evident surface seepage and other negative foundation problems."

As the project evolved, it became clear that the site selected presented foundation problems. These problems manifested themselves in cracks that appeared in the model homes, the resulting need for extensive soil testing to determine the characteristics of the land designated for housing, and increased costs for heavier-than-expected foundations.

A professor at the Faculty of Engineering, Ain Shams University, who had advised the Government of Egypt on similar housing projects and who provided EAJP with an analysis of the cracks that occurred in the model homes, told us it was well known that the area of the new community contained a thick layer of clay. He added that the area was unsuitable for low-cost buildings because the cost of foundations required in this type of soil was out of proportion to the cost of housing to be built. Another engineer working for an agency involved in the project stated: "Nobody listened to us at the beginning of the project when we said it is a very bad site." One of the soil consultants, who made soils tests for housing construction in Neighborhoods 1 and 2 in 1987, first recommended changing the project site if possible. "Site selection is a very important factor in any housing project, particularly if it is for low-income people," he advised us.

We found no evidence that the designated area was tested for soil characteristics before the site was selected in 1978.

b. Inadequate Project Layout

After the site was selected, the next major task was to subdivide the area in terms of the number and types of houses to be built, and the location of the houses and other facilities, such as schools and recreation areas. This urbanization plan was to be developed by a consultant engineer to the GOE.

The record indicated that preliminary soils testing for the project was done in April 1980, at about the same time the consultant engineer started to design the urbanization plan. The testing involved 35 test pits and 18 bore holes.

Each of the several individuals interviewed on this point said that the amount of soil testing was inadequate for laying out the project. These people indicated more soil testing should have been done before the project design was adopted and before any construction took place. It was known that the area not only had clay soils, but also that it had been used as a storm drainage area and a garbage dump.

An Egyptian engineer knowledgeable about the Helwan area advised us that, as a result of insufficient soil testing, cracks developed in the model homes. More importantly, the sites and services infrastructure, which was implemented at a cost of about \$30 million, was largely destroyed in three subdivisions because of the subsequent excavations required to put in proper foundations. 2/

c. Lack of Management Continuity

A key element in successful construction projects is continuity of project management so that there is a clear, consistent, and agreed-upon approach to what is to be built, how and when. The Helwan project suffered greatly, in our opinion, from continuous turnover of personnel. During its 10 years, the project saw four A.I.D. Mission directors and seven project officers. On the GOE side, there were four Ministers of Housing, and four chairmen of the implementing agency.

The lack of management continuity resulted in changing approaches to the execution of the project. According to EAJP officials, in 1984 the then Minister of Housing, on his first visit to the project site, gave instructions to build 3-story walk-up buildings which is the traditional GOE approach to low-income housing. In order to help offset the cost of the expensive foundations needed, EAJP later (1987) decided to raise the height of some buildings to 4 or 5 stories. Based on the Minister's instructions and EAJP's decision, 4,972 flats were under construction in three subdivisions as of April 1988. These units were being sold to the beneficiaries without land titles. Although these were major departures from the original project concept, the Mission apparently did not object to this approach. However, the record does not show any formal change to the project agreement.

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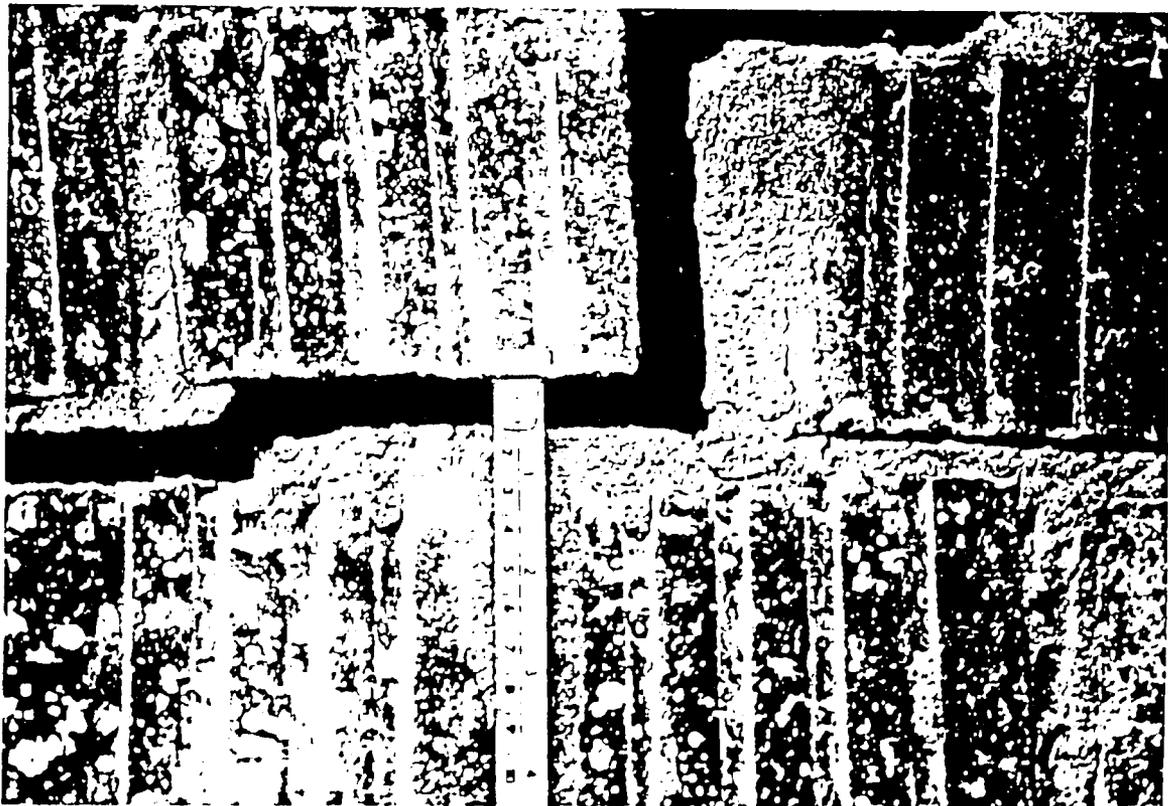
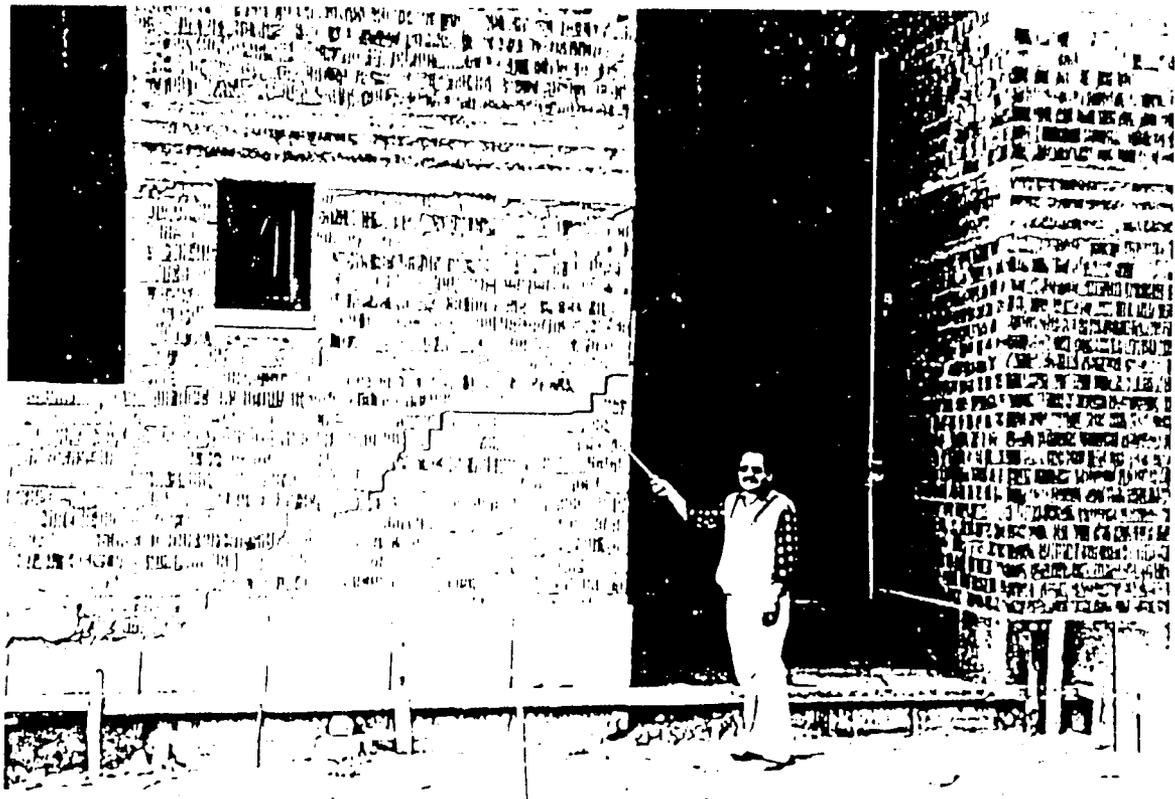
2/ Under the sites and services concept, all services (gas, water, sewerage, electricity, and telephones) are provided to each site ready for use, i.e., an urbanized lot.

d. Model Homes Acceptability

An innovative project feature was the construction of model homes to help potential buyers decide what best suited their needs and budgets. As a means of testing market acceptance of the housing and urbanization plan, a model housing estate was built. The houses were to be prototypes of different designs and construction, varying with plot size. Once acceptability of the model homes was established, the next step was to sign the construction contract for the sites and services to be supplied. 186 model units were completed at a cost of \$1,920,795 and were made available for public examination in the spring of 1984, four years behind schedule. Their completion also came more than 36 months after the urbanization plan was approved, and about 8 months after the execution of a sites and services construction contract with a U.S. firm.

Due to construction delays, the acceptability of the model homes could not be determined prior to the installation of the sewer, water, telephone, and gas lines. One of the 5 models proposed was rejected by many potential buyers because of its small size. About 3,125 houses of that type were planned to be built and not much could be done to alter these plans once construction of the infrastructure had started. A GOE official acknowledged that model housing should have been built before construction plans were finalized.

Not surprisingly, the contractor found shifting clay soil during the construction and work was stopped until a new foundation design was completed. After the model homes were completed and after preliminary acceptance of the units, serious cracks appeared in certain modelw (see pictures following). The GOE implementing agency hired a consultant to determine the reasons for the cracks and how to treat them. The consultant's conclusion was that the contractor did not discover the true nature of the soil because of inadequate testing and, therefore, had not built suitable foundations. Thus, the money spent for the model housing was not effectively used because the models could not be presented to potential buyers in an appropriate way.



Cracks which developed in model houses. Block 5, Lot 8.  
(Pictures provided by BWN.)

e. Site Destruction

Parts of the completed infrastructure in three subdivisions were destroyed because of subsequent excavations by local contractors to build proper foundations (see pictures following). When it was decided to construct 3-story walk-ups, the local contractors awarded these tasks were responsible for making soil tests to determine foundation requirements. The testing disclosed the existence of clay soil. The first recommendation of one of the soil consultants was to change the project site, if possible. Since that was impossible, a heavier foundation was recommended. The new foundation design conflicted with the design of the infrastructure already in place. Thus, existing connections for water, electricity, gas, and sewerage had to be moved or destroyed.



Excavations in preparation for heavier, clay soil foundation. (June 23, 1988)

Although the GOE implementing agency was holding the local contractors responsible for repairing damages to the infrastructure previously in place, it turned out to be a wasteful project expense to have installed the services in the first place. As of July 29, 1987 the implementing agency had retained LE95,127 (about \$41,359) <sup>3/</sup> from the contractor's progress payment to repair damages to infrastructure. The contractor estimated that repairs would not cost more than LE6,000 (about \$2,608). It is doubtful that the damaged infrastructure can be repaired to the same specifications as originally designed. As of January 31, 1988 the implementing agency had retained \$280,920 and LE212,751 (about \$92,500) from the progress payments of the two contractors working in the three affected subdivisions until they repair infrastructure damage.

The destruction could have been avoided had there been adequate soil testing prior to adopting the project design, or had the foundations been constructed along with the service infrastructure.

There was also some confusion as to whether to construct houses on filled land. The project expended \$916,935 and LE599,256 (about \$1,177,481 in total) for compacted and borrowed fill. The consultant engineer and the U.S. sites and services contractor both claimed that it was possible to construct 3-story houses on the engineered fill.

The GOE implementing agency and its Egyptian consultant, however, did not believe construction could be done on filled land. As a consequence, this costly fill was being removed to construct heavy foundations. This issue should have been resolved before spending money for compacted and borrowed fills.

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3/ Conversion rate LE2.30 = \$1.



Destruction of infrastructure resulting from subsequent excavation. (June 23, 1987)



More substantial foundations recommended by a soil consultant. (June 23, 1988)

### Management Comments

The Mission agrees with the recommendation and has requested that the technical assistance contractor emphasize "lessons learned" in its Project Completion Report. The Mission has also requested Ministry of International Cooperation (MIC) support for use of program development and support funding to provide technical assistance to the project after A.I.D.'s dollar financing ceases. The Mission feels that emphasizing the lessons learned is an important task which would promote the objectives of the project and capitalize on the experience. Results of these and other studies will be given appropriate distribution.

### Office of the Inspector General Comments

We believe that the course of action proposed by the Mission could be a valid basis for the Mission to prepare a "lessons learned" paper. Accordingly, Recommendation No. 1 is considered resolved but remains open until the "lessons learned" paper has been finalized and distributed.

## 2. Criteria for Determining Intended Beneficiaries Needed to Be Clarified

The project agreement identified the total salary of the head of household as the basis for determining beneficiary eligibility. The project paper stated household income should be used. In actual practice, EAJP used a different standard--the basic salary of the head of household, not to exceed LE125 per month. The difference between the three measures could be substantial. Total salary includes basic salary plus incentives and allowances. Household income includes total salary of the head of household plus other income earned by any household member. Thus, the criteria used by the GOE implementing agency to determine the low-income family target group is inconsistent with that prescribed in the project agreement or the project paper. The cause of the problem lay in the fact that low-income beneficiaries had not been adequately defined so that appropriate criteria could be consistently and effectively applied. Thus, there is limited assurance that the beneficiaries contemplated in the project agreement will actually be reached, or that those selected will be able to afford their loan payments and also meet other financial obligations.

### Recommendation No. 2

We recommend that USAID/Egypt and the Government of Egypt implementing agency reexamine the eligibility criteria being used to reach the low-income family target group. Such reexamination should focus on the assumptions and data underlying the establishment of beneficiary income criteria in order to identify the target group and to determine the ability of beneficiaries to afford loan payments in the context of all their financial obligations.

### Discussion

Low-income families in Helwan are the basic project target group. Conflicts exist, however, among the eligibility criteria specified in the project paper, the project agreement, and those actually used by the GOE implementing agency.

The project paper identified "household income" as the criteria against which to measure what a low-income family could afford in terms of housing. It required that the eligible applicants in the new community "have a level of

household income such that monthly house payments will not exceed 20 percent of income and this income must not place the buyer above the 60th percentile group."

The project agreement, on the other hand, identified the "total salary of the head of the household" as the basis for determining the eligibility of applicants. The project agreement stated: "Eligibility for resident selection and mortgage credit in the new community is open to all workers in Helwan who demonstrate a total [annual] wage with bonuses and allowances from their principle employer of LE800 or less on August 25, 1978, or the equivalent salary at the time of purchase during the implementation period."

The difference between household income and total salary of the head of the household can be substantial. Household income includes the total salary of the head of the household and the income of other household members.

In actual practice, EAJP, the GOE implementing agency, used neither the project agreement nor the project paper criteria. EAJP used the basic salary (maximum LE12 per month) of the head of household for determining eligibility. This measure omits incentives and bonuses which, according to EAJP estimates, inappropriate in our view, doubles or triples a worker's basic salary, and omits any income earned by other family members. EAJP officials said that basic salary was used because it could be verified to the worker's pay records, whereas household income was more difficult to identify and was not as reliable as a continuing source of income.

Using basic salary to determine eligibility presents major implementation problems that could limit the intended beneficiaries. The basic salary of the head of household does not always reflect real household income (see examples on next page). There is a risk, therefore, of considering certain families eligible who may be unable to make monthly loan payments without severe hardship or some sort of supplementary financial assistance. In one case, for example, the worker's basic salary was LE55 and his household income was about LE80 per month, which meant that the beneficiary probably would be unable to meet the monthly loan payments of LE65, as well as provide for other needs.

In using basic salary, there also is a risk of making eligible families who belong to an inappropriately higher income level. For example, EAJP made three beneficiaries

eligible because the basic salary of each was about LE120 per month. Their total income, however, was about LE600 per month, far above the maximum income level of LE125 per month being used.

A group of 21 beneficiaries was interviewed during the audit. These people were selected by the EAJP at our request. The interviews disclosed that basic salaries, total salaries, and total family income varied significantly among the applicants. The inconsistencies were caused by the varying amounts of incentives, bonuses, and income of other working family members. The situation (unverified) with respect to five such beneficiaries, as determined during the interviews is shown below. In none of these cases did the workers' total salary include incentives amounting to 100-200 percent of the basic salary, as assumed by EAJP.

<u>Beneficiary</u>	<u>Basic Salary</u> (LE)	<u>Total Salary</u> (LE)	<u>Household Income</u> (LE)
A	115	165 (44%)	275 (239%)
B	108	163 (51%)	163 (151%)
C	51	101 (98%)	251 (492%)
D	48	80 (67%)	80 (167%)
E	56	70 (25%)	70 (125%)
Average	75.6	116 (53%)	167.8 (221%)

#### Implications of criteria as concerns loan payments

The project agreement and the project paper also required that monthly mortgage installment amounts should not exceed 20 percent of family income. Of the 21 beneficiaries interviewed, 12 had purchased flats. These 12 owners did not know how much the monthly installments would be because the construction had not been completed and the cost of the flats had not been established.

For the other nine beneficiaries, as shown below, their monthly installments ranged from 27 percent to 81 percent of family income, substantially in excess of the 20 percent guideline. When measured as a percentage of the head of household's basic salary, the monthly installments ranged from 52 percent to 118 percent.

<u>Beneficiary</u>	<u>Monthly Installment (LE)</u>	<u>Basic Salary (LE)</u>	<u>Percent</u>	<u>Household Income (LE)</u>	<u>Percent</u>
1	75	116	65	225	33
2	53-80 <u>5/</u>	75	71	195	27
3	58	100	58	168	35
4	48-99 <u>5/</u>	65	74	180	27
5	58	71	82	160	36
6	54-? <u>6/</u>	96	56	160	34
7	65-76 <u>5/</u>	55	118	80	81
8	29-76 <u>5/</u>	56	52	70	39
9	58	75	77	160	36

The above analysis indicates that beneficiaries probably would find it difficult to pay their mortgage installments and still be able to meet other needs. The decision made by project officials to use basic salary (not to exceed LE125 per month) as the determining factor; i.e., to classify family income based on an assumption that basic salary represents one-half or one-third of total salary, was not always correct.

In our view, household income would be a more appropriate measure to use in determining the eligibility of beneficiaries, as the project paper originally envisioned. Even under this standard, however, many monthly installment requirements would exceed 20 percent of household income. Appropriate criteria are essential in achieving the project objective of providing affordable housing for low-income families in Helwan. USAID/Egypt and EAJP need to reexamine the appropriateness of the eligibility criteria being used to reach low-income Helwan families, as well as the 20 percent limitation, and modify them, as appropriate.

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5/ In the case of graduated installments, the minimum amount was used to calculate the percentages used.

6/ The higher limit was not known by this individual.

### Management Comments

The Mission believes that the project has gone to considerable lengths to ensure that benefits flowed to low-income families and that benefits were affordable. Also, there is full agreement among all parties concerned that the project was intended for low-income Helwan factory workers. Therefore, project beneficiaries are coming from an appropriate income group.

The Mission points out that the audit report expresses concern over the use of basic income to measure eligibility because people with incomes too high and people with incomes too low have become participants in the project, and that a number of people are making payments which are much higher than 20 percent of "family" income. The validity of basing audit conclusions on interviews with 21 people was questioned because such a survey might not be representative. In particular, the Mission thought that "family" incomes of less than LE100 per month were unlikely to be correct. Furthermore, the "basic" incomes appeared to be quite low in comparison to project experience. It also appeared that the audit "survey" made precisely the point that obtaining real income data was extremely difficult and that the data gathered cannot be considered useful to assess project income targeting.

### Office of the Inspector General Comments

The focus of the audit finding is on the difference between the criteria for the low-income family described in the project paper and the one used by the project. The audit report expressed concern that using the basic salary of the head of the household may affect beneficiary selection because it does not reflect the real income of the household. The 21 beneficiaries we interviewed was a small sample, but we see no reason why it should not be representative. The participants were selected by EAJP and all were working at GOE public sector companies. The basic salary schedules in these companies were governed by the same regulations. This group included a basic salary range between LE48-116 per month. Incentives and allowances differ from one company to another, and incomes of other family members may vary greatly. Finally, the reason we asked EAJP to select beneficiaries for us to interview was that none were yet living at the project site but, most importantly, during the life of this project, we found no

evidence that its managers had performed an income survey of potential beneficiaries. What was done was limited to surveys of employers in 1984 and 1987.

Recommendation No. 2 remains unresolved until such time as the eligibility criteria being used to reach the low-income target group has been validated by means of a serious income study, and the results have been acted upon by USAID/Egypt.

### 3. Housing Plan for Six Neighborhoods Was Not Ready

At the end of our fieldwork in March 1988, housing plans for 6 of the 10 neighborhoods (subdivisions) in the Helwan new community had yet to be prepared. The original project design called for the construction of 7,200 core dwelling units in 10 neighborhoods for low-income factory workers. In three neighborhoods we found multistory apartment buildings under construction. In another, urbanized lots were being offered for sale along with construction financing. But because of many implementation delays and differing approaches to project implementation adopted by successive GOE officials (not always with A.I.D.'s approval), the future of the remaining six neighborhoods remained in doubt. There was consequently no assurance how or when these areas would ultimately be developed, especially in view of the recent closeout of A.I.D. funding to, and involvement in, the project. Clearly, USAID/Egypt needs to take some form of post-project interest in this activity in order to ensure its ultimate, orderly conclusion.

#### Recommendation No. 3

We recommend that USAID/Egypt ensure that the Government of Egypt develop a housing plan, approved by USAID/Egypt and in conformance with agreed-upon project objectives, for the remaining six neighborhoods.

#### Discussion

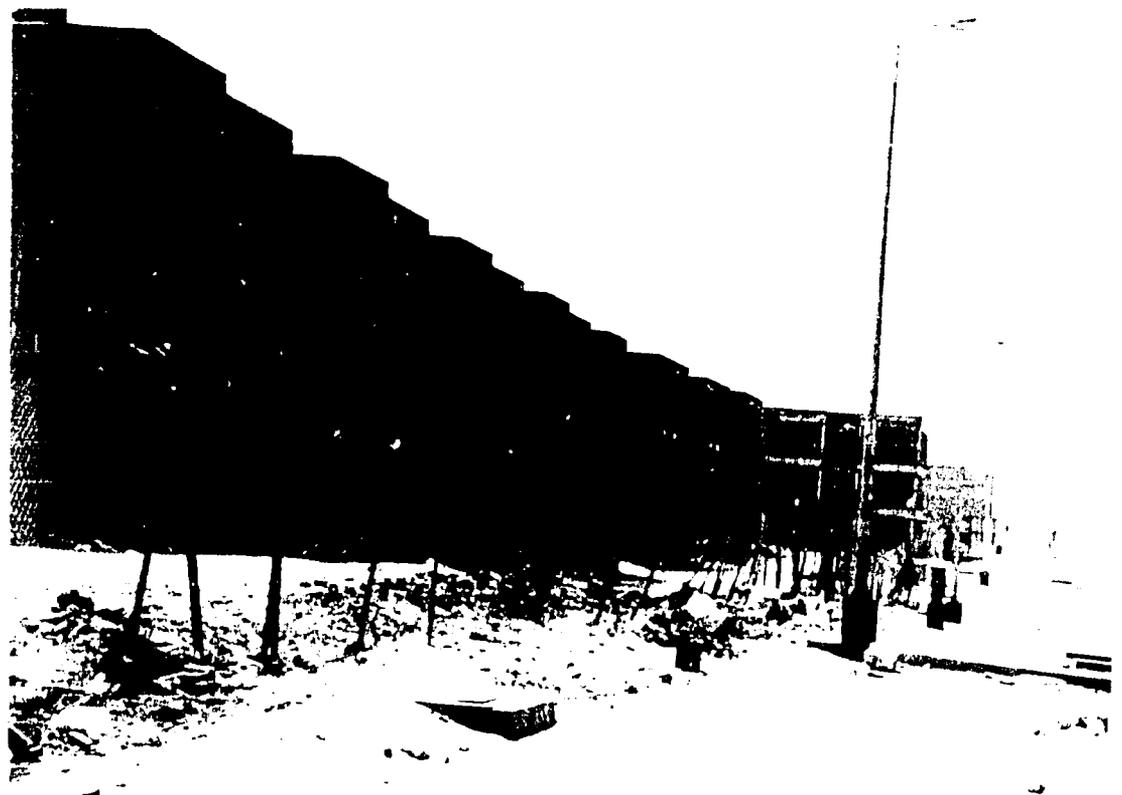
The major project purpose was to enable low-income Egyptian factory workers in Helwan to own a plot of land on which to build their homes. One of the project outputs in the New Community was to provide housing for about 7,200 families. This would be achieved by helping low-income families gain title to the land through low-interest loans for the purchase of a standard plot with a utility core unit. This core unit could be expanded over time to a maximum of 3 stories to provide additional living space for other family members according to the needs and financial capabilities of each family. The eventual population of the new community was estimated at 110,000 when all housing units were built to their allowed maximum.

The core dwelling approach was changed in 1984 when the Minister of Housing, in order to create more units, verbally instructed EAJP to construct three-story, walk-up buildings to provide housing for three families instead of one family

per plot. Although this decision was a material change in project direction, we found no evidence that the Project Agreement was modified or that USAID/Egypt formally approved the change. Under this changed concept, the beneficiaries would own the flats, but would not have title to the land which was a fundamental change in the project concept of individual land ownership. As a result of this decision, 4,972 flats were under construction as of April 1988. Because of soil problems and the resulting high cost of foundations required, EAJP in 1987 decided to raise the height of some buildings to 4 or 5 stories. The possible effect of constructing these buildings in the three neighborhoods presently under construction is to greatly increase the density of the population thereby overloading the services component of the project including gas, water, telephone, sewerage, and electricity (see pictures following).

In one neighborhood, EAJP was using yet another approach. As of May 1988, EAJP had sold 601 plots to Helwan factory workers. Owners of these plots obtained title to the land as originally contemplated in the project design. In order to obtain a good price for constructing the houses and to ensure appropriate soil testing, contractors selected by committees representing the owners were to construct the houses. EAJP was helping in the price negotiations between the contractors and the committees to construct the foundation and the ground floor of each unit.

At the time of the audit, EAJP had no confirmed plans for the remaining six neighborhoods in terms of the housing approach to be implemented. An EAJP official stated that if the approach used in the neighborhood where the plots were for sale succeeded, EAJP would be encouraged to use it in the other subdivisions, assuming mortgage funds were available.



Construction of 3-story walk-up buildings in one subdivision. (June 23, 1983)



Construction of 4-story walk-up buildings in two subdivisions. (June 23, 1963)

However, use of this approach raises other questions.

- a. A reputable construction company recently offered to construct houses on a turn-key basis at a cost of LE9,210, LE10,540, and LE12,135 for three different models. These prices are about 150 percent of the cost of the houses already contracted for and raise a question as to whether the contractor now at work will be able to deliver acceptable units of sound quality construction.
- b. The available loan amount covers about 75-80 percent of the construction cost and is not enough to construct and finish the foundation and the ground floor. Most beneficiaries probably would find it difficult to raise the rest of the needed money. As a result, each beneficiary would have to complete the unfinished items, whenever he is able to do so, and in whatever way he can. This ad hoc approach to completing the construction could greatly distort the project's intended design symmetry.

An EAJP official stated that he was not optimistic about the lot sales approach, and believed that it was going to fail because of the above problems. Problems began early in 1988 when beneficiaries tried to break the construction contract because of delays in starting work. Another problem arose when one of the contractors started to construct foundations without having the required soils report.

The lot sales approach, therefore, is not entirely promising, and EAJP admittedly does not have funds available to construct houses similar to the three-story walk-ups built in other neighborhoods. Unless action is taken to firm up the housing plan, there will be no assurance that the land in these neighborhoods will be used to achieve the project goals. A project official stated that "having a fully serviced site like the new community is providing a high temptation (for misuse) to all GOE agencies." In early 1988, there was an apparent attempt by a private investment company to buy two neighborhoods in the new community. There is no reason to believe that this company intended to build houses for low-income Egyptian workers in Helwan, as the project anticipated. Inappropriate development of these neighborhoods would adversely affect the targeted beneficiaries and population of the new community. Agreed upon definitive plans would limit the project's vulnerability to misuse.

### Management Comments

The Mission responded that the GOE has developed an individual plan for each of the remaining six neighborhoods. USAID/Egypt said that it will continue to monitor project progress and provide technical assistance over the next year in order to continue to promote project objectives during the next phase of development of the Helwan New Community.

### Office of the Inspector General Comments

Recommendation No. 3 is considered resolved but will remain open until we have had an opportunity to review the housing plans for the remaining six neighborhoods.

#### 4. Implementing Agency Needs to Be Able to Use Project Reflows

According to the project design, the Executive Agency for Joint Projects (EAJP) was to administer a revolving loan fund. However, GOE regulations do not allow the implementing agency to retain loan repayments from beneficiaries because EAJP is classified as a service agency. Under Egyptian regulations, all collections of a GOE service agency are considered fiscal income and must be deposited in a special account in the Central Bank. Project designers apparently overlooked GOE regulations governing service agencies and the need to get appropriate clearances for EAJP to operate in the manner intended. For unexplained reasons, EAJP had transferred only about LE200,000 (about \$86,956) <sup>7/</sup> in collections to the Central Bank of Egypt while retaining over \$1 million in several unauthorized accounts. Until this situation is clarified, EAJP's ability to manage project reflows in order to benefit potential beneficiaries who wish to buy plots, upgrade living conditions, or start new businesses remains in doubt.

#### Recommendation No. 4

We recommend that USAID/Egypt:

- (a) coordinate the issuance of a GOE presidential decree authorizing EAJP to open a bank account for the collection and use of project revenues; and
- (b) determine the amount of collections transferred to the Central Bank of Egypt and ensure that EAJP reinstates the funds to the appropriate accounts, or show why such reinstatement is not possible or necessary.

#### Discussion

Mortgage and loan repayments to the EAJP provide the funds needed to further finance project beneficiaries and are essential to project continuation. Under GOE regulation (Law No. 53/1973, Article 9), EAJP is not authorized to retain funds collected from beneficiaries because it is

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<sup>7/</sup> Conversion rate LE2.30 = \$1.

classified as a service agency in the GOE organizational structure. Collections made by a service agency are considered fiscal income and must be transferred immediately to a GOE account at the Central Bank of Egypt. This situation constitutes a problem because EAJP collects money from three sources and should recycle these funds for mortgage financing, small business loans, and EAJP debt repayments:

- advance payments from sales of flats and plots, and installment payments;
- installment payments of home improvement loans; and
- installment payments of small business loans. 8/

According to the project design, the funds collected by EAJP were to be recycled and used for project purposes. As far as we could tell, project designers never became aware of this obstacle to EAJP's use of revenues, or simply had not dealt with it effectively. If EAJP complies with the GOE regulation, it may be unable to finance more loans to beneficiaries or repay its debts, because it would have to compete for GOE budget funds along with all other activities under the Ministry of Housing.

Notwithstanding GOE regulations on the use of collections, EAJP opened eight bank accounts for different project activities at Credit Foncier D'Egypte. From 1982 to November 1987, 2,942 loans valued at LE4.5 million were made to project beneficiaries. As of February 29, 1988, a total of LE2,389,812 was on deposit in various EAJP accounts. The audit found that the balance of one of these bank accounts (about LE200,000) had been transferred to the Central Bank of Egypt at the request of EAJP. This transfer was made in two parts in November 1987 and in February 1988. We requested an explanation from EAJP but received no satisfactory response; we were unable to determine why these funds were transferred. The remaining seven accounts were intact and being used.

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8/ In addition, the Building and Housing Cooperative Agency in 1985 provided about LE40 million in two loans to EAJP to construct 3-story buildings at the project site.

Although EAJP had been able to sidestep this issue for several years, there was no assurance that it would be able to continue administering the project financially. EAJP recently approached the Minister of Housing and submitted two proposals to resolve this situation. The first proposal was to change the nature of EAJP from a services agency to a general agency having a separate budget. The second proposal was to authorize EAJP to have its own bank accounts. Both proposals required issuance of a GOE presidential decree. The Minister promised to try to obtain a presidential decree authorizing EAJP to open and maintain its own bank accounts but, at the time audit work was completed, no decree had been issued.

The availability of reflows to make further financing possible is crucial to the effective functioning of the project. USAID/Egypt should ensure that an arrangement is worked out that will guarantee the availability of necessary funds. Also, USAID/Egypt should determine the total amount transferred to the Central Bank of Egypt and ensure that EAJP reinstates the funds to the proper project bank account.

#### Management Comments

In regard to Recommendation No. 4a, the Mission supports its intent but favors a more substantive as well as practicable solution to this and other operational problems for EAJP. The Mission favors a change in the institutional nature of EAJP to a General Organization. This possibility is currently being pursued. A General Organization would be able to retain and reuse project revenues.

For Recommendation No. 4b, EAJP has clarified this matter in a letter (dated April 17, 1988) indicating that LE200,000 was transferred to the EAJP credit account at the Central Bank for Helwan Project use only, and not for general treasury revenues.

#### Office of the Inspector General Comments

USAID/Egypt's proposed alternative course of action for Recommendation No. 4a is acceptable. This recommendation is resolved but remains open pending completion of the required action.

Recommendation No. 4b is also resolved upon issuance but remains open pending receipt of a fuller explanation as to why this account was opened and how long it will remain at the Central Bank, plus confirmation of the amounts of collections transferred to it.

## 5. Completed Infrastructure Works Cannot Be Used

Sewer and water lines built to serve six upgraded communities in Helwan are not expected to be operational until about 1990-92 because there is no connecting system in place to discharge the waste. One of the project outputs was to upgrade some of the existing communities in Helwan by providing them with sewage and water conduits. Originally, the completed sewer lines were to rely on the Helwan Wastewater Master Plan, a project funded by the European Economic Community. When it was obvious that this system would not be completed on schedule, USAID/Egypt approved construction of a temporary off-site collector and a sewage treatment plant. After about 2 years of study, this decision was reversed in 1986. Thus, the completed sewage lines will remain unused for at least 2 to 4 years with the possibility of system deterioration in the interim. Potable water lines also will not be used until the sewage system is operational. People in the upgraded areas, therefore, will have to continue to rely on substandard septic tanks and hand-carried water systems which are acknowledged health hazards.

### Recommendation No. 5

We recommend that USAID/Egypt consult with the Government of Egypt in addressing effectively the problem of inoperable sewer and water lines so that the people living in the six upgraded Helwan communities can use the completed facilities as soon as practicable.

### Discussion

One of the project outputs was to upgrade some of the existing communities in Helwan by providing them with sewage and water lines. At present, the communities rely on inadequate septic tanks for wastewater disposal and hand-carried water from nearby public water taps. The project financed construction of sewage lines at seven upgrading sites in Helwan at a cost of \$6.9 million and water distribution networks at a cost of \$1.5 million. The original plan called for disposing effluent from these lines in accordance with the Helwan Wastewater Master Plan (Dorsch system), a project funded by the European Economic Community. Only one of the sewage lines costing about \$1 million had actually been put into operation. This line was connected to the old sewerage network in Helwan.

In 1983, it became apparent that the Dorsch system would not be completed as expected in 1985. In view of the delay and the need to have a system in place to serve the upgraded communities, USAID/Egypt agreed to finance construction of an off-site collector and a sewage treatment plant that would collect and divert all wastewater and sewage from the upgraded communities to the nearby Tebbin Sewage Treatment Plant. The cost of that arrangement, at that time, was about LE4 million (or \$4.8 million nearby at the 1985 exchange rate of \$1=LE0.83).

Before the design of the off-site collector was finished, however, USAID/Egypt asked its contractor to redesign the collector system to accept the sewage effluent of three additional unserved communities. Also, in January 1985, USAID/Egypt agreed to rehabilitate the Tebbin Sewage Treatment Plant to handle additional flows generated in the new communities. The rehabilitation was completed in November 1986 at a cost of about LE6.76 million (about \$5 million at the 1986 rate of LE1.35).

In mid-1986, USAID/Egypt and EAJF reversed the decision made 2-years earlier and agreed to delete the off-site collector and the treatment plant project based on the assumption that the Dorsch system soon would be able to fulfill the needs of the upgraded areas. This decision was made after the publication of the advertisement for bids and the approval of the short list of qualified firms for the construction of the interim off-site collector.

At the end of our fieldwork, the off-site collector had not been constructed nor had the Dorsch system been completed. Phases I and II of the Dorsch system, which will receive effluents from the upgraded communities, are now expected to start operation in July 1990 and January 1992, but these estimates may be optimistic. <sup>9/</sup> Although three sewerage lines had been completed, two lines were not yet in operation. The other four lines were expected to be completed later in 1988. In sum, there would have been six sewerage lines completed by the Project Assistance Completion Date of August 1988, although none would have been in operation for some time. In addition, potable water lines to these areas, although also completed, were not yet

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<sup>9/</sup> The request for bids for Phase II had not yet been published nor were the funds needed to build that phase available.

connected. The anticipated delays in putting the sewage and water lines into service range from 2 to 4 years. During this period, the safety of the sewerage network cannot be assured. Also, the construction company's 1-year guaranty for the sewage network will have expired before it is put into service.

The final result is that the important sewerage and water component in upgrading these six areas will not be achieved on a timely basis. There is a possibility of deterioration of the unused systems which cost about \$7.4 million. Also, the continued use of substandard facilities by occupants of the upgraded communities increases their exposure to acknowledged health hazards.

#### Management Comments

In the past 3 months, there has been another re-evaluation of the concern over delay of the Dorsch scheme based upon current schedules and actual construction completion. Again, after engineering review it has been concluded that special construction measures were not cost-effective because they could only make up about 6 months of the delay between completion of the upgrading community infrastructure and completion of Phase I and contract 4 of Phase II of the Dorsch scheme. A joint committee of the concerned parties has been formed to accelerate construction of the connection to the Dorsch collector.

#### Office of the Inspector General Comments

USAID/Egypt, in 1986, deleted the off-site collector based on the assumption that the Dorsch system would soon address the needs of the upgrading areas. The Dorsch system still has not been completed. Management's response did not address audit concerns and did not provide start-up or completion dates for Phase II of the Dorsch scheme. USAID/Egypt should ensure utilization of the A.I.D. financed sewer and water lines as soon as possible.

Recommendation No. 5 consequently remains unresolved.

## B. Compliance And Internal Control

### Compliance

In the areas audited, compliance exceptions noted were: (1) the project concept was changed on the basis of verbal instructions from the Minister of Housing in 1984 to alter the core-dwelling approach to construction of multistory units. (USAID/Egypt allowed this material change to happen without written authorization or approval); (2) eligibility criteria for targeted beneficiaries was not in compliance with either the project paper or the project agreement; and (3) although the PACD expired on August 26, 1988, no families were occupying houses and there was no housing plan for six of the 10 neighborhoods planned.

### Internal Controls

The audit disclosed some material weakness in project internal controls. The GOE implementing agency was not officially authorized to retain project funds collected from beneficiaries. There was destruction of A.I.D.-financed infrastructure after it had been completed. Adequate soil testing was not done prior to site selection. Timing of the constructing and marketing of model homes did not provide an opportunity to reflect beneficiaries' desire to make any modifications in the design of the homes. Coordination of water and sewer infrastructure upgrading works with collector systems was lacking and has prevented their being put into service.

Our review of compliance and internal controls was limited to the matters described in this report.

### C. Other Pertinent Matters

The Project Agreement was signed in August 1978. At that time the pound/dollar exchange rate was LE0.70=US\$1.00. Since then, there have been several devaluations of the Egyptian pound. The exchange rate at the time of project completion was about LE2.30=US\$1.00. The GOE contribution to the project was to have been the Egyptian pound equivalent of \$80 million. In December 1986, when the actual rate of exchange was about LE1.36=US\$1.00, USAID/Egypt issued a Project Implementation Letter (PIL) approving a GOE funding level of LE56 million, the equivalent of \$80 million using the LE0.70=US\$1.00 exchange rate in effect on the date the agreement was signed.

We believe that the reason for stating the GOE contribution in dollar equivalent was to avoid any negative effect on the project from devaluation of the local currency. Of course, USAID/Egypt's decision to fix the conversion rate at LE0.70=US\$1.00 has resulted in reducing the local currency that could have been available for the project if the GOE contribution had been measured at the highest rate available at the time of disbursement. For example, there has not been enough local currency from the GOE side to construct units in the unfinished subdivisions. In order to make up this shortfall, LE10 million has been requested from the Special Account.

AUDIT OF  
HELWAN HOUSING AND  
COMMUNITY UPGRADING IN EGYPT  
PROJECT NO. 263-0066

PART III - APPENDICES

Much of the audit report echoes the concerns of the Mission regarding this project. When judged in comparison with other construction projects, both the upgrading and the new community components have taken years longer than this construction should have taken. This has delayed achievement of some of project objectives which could only be implemented after completion of initial infrastructure construction.

We would like to note, however, that this project was not just another construction project. The purpose of the project was to explore and test alternate approaches of utilizing scarce GOE resources, and to rely upon significantly greater participation by low income Egyptians in solving their housing problems. These approaches represented significant, radical departure from the essential operating philosophy of the GOE in dealing with this segment of Egyptian society. The project resulted in the following discernible accomplishments:

- It demonstrated that a well focused project with modest resources can impact positively on the orderly growth of large informal squatter communities and raise the standard of living of their inhabitants;
- The New Communities project element effectively sold the "sites and services" concept to a skeptical Ministry of Housing heretofore committed to highly subsidized satellite cities and multistory walk-ups;
- The Upgrading of existing squatter homes element resulted in significant policy achievements in legalizing informal communities through legislative action (law 135/1981 and 31/1984), recognizing these as legitimate and permanent communities and entitling their residents to land tenure;
- Demonstrated the viability of small credit programs for both housing upgrading and for small scale enterprise development.

While most of the conclusions of the audit report are correct, the perspective may not be wholly appropriate. Judgment of the success or failure of the project to effect housing and land tenure policy may be premature. The frustrations, delays and difficulties of the infrastructure construction are only just now beginning to give way to achievement of project objectives, including some changes of attitude about the Helwan New Community and about housing policy. It is difficult to consider as entirely coincidental two major speeches by Minister of Housing Kafrawi during the week of August 20-26, in which he described a new MOH approach to housing -- sale of land, provision of infrastructure, and construction financing by the government, for individual family purchase and build-out.

Change in housing policy will come about after success of alternative approaches is fully demonstrated. The Helwan New Community project should best be judged for its own success and for its impact upon housing policy after about five years. Development of a new community is a long term process; it does not necessarily take place within a standard USAID project term.

In the informal or squatter communities, change is equally difficult. Development in such areas was at first considered illegal and the provision of basic services considered as encouraging the development of slums. The upgrading successes in Helwan have encouraged the Governor to establish a land planning unit and initiate land tenure and cost recovery plans. Again policy success should best be judged after a few more years of evolution.

Recommendation No. 1

Lessons learned Analysis. The audit report recommends that USAID/Egypt critically detail the events concerning the Helwan Project and prepare and distribute to Bureau and Agency officials "a lessons learned" paper.

Mission Response:

The Mission agrees with this recommendation and has requested the Technical Assistance Contractor (CHF) to emphasize the "lessons learned" in their Project Completion Report for this activity. The Mission has also requested the Ministry of International Cooperation (MIC) support for use of Program Development (PDS) Funding for technical assistance for:

Development of Housing Policy recommendations for the Ministry of Housing, based upon the experience of the Helwan New Community, other communities, and community upgrading, including a review of cooperative and group organization in new communities and in community upgrading projects.

MIC at this time has this proposal under review. The Mission feels that this is an important task which would promote the objectives of the project and capitalize on the experience. Results of these and other studies will be given appropriate distribution.

Recommendation No. 2

Affordability vs. Eligibility. The audit report recommends that USAID/Egypt and the Government of Egypt re-examine the eligibility criteria being used to reach the low income family target group focusing on the income criteria in terms of the most appropriate determinant to use to identify the target group and on the ability of beneficiaries to meet loan payments and basic living necessities.

Mission Response:

The project has gone to considerable lengths to ensure that benefits flowed to low-income families and that benefits were affordable. Further, in the face of lengthy implementation delays the mission continued to assure that the eligibility and income measurements used were realistic and appropriate, adhering to the spirit and intent of original project concepts.

Full agreement exists among all documents and by all implementing agencies about one eligibility criterion: the project was intended for low-income Helwan factory workers. This target has been consistently maintained by the project.

The project paper included a graph locating intended project beneficiaries as being clustered near the median of national urban income distribution (30th percentile to 60th percentile). It seems unlikely that the position of Helwan factory workers in regard to national urban income distribution has changed significantly during the past 10 years and, therefore, project beneficiaries are coming from an appropriate income group.

Regarding eligibility concerns, clearly, the lengthy implementation delays made actual incomes cited in original project documents out-of-date and inappropriate. In addition, core housing units were deleted from the project and infrastructure cost over-runs significantly raised sale prices required for plots in order to maintain cost recovery. The housing strategy adopted by the project included building completed units in three neighborhoods, but also focused on selling vacant plots and providing mortgage loans.

Given these substantial changes in cost and subsequent adjustment in strategy, the project responded to the need to re-define the actual income levels to be used to determine eligibility and affordability through an income study and a loan program.

Regarding the income study, income data for about 70,000 Helwan factory workers was gathered from factory administrators. This data provided for two income measures: 1) Base income -- this included basic monthly income plus fixed allowances, such as social insurance, lunch, inflation factors; and 2) Net income -- this includes all basic income and fixed allowances plus all incentives and bonuses, less deductions for taxes. The study showed clearly that base income was comparable among all factories while net income varied greatly from factory to factory. In effect, the employees of some factories, due to favorable economic trends of the moment, were able to work large amounts of overtime and to receive production bonuses and had higher net incomes than employees of less fortunate industries. The study concluded that base income was a more equitable and reliable indicator of a factory worker's economic situation and long-term ability to sustain housing payments, than was net income, but that net income could be used to determine the size of monthly repayments an individual borrower should undertake. Considerable experience with income research in Egypt shows that very few people will accurately report -- or perhaps even know for certain -- their "total" or "household" or "family" income, none of which is likely to be identical to income earned from the principle employer. Given the scope and size of the project, it was considered unrealistic to expect to carry out the detailed individual research which would be required to determine such incomes in a consistently reliable and equitable manner. It was concluded that base income should be the principal criterion for project eligibility. This study concluded that the upper income limit for eligibility should be a basic income of LE 125 per month.

The second response to eligibility and affordability concerns was the loan program. Following project concepts in regard to recovery of costs through plot sale prices, lending conditions, and use of graduated payment mortgage options, the project developed a comprehensive loan program. The emphasis of this loan program was to make available a variety of loan "packages" which would be appropriate for project beneficiaries. In effect, the project endeavored to provide loans under conditions which would ensure access to credit by participants with low basic incomes while permitting all beneficiaries to select repayments which most suited them. This approach was based upon the principle that only the participants actually knew how much they could realistically afford to pay. During implementation, experience showed that about half the borrowers opted for level-payment mortgages, despite being cautioned that monthly payments appeared high relative to their basic incomes, while about half opted for the lower payments offered by graduated payment mortgages.

Finally, the following comments are offered regarding affordability and eligibility. The audit report expresses concern that the basic income measure was inappropriate, that people with incomes too high and people with incomes too low have become participants in the project, and that a number of people are making payments which are much higher than 20% of "family" income. The auditors apparently based these conclusions on interviews with 21 people. We question whether such a survey is representative. The "family" income data gathered is highly suspect; cited "family" incomes of less than LE 100 per month are highly unlikely to be correct. "Basic" incomes cited appear to be quite low in comparison to project experience. It would appear that this "survey" makes precisely the point that obtaining real income data is extremely difficult and that the data gathered cannot be considered useful to assess project income targeting.

A majority of those surveyed had purchased flats, not plots. These flats were built over the objections of other implementing agencies, using GOE funds not included in project funding, which raised the question of whether it is fair to apply the affordability standard while at the same time encouraging the GOE to recover the full cost of the construction.

The project carried out appropriate and necessary studies to determine income levels and measures, chose an equitable and verifiable measure, and made strenuous and successful efforts to ensure that the target group -- low income Helwan factory workers -- was served.

Recommendation No. 3

HNC Development Plan for Neighborhoods 4, 6, 7, 8, 9 & 10. The audit report recommends that USAID/Egypt ensure that the Government of Egypt develop a housing plan, approved by USAID/Egypt and in conformance with the agreed-upon project objectives, for the remaining six neighborhoods.

Mission Response:

Since the audit, the GOE has developed an individual plan for each of the remaining six neighborhoods mentioned in the recommendation. The Mission has been consulted and has concurred in these plans. Following is a brief discussion of each neighborhood. Neighborhood #4 was handled the same way as neighborhood #3, i.e. factory workers bought their plots and collectively contracted to build their houses. The demand for individual plots was so large in Neighborhood #3 that EAJP extended the program to include neighborhood #4. USAID supported this decision to extend the plot sale/construction loan program by committing an additional \$1.4 million for construction loans in this neighborhood. During June 1988, all 550 plots of neighborhood #4 were sold within six days of actual plot marketing, satisfying only a small portion of the demand. Factory workers from the four factories allocated plots in neighborhood #4 slept overnight in line in order to buy plots and a chance to build their own homes in the Helwan New Community.

In order to meet the post neighborhood #4 demand, the GOE decided to extend the same model to three additional neighborhoods: #6, #7 and #8. EAJP has joined USAID in a request to MIC for LE 10 million from the Special Account for construction loans in #6, #7, and #8. MIC is studying the request. This means that at least five neighborhoods will follow the plot sale/construction loan program model.

Neighborhoods #9 and #10 have been set aside for an alternate approach, as yet to be detailed, with the stated purpose of involving the private sector in providing housing for the target group. While USAID encourages the effort, there is reasonable skepticism regarding the ability of the private sector to produce an affordable product for the target group.

USAID/Egypt will continue to monitor progress in the project and is providing technical assistance over the next year in order to continue to promote project objectives during the next phase of development of the Helwan New Community.

Recommendation No. 4AIssuance of Presidential Decree Regarding Use of Project Funds.

The audit report requests the issuance of a presidential decree authorizing EAJP to open a bank account for the collection and use of project revenues.

Mission Response:

The explicit intention of the re-use or second use of project revenues from either cost recovery or repayment of housing construction loans and small business loans is that these project funds continue to be used for the same purposes on a continuing basis.

In order to ensure that project revenues are employed for similar, new project activities, it is important that these funds not become a part of general revenues. They should remain with the EAJP. However, there are legal problems with EAJP retention of these revenues based upon its institutional identity within the Government of Egypt. A presidential decree is one way to accomplish this. The Mission prefers a more substantive as well as practicable solution to this and other operational problems for EAJP; a change in the institutional nature of EAJP to a General Organization. The Minister has requested studies and necessary documentation to prepare for EAJP to become a General Organization. All of the documentation is now ready for the Ministerial approval. As a General Organization, EAJP would be able to retain these funds and program them for the purposes intended. If that fails, then we may have to fall back on the idea of a presidential decree.

Recommendation No. 4B

Explanation Regarding Transfer of EAJP Funds to Central Bank of Egypt. The audit report has recommended exact determination of funds transferred to the Central Bank of Egypt and assurance that EAJP makes reinstatement to the same account from which funds were withdrawn.

Mission Response:

EAJP has clarified this matter in a letter (dated April 17, 1988, attached) indicating that LE 200,000 have been transferred to EAJP credit account at C.B.E. for the Helwan Project use only, and not for general treasury revenues.

Recommendation No. 5

USAID Cooperation with Government of Egypt Efforts to Expedite Off-site Sewage Collection for Upgraded Communities. The audit report has recommended that USAID/Egypt assist the Government of Egypt to expedite the delays in utilization of the on-site infrastructure in the upgraded communities.

Mission Response:

Off-site construction of infrastructure was not properly a part of the scope of this project. Development of plans for on-site infrastructure in the upgrading communities, even selection of the upgrading communities for the project, relied principally upon completion of the Dorsch sewage network to serve on-site infrastructure construction.

When progress on construction of the Dorsch system was seriously delayed, EAJP prepared a contingency plan for construction of an interim off-site collector to serve the upgrading communities.

The factors determining a decision to construct were: actual completion dates for on-site infrastructure; actual completion dates for completion of Phase I and contract 4 of Phase II of the Dorsch scheme, and overall cost effectiveness of construction of an eventually redundant system. On previous decision dates to go ahead or not on the interim off-site collector, the evaluation was made that it did not sufficiently accelerate utilization of the upgrading community infrastructure to justify the expense.

Three months ago, there was another re-evaluation of this concern due to projected delay of the Dorsch scheme based upon current schedules and actual construction progress. After engineering review it has been concluded that special construction measures were not cost effective because they could only make up about six months of the delay between completion of the upgrading community infrastructure and completion of Phase I and contract 4 of Phase II of the Dorsch scheme.

However, CWO agreed immediately to re-negotiate the contract for connecting the communities to the Dorsch scheme. The contract prices are seriously out-of-date and are preventing this important construction commencement. USAID is promoting this action by CWO as soon as possible, although USAID does not have direct influence over the actual construction. However, to assure that this important project objective is met, a joint committee of CWO, Dorsch, CGOSD, EAJP and USAID engineers has been formed specifically to accelerate construction of the connection to the Dorsch collector.

List Of Recommendations

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We recommend that USAID/Egypt analyze in detail the history of the Helwan project, and prepare and distribute to Bureau and Agency officials a "lessons learned" paper that would help avoid similar deficiencies in future low-income housing projects.	
<u>Recommendation No. 2</u>	16
We recommend that USAID/Egypt and the Government of Egypt implementing agency reexamine the eligibility criteria being used to reach the low-income family target group. Such reexamination should focus on the assumptions and data underlying the establishment of beneficiary income criteria in order to identify the target group and to determine the ability of beneficiaries to afford loan payments in the context of all their financial obligations.	
<u>Recommendation No. 3</u>	22
We recommend that USAID/Egypt ensure that the Government of Egypt develop a housing plan, approved by USAID/Egypt and in conformance with agreed-upon project objectives, for the remaining six neighborhoods.	
<u>Recommendation No. 4</u>	28
We recommend that USAID/Egypt:	
(a) coordinate the issuance of a GOE presidential decree authorizing EAJP to open a bank account for the collection and use of project revenues; and	

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- (b) determine the amount of collections transferred to the Central Bank of Egypt and ensure that EAJP reinstates the funds to the appropriate accounts, or show why such reinstatement is not possible or necessary.

Recommendation No. 5

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We recommend that USAID/Egypt consult with the Government of Egypt in addressing effectively the problem of inoperable sewer and water lines so that the people living in the six upgraded Helwan communities can use the completed facilities as soon as practicable.

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