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# **LOCAL DEVELOPMENT II URBAN PROJECT**

Submitted to

**USAID / CAIRO**

Submitted by

**WILBUR SMITH ASSOCIATES**

in association with

**PUBLIC ADMINISTRATION SERVICE  
DEVELOPMENT CONSULTING OFFICE**

**DELOITTE AND TOUCHE  
ENGINEERING AND GEOLOGICAL  
CONSULTING OFFICE**

**REPORT ON SUB-PROJECT RATING  
FOR PROJECTS CARRIED OUT DURING FY 1988**

**DECEMBER 1990**

**Submitted to  
USAID/CAIRO**

**Submitted by  
WILBUR SMITH ASSOCIATES**

**Public Administration Service  
Development Consulting Office**

**Deloitte & Touch  
Engineering & Geological  
Consulting Office**

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**Section 1**

# **INTRODUCTION**

## 1. INTRODUCTION

This report follows a similar format to that already produced for the financial year 1987 and a significant proportion of the phraseology has been copied verbatim. For example, in the 1987 report it was stated that "In any construction project, or project which involves provision of equipment for facilities, there is a need to evaluate how well the projects were planned, built and then equipped in order to determine which, if any, of the facilities are being adequately utilized and properly maintained. This report only contains a relatively limited view point however as only one year's projects are analyzed. Useful conclusion may nevertheless be drawn and some startling statistics have been generated." The sentiment for this statement remains the same but the relevant numbers have invariably changed and comment is given herein where appropriate.

- i. 23% of the construction sub-project needs urgent maintenance and 68% need periodic maintenance; i.e. 91% of the construction sub-projects need urgent or periodic maintenance. The sectors reflecting the worst maintenance records are education and public health.
- ii. 96% of the construction sub-projects do not have USAID plaques.

The sub-project rating exercises undertaken during this study focus on both implementation (planning, engineering and construction) and operation (degree of usage, adequacy of equipment, staffing and status of maintenance). The individual rating field work sheets (two for "sub-projects", one for "equipment" and two for "utilities") are given in the appendices of this report for reference. These individual rating forms are the same as those used for the FY 87 survey. The depiction of the results derived from these sub-projects rating forms varies slightly from section to section within this report but each generally contains a narrative, a graphical representation (pie charts) and computer generated tabulations.

All of the analysis given in this report were derived from data collected prior to December 12, 1990. Port Said and Suez governorates have been excluded from this report as there were no sub-projects implemented during FY 88.

Section 2  
**D E S I G N**

## 2. DESIGN

### 2.1 General:

Preliminary and detailed design of the projects is the responsibility of the project departments at the governorate and district levels. Some service directorates also have design units in their engineering departments which prepare typical design for classrooms, clinics, etc.

### 2.2 Project Documents:

The engineering departments prepare some, or all, of the following documents for each sub-project:

- a. General conditions
- b. Special conditions
- c. Specifications
- d. Details and Cost Estimates
- e. Working drawings

In general, the preparation of detailed working drawings and specifications has been found to be inadequate.

Reference to the rating results for FY 88 shows that 19% of the sub-projects were poor and 81% were good or moderate. Typical designs prepared by the ministries were generally found to be adequate.

### 2.3 Conclusion:

When compared with FY 87, it may be seen that some design aspects have improved. The percentage of the good sub-projects increased, and the percentage of poor sub-projects decreased. This was particularly true for Cairo, Alexandria and Qaliubia. Reference to Table 2-1 shows lower percentages for Giza. This was due to:

- o District Maintenance Center; this project was allocated a score based upon its initial intended use i.e. as a maintenance center it did not meet normally accepted engineering standards and specifications. It was apparently for this reason that it was used as a Headquarters for El-Haram District.
- o 50% of the construction sub-projects were for the construction of W.C.'s. These were consistently given poor marks when they were found to be inadequate to meet the demand. Sufficient thought had apparently not gone into the designs (layouts, accessibility and pipe gradients all gave rise to concern).
- o Nazlet El-Batran Youth Center is a sub-project that received low scores for design because it was not in accordance with specification or standards described in the needs assessment reports.

The recommendations from 1987 are still valid and are given below for reference:

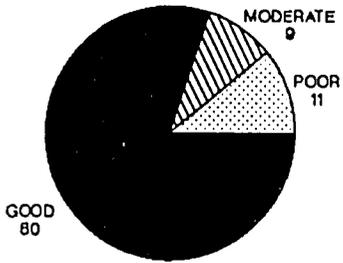
- a. Creation of small design sections in each district (these sections would be responsible for preparation of all tender and contract documents).
- b. Concentration on design training courses to increase the design capacity within governorates and districts.
- c. Drawings and specifications for projects should be approved by the relevant "user" department prior to tender.

- d. **Hiring of an engineering services consultant, contracted on an annual basis, to assist the district engineers in preparing the project documents when "in house" skills are limited.**

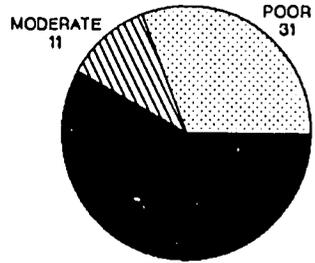
**Graphs**

Design issues are shown pictorially on the following page.

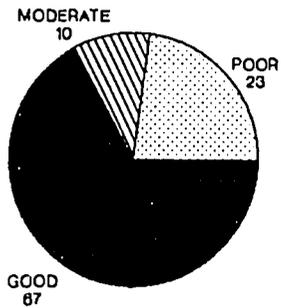
## ADHERANCE TO DESIGN STANDARDS



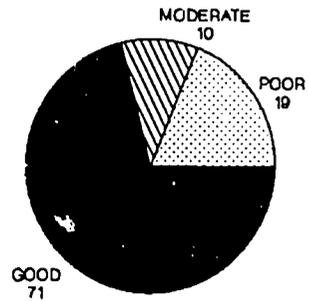
CAIRO



ALEXANDRIA



GIZA



QALIUBIA

TABLE 2-1  
ADEQUACY OF DESIGN (CONSTRUCTION S.P.)  
FY 88

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | FUND<br>SPENT | GOOD |     |           |     | MODERATE |    |         |    | POOR |    |         |    |
|--------------------------|-------------|---------------|------|-----|-----------|-----|----------|----|---------|----|------|----|---------|----|
|                          |             |               | NO.  | %   | COST      | %   | NO.      | %  | COST    | %  | NO.  | %  | COST    | %  |
| CAIRO                    |             |               |      |     |           |     |          |    |         |    |      |    |         |    |
| -----                    |             |               |      |     |           |     |          |    |         |    |      |    |         |    |
| HELWAN                   | 14          | 777.733       | 10   | 71  | 656.919   | 84  | 3        | 21 | 105,206 | 14 | 1    | 7  | 15,608  | 2  |
| HELIOPOLIS               | 7           | 350.084       | 6    | 86  | 333,498   | 95  | 0        | 0  | 0       | 0  | 1    | 14 | 16,586  | 5  |
| WEST                     | 11          | 508.664       | 8    | 73  | 407,542   | 80  | 0        | 0  | 0       | 0  | 3    | 27 | 101,122 | 20 |
| ABDEEN                   | 9           | 413,907       | 7    | 78  | 305,933   | 74  | 2        | 22 | 107,974 | 26 | 0    | 0  | 0       | 0  |
| CENTRAL                  | 5           | 584,535       | 5    | 100 | 584,535   | 100 | 0        | 0  | 0       | 0  | 0    | 0  | 0       | 0  |
| WAILY                    | 9           | 845,855       | 8    | 89  | 835,214   | 99  | 1        | 11 | 10,641  | 1  | 0    | 0  | 0       | 0  |
| EL MATAREYA              | 16          | 879,199       | 13   | 81  | 815,665   | 93  | 2        | 12 | 27,043  | 3  | 1    | 6  | 36,491  | 4  |
| ZEITOUN                  | 10          | 782,822       | 8    | 80  | 742,301   | 95  | 0        | 0  | 0       | 0  | 2    | 20 | 40,521  | 5  |
| SOUTH                    | 11          | 414,602       | 8    | 73  | 329,237   | 79  | 1        | 9  | 22,019  | 5  | 2    | 18 | 63,346  | 15 |
| MISR EL KADIMA           | 11          | 768,663       | 9    | 82  | 508,192   | 66  | 2        | 18 | 260,471 | 34 | 0    | 0  | 0       | 0  |
| ROD EL FARAG             | 9           | 798,567       | 8    | 89  | 707,635   | 89  | 0        | 0  | 0       | 0  | 1    | 11 | 90,932  | 11 |
| SHOUBRA                  | 4           | 255,057       | 3    | 75  | 243,857   | 96  | 0        | 0  | 0       | 0  | 1    | 25 | 11,200  | 4  |
| NASR CITY                | 1           | 190,571       | 1    | 99  | 190,571   | 100 | 0        | 0  | 0       | 0  | 0    | 0  | 0       | 0  |
| EL ZAWIA                 | 12          | 548,115       | 10   | 83  | 492,625   | 90  | 0        | 0  | 0       | 0  | 2    | 17 | 55,490  | 10 |
| EL SALAM                 | 5           | 284,313       | 4    | 80  | 267,127   | 94  | 1        | 20 | 17,186  | 6  | 0    | 0  | 0       | 0  |
| MAADI                    | 7           | 449,584       | 5    | 71  | 304,106   | 68  | 1        | 14 | 55,610  | 12 | 1    | 14 | 89,868  | 20 |
| SUB-TOTAL                | 141         | 8,852,271     | 113  | 80  | 7,724,957 | 87  | 13       | 9  | 606,150 | 7  | 15   | 11 | 521,164 | 6  |
| ALEXANDRIA               |             |               |      |     |           |     |          |    |         |    |      |    |         |    |
| -----                    |             |               |      |     |           |     |          |    |         |    |      |    |         |    |
| GOVERNORATE              | 3           | 1,004,609     | 3    | 100 | 1,004,609 | 100 | 0        | 0  | 0       | 0  | 0    | 0  | 0       | 0  |
| EASTERN                  | 7           | 338,320       | 2    | 29  | 117,294   | 35  | 2        | 29 | 105,837 | 31 | 3    | 43 | 115,189 | 34 |
| MID-TOWN                 | 13          | 1,114,538     | 6    | 46  | 705,442   | 63  | 2        | 15 | 102,004 | 9  | 5    | 38 | 307,092 | 28 |
| WEST                     | 15          | 591,983       | 7    | 47  | 363,414   | 61  | 3        | 20 | 77,616  | 13 | 5    | 33 | 150,953 | 25 |
| AMREYA                   | 13          | 548,511       | 6    | 46  | 359,959   | 66  | 0        | 0  | 0       | 0  | 7    | 54 | 188,552 | 34 |
| MONTAZAH                 | 13          | 629,994       | 10   | 77  | 558,409   | 89  | 1        | 8  | 31,155  | 5  | 2    | 15 | 40,430  | 6  |
| GOMROK                   | 7           | 426,326       | 7    | 100 | 426,326   | 100 | 0        | 0  | 0       | 0  | 0    | 0  | 0       | 0  |
| SUB-TOTAL                | 71          | 4,654,281     | 41   | 58  | 3,535,453 | 76  | 8        | 11 | 316,612 | 7  | 22   | 31 | 802,216 | 17 |

TABLE 2-1  
ADEQUACY OF DESIGN (CONSTRUCTION S.P.)  
FY 88

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | FUND<br>SPENT | GOOD |     |            |     | MODERATE |    |           |    | POOR |    |           |    |
|--------------------------|-------------|---------------|------|-----|------------|-----|----------|----|-----------|----|------|----|-----------|----|
|                          |             |               | NO.  | %   | COST       | %   | NO.      | %  | COST      | %  | NO.  | %  | COST      | %  |
| SIZA                     |             |               |      |     |            |     |          |    |           |    |      |    |           |    |
| -----                    |             |               |      |     |            |     |          |    |           |    |      |    |           |    |
| GOVERNORATE              | 8           | 535.967       | 3    | 37  | 340.346    | 64  | 3        | 37 | 160.621   | 30 | 2    | 25 | 35.000    | 7  |
| NORTH                    | 10          | 572.323       | 8    | 80  | 495.229    | 87  | 1        | 10 | 33.958    | 6  | 1    | 10 | 43.136    | 8  |
| SOUTH                    | 6           | 461.427       | 4    | 67  | 418.993    | 91  | 0        | 0  | 0         | 0  | 2    | 33 | 42.434    | 9  |
| WEST                     | 8           | 311.996       | 3    | 37  | 192.743    | 62  | 0        | 0  | 0         | 0  | 5    | 62 | 119.253   | 38 |
| CENTRAL                  | 10          | 330.825       | 10   | 100 | 330.825    | 100 | 0        | 0  | 0         | 0  | 0    | 0  | 0         | 0  |
| SIIB-TOTAL               | 42          | 2,212.538     | 28   | 67  | 1,778.136  | 80  | 4        | 10 | 194,579   | 9  | 10   | 24 | 239.823   | 11 |
| QALUBIA                  |             |               |      |     |            |     |          |    |           |    |      |    |           |    |
| -----                    |             |               |      |     |            |     |          |    |           |    |      |    |           |    |
| EAST                     | 9           | 622.854       | 5    | 55  | 367.662    | 59  | 2        | 22 | 113,655   | 18 | 2    | 22 | 141,537   | 23 |
| WEST                     | 10          | 776.574       | 6    | 60  | 468.532    | 60  | 1        | 10 | 141,504   | 18 | 3    | 30 | 166.538   | 21 |
| SIIB-TOTAL               | 19          | 1,399.428     | 11   | 58  | 836.194    | 60  | 3        | 16 | 255.159   | 18 | 5    | 26 | 308.075   | 22 |
| TOTAL                    | 273         | 17,118.518    | 193  | 71  | 13,874.740 | 81  | 28       | 10 | 1,372.500 | 8  | 52   | 19 | 1,871.278 | 11 |

TABLE 2-2  
 FREQUENCY OF DESIGN (STANDARD DEVIATION)

As of 12/12/90

| FY99        |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| CAIRO       | NASR CITY      | 3           | 1             | 4.00  | 190.571       | ABOVE AVG. |
| ALEXANDRIA  | GOVERNORATE    | 11          | 3             | 3.91  | 1,004,609     | ABOVE AVG. |
| ALEXANDRIA  | GOMROK         | 18          | 7             | 3.91  | 426,326       | ABOVE AVG. |
| CAIRO       | WAILY          | 12          | 9             | 3.89  | 845,855       | ABOVE AVG. |
| CAIRO       | HELIOPOLIS     | 12          | 7             | 3.83  | 350,084       | ABOVE AVG. |
| CAIRO       | ZEITOUN        | 19          | 10            | 3.80  | 782,822       | ABOVE AVG. |
| GIZA        | CENTRAL        | 22          | 10            | 3.73  | 330,825       | AVERAGE    |
| CAIRO       | EL SALAM       | 6           | 5             | 3.67  | 284,313       | AVERAGE    |
| GIZA        | NORTH          | 21          | 10            | 3.66  | 572,323       | AVERAGE    |
| CAIRO       | SOUTH          | 21          | 11            | 3.63  | 414,602       | AVERAGE    |
| CAIRO       | HELWAN         | 27          | 14            | 3.57  | 777,733       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 24          | 13            | 3.57  | 629,994       | AVERAGE    |
| CAIRO       | SHOUBRA        | 10          | 4             | 3.53  | 255,057       | AVERAGE    |
| CAIRO       | CENTRAL        | 17          | 5             | 3.45  | 584,535       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 29          | 16            | 3.40  | 879,199       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 14          | 11            | 3.24  | 768,663       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 23          | 9             | 3.24  | 798,567       | AVERAGE    |
| CAIRO       | MAADI          | 12          | 7             | 3.19  | 449,584       | AVERAGE    |
| CAIRO       | WEST           | 19          | 11            | 3.17  | 508,664       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 26          | 13            | 3.15  | 548,511       | AVERAGE    |
| CAIRO       | ABDEEN         | 18          | 9             | 3.14  | 413,907       | AVERAGE    |
| GIZA        | SOUTH          | 13          | 6             | 3.10  | 461,427       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 19          | 12            | 3.00  | 548,115       | AVERAGE    |
| GIZA        | GOVERNORATE    | 17          | 8             | 2.94  | 535,967       | BELOW      |
| QALIUBIA    | WEST           | 15          | 10            | 2.89  | 776,574       | BELOW      |
| ALEXANDRIA  | WEST           | 27          | 15            | 2.85  | 591,983       | BELOW      |
| QALIUBIA    | EAST           | 15          | 9             | 2.84  | 622,854       | BELOW      |
| ALEXANDRIA  | MID-TOWN       | 17          | 13            | 2.80  | 1,114,538     | BELOW      |
| GIZA        | WEST           | 29          | 8             | 2.68  | 311,996       | BELOW      |
| ALEXANDRIA  | EASTERN        | 27          | 7             | 2.65  | 338,320       | BELOW      |
| CAIRO       | GOVERNORATE    | 4           | 0             | 0.00  | 0             | -          |
| QALIUBIA    | GOVERNORATE    | 1           | 0             | 0.00  | 0             | -          |
| TOTAL       |                | 538         | 273           |       | 17,118,518    |            |

MEAN VALUE : 3.35  
 STD. DEVIATION : 0.40  
 AVERAGE LOW END : 2.95  
 AVERAGE HIGH END : 3.75  
 % L.E. ABOVE AVERAGE : 21.00  
 % L.E. AVERAGE : 54.00  
 % L.E. BELOW AVERAGE : 25.00

**Section 3**  
**COST ESTIMATES**

### 3. COST ESTIMATES

#### 3.1 General:

Two tables relating to cost have been generated from the data collected during the sub-project rating exercises. The first compares actual sums expended to estimated cost and the second compares them to contracted cost. These show that approximately 25% of the construction sub-projects had cost overruns in excess of 10% when compared to the estimated sums, and 34% had cost overruns when compared to contracted sums. This may be due to any or all the following:

- a. Bad planning
- b. Bad estimation
- c. The proliferation of 'change orders'
- d. Omission of items from the original estimate

#### 3.2 Conclusions:

When compared with FY 87, it may be seen that the estimation of costs generally improved in FY 88. The percentage of projects reaching acceptable standards increased for Cairo, Alexandria and Qaliubia; the exception to this trend was Giza Governorate. By reviewing Tables 3-1 and 3-2 it may be seen that the low percentage for Giza was a reflection of the low scores given to sub-projects in the Central and West Districts.

With reference to Table 3-2 and the individual implementation sheets, it was observed that at Giza Governorate, Central District, there are 4 sub-projects that have overrun a cost; one of those sub-projects had an overrun of L.E. 55,000. When compared to the initial allocation of L.E. 110,000, it may be seen that this sub-project overran its allocation by 50%. By comparing all of the sub-projects in the district, it was shown that the total sum for overruns was L.E. 67,332. The total contracted costs were L.E. 286,810, i.e. they have 23% overrun of their contracted costs.

In general, the same recommendations from 1987 are still valid and are given below for reference:

- a. More training is necessary for engineers in design and cost estimate.
- b. Preparation of current cost data files would be beneficial.
- c. Engineers should use the Analysis Cost Report which was prepared by TAC as a reference.
- d. More cooperation between the designer and the users should be encouraged.
- e. It may be beneficial to hire consultants on one year contracts to assist in preparation of better estimates and tender documents to alleviate the needs for so many change orders.

TABLE 3 - 1  
STATUS OF SUB-PROJECTS (CONSTRUCTION)  
VARIANCE TO ESTIMATED COST  
F198

As of 12/12/79

PROJECTS 10% OR MORE OVER CONTRACT

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | INITIAL<br>COST   | 10-19 %   |           | OVER 20-30 % |           | TOTAL<br>NO. | % OF<br>TOTAL<br>OVER LE | % OF<br>TOTAL |
|--------------------------|-------------|-------------------|-----------|-----------|--------------|-----------|--------------|--------------------------|---------------|
|                          |             |                   |           |           |              |           |              |                          |               |
| <b>CAIRO</b>             |             |                   |           |           |              |           |              |                          |               |
| GOVERNORATE              | 0           | 0                 | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| HELWAN                   | 14          | 1,400,000         | 0         | 0         | 14           | 14        | 100          | 689,374                  | 49            |
| HELIOPOLIS               | 7           | 171,500           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| WEST                     | 11          | 381,698           | 0         | 0         | 11           | 11        | 100          | 125,411                  | 33            |
| ABDEEN                   | 9           | 293,500           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| CENTRAL                  | 5           | 347,115           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| HAIFY                    | 9           | 14,577            | 0         | 9         | 0            | 9         | 100          | 3,195                    | 21            |
| EL MATAREYA              | 15          | 409,330           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| ZETTOUN                  | 10          | 1,821,620         | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| SOUTH                    | 11          | 440,000           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| MISR EL KADIMA           | 11          | 903,000           | 0         | 11        | 0            | 11        | 100          | 223,947                  | 28            |
| ARB EL FARAG             | 9           | 1,081,035         | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| SHOUBRA                  | 4           | 314,772           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| WARR CITY                | 1           | 80,000            | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| EL ZAWIA                 | 12          | 2,627,664         | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| EL SALAM                 | 5           | 70,100            | 5         | 0         | 0            | 5         | 100          | 9,995                    | 14            |
| MAADI                    | 7           | 20,706            | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| EL SAHEL                 | 0           | 0                 | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| ATM SHAMS                | 0           | 0                 | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| TEBEEEN                  | 0           | 0                 | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| <b>SUB-TOTAL</b>         | <b>141</b>  | <b>10,267,447</b> | <b>5</b>  | <b>20</b> | <b>25</b>    | <b>50</b> | <b>35</b>    | <b>1,050,932</b>         | <b>10</b>     |
| <b>ALEXANDRIA</b>        |             |                   |           |           |              |           |              |                          |               |
| GOVERNORATE              | 3           | 2,227,590         | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| EASTERN                  | 7           | 1,162,000         | 7         | 0         | 0            | 7         | 100          | 294,918                  | 18            |
| MID-TOWN                 | 13          | 650,000           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| WEST                     | 15          | 525,000           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| AMREYA                   | 13          | 2,443,350         | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| MONTAZAH                 | 13          | 572,000           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| SOMDIE                   | 7           | 640,304           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| <b>SUB-TOTAL</b>         | <b>71</b>   | <b>8,229,244</b>  | <b>7</b>  | <b>0</b>  | <b>0</b>     | <b>7</b>  | <b>10</b>    | <b>294,918</b>           | <b>2</b>      |
| <b>GIZA</b>              |             |                   |           |           |              |           |              |                          |               |
| GOVERNORATE              | 9           | 141,336           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| NORTH                    | 10          | 498,470           | 0         | 0         | 10           | 10        | 100          | 251,530                  | 59            |
| SOUTH                    | 6           | 121,884           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| WEST                     | 8           | 339,824           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| CENTRAL                  | 10          | 147,700           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| EL HARAN                 | 0           | 0                 | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| <b>SUB-TOTAL</b>         | <b>42</b>   | <b>1,249,214</b>  | <b>0</b>  | <b>0</b>  | <b>10</b>    | <b>10</b> | <b>24</b>    | <b>251,530</b>           | <b>20</b>     |
| <b>QALUBIA</b>           |             |                   |           |           |              |           |              |                          |               |
| GOVERNORATE              | 0           | 0                 | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| EAST                     | 9           | 391,194           | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| WEST                     | 10          | 2,398,190         | 0         | 0         | 0            | 0         | 0            | 0                        | 0             |
| <b>SUB-TOTAL</b>         | <b>19</b>   | <b>2,609,384</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>     | <b>0</b>  | <b>0</b>     | <b>0</b>                 | <b>0</b>      |
| <b>TOTAL</b>             | <b>273</b>  | <b>22,346,289</b> | <b>12</b> | <b>20</b> | <b>35</b>    | <b>67</b> | <b>25</b>    | <b>1,597,360</b>         | <b>7</b>      |

TABLE 3-2  
 DEFERENCE TO CONTRACT COST (CONST. S.P.)  
 FY 98

As of 12/12/98

PROJECTS 10 % OR MORE OVER CONTRACT

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | CONTRACT<br>COST  | PROJECTS 10 % OR MORE OVER CONTRACT |           |              |              |               |                  |               |
|--------------------------|-------------|-------------------|-------------------------------------|-----------|--------------|--------------|---------------|------------------|---------------|
|                          |             |                   | 10-19 %                             | 20-30%    | OVER<br>30 % | TOTAL<br>NO. | % OF<br>TOTAL | TOTAL<br>OVER LE | % OF<br>TOTAL |
| <b>CAIRO</b>             |             |                   |                                     |           |              |              |               |                  |               |
| GOVERNORATE              | 0           | 0                 | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| HELWAN                   | 14          | 784,880           | 1                                   | 0         | 1            | 2            | 14            | 18,461           | 2             |
| HELIOPOLIS               | 7           | 372,663           | 1                                   | 0         | 0            | 1            | 14            | 1,788            | 0             |
| WEST                     | 11          | 432,978           | 1                                   | 0         | 2            | 3            | 27            | 85,326           | 20            |
| ABDEEN                   | 9           | 455,800           | 2                                   | 0         | 2            | 4            | 44            | 34,936           | 8             |
| CENTRAL                  | 5           | 589,794           | 2                                   | 0         | 0            | 2            | 40            | 22,562           | 4             |
| NATLY                    | 9           | 835,659           | 3                                   | 0         | 4            | 7            | 78            | 94,266           | 11            |
| EI MATAREYA              | 16          | 772,259           | 1                                   | 6         | 4            | 11           | 69            | 113,765          | 15            |
| ZEITOUN                  | 10          | 767,029           | 7                                   | 0         | 0            | 2            | 20            | 20,504           | 3             |
| SOUTH                    | 11          | 363,049           | 0                                   | 1         | 3            | 4            | 36            | 52,432           | 14            |
| MISR EL KADIMA           | 11          | 733,416           | 0                                   | 1         | 1            | 2            | 18            | 62,820           | 9             |
| ROD EL FARAG             | 9           | 780,962           | 1                                   | 0         | 1            | 2            | 22            | 23,029           | 3             |
| SHUBRA                   | 4           | 256,592           | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| NASR CITY                | 1           | 177,000           | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| EL ZAWTA                 | 12          | 547,807           | 0                                   | 1         | 0            | 1            | 8             | 4,962            | 1             |
| EL SALAM                 | 5           | 275,148           | 1                                   | 0         | 1            | 2            | 40            | 27,927           | 10            |
| MAADI                    | 7           | 382,367           | 2                                   | 3         | 0            | 5            | 71            | 66,253           | 17            |
| EI SAHEL                 | 0           | 0                 | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| AIM SHAMS                | 0           | 0                 | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| TEBBEEN                  | 0           | 0                 | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| <b>SUB-TOTAL</b>         | <b>141</b>  | <b>8,527,403</b>  | <b>17</b>                           | <b>12</b> | <b>19</b>    | <b>48</b>    | <b>34</b>     | <b>629,031</b>   | <b>7</b>      |
| <b>ALEXANDRIA</b>        |             |                   |                                     |           |              |              |               |                  |               |
| GOVERNORATE              | 3           | 1,005,596         | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| EASTERN                  | 7           | 330,007           | 1                                   | 1         | 0            | 2            | 29            | 21,346           | 6             |
| MID-TOWN                 | 13          | 997,829           | 4                                   | 3         | 3            | 10           | 77            | 154,763          | 16            |
| WEST                     | 15          | 506,360           | 0                                   | 1         | 2            | 3            | 20            | 186,195          | 21            |
| SMARFA                   | 13          | 504,908           | 4                                   | 1         | 1            | 6            | 46            | 54,727           | 11            |
| MONTAZAH                 | 13          | 554,258           | 5                                   | 7         | 1            | 8            | 61            | 63,823           | 12            |
| ROMAHO                   | 7           | 401,680           | 0                                   | 2         | 1            | 3            | 43            | 23,372           | 6             |
| <b>SUB-TOTAL</b>         | <b>71</b>   | <b>4,300,638</b>  | <b>14</b>                           | <b>10</b> | <b>8</b>     | <b>32</b>    | <b>45</b>     | <b>424,226</b>   | <b>10</b>     |
| <b>GIZA</b>              |             |                   |                                     |           |              |              |               |                  |               |
| GOVERNORATE              | 8           | 521,095           | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| NORTH                    | 10          | 607,918           | 1                                   | 0         | 0            | 1            | 10            | 5,932            | 1             |
| SOUTH                    | 6           | 437,611           | 1                                   | 0         | 1            | 2            | 33            | 24,560           | 6             |
| WEST                     | 9           | 316,226           | 1                                   | 1         | 3            | 5            | 62            | 23,145           | 7             |
| CENTRAL                  | 10          | 786,810           | 0                                   | 0         | 4            | 4            | 40            | 67,332           | 23            |
| EL HARAM                 | 0           | 0                 | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| <b>SUB-TOTAL</b>         | <b>42</b>   | <b>2,169,660</b>  | <b>3</b>                            | <b>1</b>  | <b>8</b>     | <b>12</b>    | <b>29</b>     | <b>120,969</b>   | <b>6</b>      |
| <b>QALUBIA</b>           |             |                   |                                     |           |              |              |               |                  |               |
| GOVERNORATE              | 0           | 0                 | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| FAST                     | 9           | 471,707           | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| WEST                     | 10          | 915,075           | 0                                   | 0         | 0            | 0            | 0             | 0                | 0             |
| <b>SUB-TOTAL</b>         | <b>19</b>   | <b>1,586,782</b>  | <b>0</b>                            | <b>0</b>  | <b>0</b>     | <b>0</b>     | <b>0</b>      | <b>0</b>         | <b>0</b>      |
| <b>TOTAL</b>             | <b>273</b>  | <b>16,584,483</b> | <b>34</b>                           | <b>23</b> | <b>35</b>    | <b>92</b>    | <b>34</b>     | <b>1,174,226</b> | <b>7</b>      |

**Section 4**

**CONSTRUCTION  
QUALITY CONTROL/SCHEDULING**

## 4. CONSTRUCTION QUALITY CONTROL/SCHEDULING

### 4.1 General

The results show a very similar pattern to 1987 and only the percentages have been changed in the analysis given below, i.e. the FY 87 report stated "according to law No. 9, districts should accept the lowest sums tendered for contracts unless adequate reason can be shown to do otherwise. In every case reviewed during the rating exercise, the lowest sum tendered had been accepted. The rating team observed that:"

- a. Workmanship tended to be poor
- b. Materials were sometimes not to specification
- c. There was little emphasis on compliance with time schedules
- d. There was inadequate engineering site inspection"

Reference to the rating analysis shows that 52% of the construction sub-projects are poor; the same percentage applies for overruns of time schedules.

### 4.2 Conclusions

- a. More emphasis should be placed on a contractor's ability to produce satisfactory workmanship when considering award of contracts.
- b. The need to assess the competency of the lowest bidder should be emphasized.
- c. There is need to create small concrete testing laboratories. These should be constructed in sufficient numbers so that they are readily accessible to each district, zone or governorate
- d. Engineering site inspection should be enhanced.
- e. Specification guidelines should be enforced.
- f. Consideration should be given to hiring consultants to assist the engineering departments in implementation and project management when "in house" skills are inadequate.

### Graphs

Quality control issues are shown pictorially on the following page.

# ADHERANCE TO QUALITY CONTROL

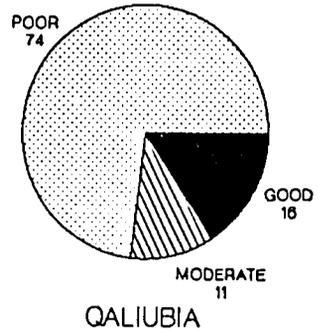
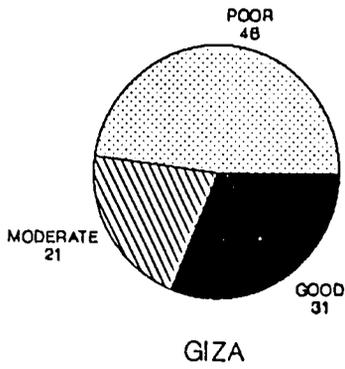
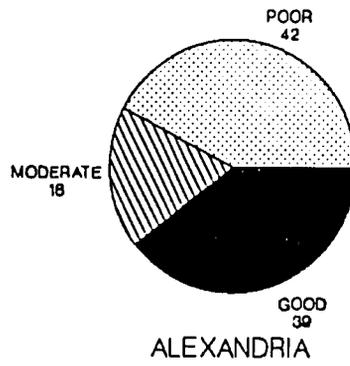
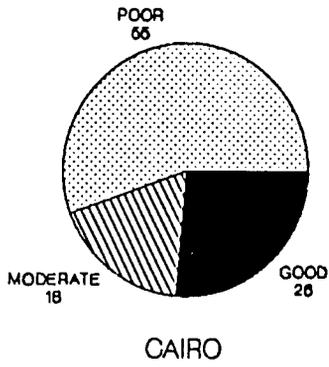


TABLE 4-1  
 FREQUENCY OF CONSTRUCTION (CONST. S.P.)  
 FY 88

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | ACTUAL<br>COST | GOOD |    |           |    | MODERATE |    |           |     | POOR |    |           |    |
|--------------------------|-------------|----------------|------|----|-----------|----|----------|----|-----------|-----|------|----|-----------|----|
|                          |             |                | NO.  | %  | COST      | %  | NO.      | %  | COST      | %   | NO.  | %  | COST      | %  |
| CAIRO                    |             |                |      |    |           |    |          |    |           |     |      |    |           |    |
| -----                    |             |                |      |    |           |    |          |    |           |     |      |    |           |    |
| HELIWAN                  | 14          | 777.733        | 4    | 29 | 152.033   | 20 | 3        | 21 | 146.752   | 19  | 7    | 50 | 478.948   | 62 |
| HELIOPOLIS               | 7           | 350.084        | 2    | 29 | 147.481   | 42 | 1        | 14 | 22.504    | 6   | 4    | 57 | 180.099   | 51 |
| WEST                     | 11          | 508.864        | 5    | 45 | 342.812   | 67 | 2        | 18 | 98.424    | 19  | 4    | 36 | 67.429    | 13 |
| ARDEEN                   | 9           | 413.907        | 1    | 11 | 98.864    | 24 | 4        | 44 | 212.921   | 51  | 4    | 44 | 102.102   | 25 |
| CENTRAL                  | 5           | 584.535        | 3    | 60 | 373.168   | 64 | 2        | 40 | 211.367   | 36  | 0    | 0  | 0         | 0  |
| WADI                     | 9           | 845.855        | 2    | 22 | 101.896   | 12 | 1        | 11 | 220.000   | 26  | 0    | 67 | 524.159   | 62 |
| EL MATAREYA              | 16          | 879.199        | 3    | 19 | 392.010   | 34 | 3        | 19 | 193.064   | 22  | 10   | 62 | 384.105   | 44 |
| ZEITOUN                  | 10          | 782.822        | 0    | 0  | 0         | 0  | 2        | 20 | 231.685   | 30  | 8    | 80 | 551.137   | 70 |
| SOUTH                    | 11          | 414.602        | 5    | 45 | 275.239   | 66 | 0        | 0  | 0         | 0   | 6    | 54 | 139.363   | 34 |
| MISR EL MADINA           | 11          | 768.653        | 1    | 9  | 73.743    | 10 | 0        | 0  | 0         | 0   | 10   | 91 | 694.920   | 90 |
| ROD EL FARAG             | 9           | 798.567        | 3    | 33 | 288.954   | 36 | 2        | 22 | 39.457    | 5   | 4    | 44 | 470.156   | 59 |
| SHUBRA                   | 4           | 355.057        | 3    | 75 | 243.857   | 68 | 0        | 0  | 0         | 0   | 1    | 25 | 11.200    | 4  |
| HAER CITY                | 1           | 190.571        | 0    | 0  | 0         | 0  | 1        | 99 | 190.571   | 100 | 0    | 0  | 0         | 0  |
| EL ZAWIA                 | 12          | 548.115        | 0    | 0  | 0         | 0  | 3        | 25 | 110.312   | 20  | 9    | 75 | 437.803   | 80 |
| EL SALAM                 | 5           | 784.313        | 1    | 20 | 17.997    | 6  | 2        | 40 | 239.311   | 84  | 2    | 40 | 27.905    | 10 |
| HAABI                    | 7           | 449.584        | 4    | 57 | 225.467   | 50 | 0        | 0  | 0         | 0   | 3    | 43 | 224.117   | 50 |
| SUB-TOTAL                | 141         | 8.852.271      | 37   | 26 | 2.642.441 | 30 | 26       | 18 | 1.916.368 | 22  | 78   | 55 | 4.293.442 | 49 |
| ALEXANDRIA               |             |                |      |    |           |    |          |    |           |     |      |    |           |    |
| -----                    |             |                |      |    |           |    |          |    |           |     |      |    |           |    |
| GOVERNORATE              | 3           | 1,004.659      | 2    | 66 | 827.781   | 82 | 0        | 0  | 0         | 0   | 1    | 33 | 176.878   | 18 |
| EASTERN                  | 7           | 738.320        | 2    | 29 | 184.630   | 55 | 0        | 0  | 0         | 0   | 5    | 71 | 153.690   | 45 |
| MID-TOWN                 | 13          | 1,114.538      | 4    | 31 | 499.732   | 45 | 4        | 31 | 315.509   | 28  | 5    | 38 | 299.297   | 27 |
| WEST                     | 15          | 591.983        | 3    | 20 | 87.395    | 15 | 4        | 27 | 102.666   | 17  | 8    | 53 | 401.922   | 68 |
| AMREYA                   | 13          | 546.511        | 4    | 31 | 98.688    | 18 | 4        | 31 | 288.347   | 53  | 5    | 38 | 161.476   | 29 |
| MONTAZAH                 | 13          | 629.994        | 8    | 61 | 469.513   | 75 | 0        | 0  | 0         | 0   | 5    | 38 | 160.481   | 25 |
| GHAFQI                   | 7           | 476.326        | 5    | 71 | 370.322   | 87 | 1        | 14 | 29.243    | 7   | 1    | 14 | 26.761    | 6  |
| SUB-TOTAL                | 71          | 4,654.281      | 28   | 39 | 2,538,061 | 55 | 13       | 18 | 735,765   | 16  | 30   | 42 | 1,380,455 | 30 |

TABLE 4-1  
ADEQUACY OF CONSTRUCTION (CONSTR. S.P.)  
FY 88

PAGE 2  
As of 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | ACTUAL<br>COST | GOOD |    |           |    | MODERATE |    |           |    | POOR |    |           |    |
|--------------------------|-------------|----------------|------|----|-----------|----|----------|----|-----------|----|------|----|-----------|----|
|                          |             |                | NO.  | %  | COST      | %  | NO.      | %  | COST      | %  | NO.  | %  | COST      | %  |
| SIZA                     |             |                |      |    |           |    |          |    |           |    |      |    |           |    |
| -----                    |             |                |      |    |           |    |          |    |           |    |      |    |           |    |
| GOVERNORATE              | 8           | 575,967        | 2    | 25 | 165,346   | 31 | 1        | 12 | 175,000   | 33 | 5    | 62 | 195,621   | 36 |
| NORTH                    | 10          | 572,323        | 3    | 30 | 197,888   | 35 | 5        | 50 | 327,350   | 57 | 2    | 20 | 47,085    | 8  |
| SOUTH                    | 6           | 461,427        | 2    | 33 | 213,915   | 46 | 2        | 33 | 205,078   | 44 | 2    | 33 | 42,434    | 9  |
| WEST                     | 8           | 711,996        | 1    | 12 | 41,144    | 13 | 0        | 0  | 0         | 0  | 7    | 87 | 270,852   | 87 |
| CENTRAL                  | 10          | 330,825        | 5    | 50 | 197,252   | 60 | 1        | 10 | 10,867    | 3  | 4    | 40 | 122,706   | 37 |
| SUB-TOTAL                | 42          | 2,212,538      | 13   | 31 | 815,545   | 37 | 9        | 21 | 718,295   | 32 | 20   | 48 | 678,698   | 31 |
| DALIUBIA                 |             |                |      |    |           |    |          |    |           |    |      |    |           |    |
| -----                    |             |                |      |    |           |    |          |    |           |    |      |    |           |    |
| EAST                     | 9           | 622,854        | 7    | 33 | 139,743   | 22 | 0        | 0  | 0         | 0  | 6    | 67 | 483,111   | 78 |
| WEST                     | 10          | 776,574        | 0    | 0  | 0         | 0  | 2        | 20 | 70,823    | 9  | 8    | 80 | 705,751   | 91 |
| SUB-TOTAL                | 19          | 1,399,428      | 7    | 16 | 139,743   | 10 | 2        | 11 | 70,823    | 5  | 14   | 74 | 1,188,862 | 85 |
| TOTAL                    | 273         | 17,118,518     | 81   | 30 | 6,135,790 | 36 | 50       | 18 | 3,441,271 | 20 | 142  | 52 | 7,541,457 | 44 |

TABLE 4-7  
 AGENCY OF CONSTRUCTION (STANDARD DEVIATION) As of 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| CAIRO       | SHOUBRA        | 10          | 4             | 3.70  | 255,057       | ABOVE AVG. |
| ALEXANDRIA  | GOMROK         | 18          | 7             | 3.39  | 426,326       | AVERAGE    |
| GIZA        | CENTRAL        | 22          | 10            | 3.00  | 330,825       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 24          | 13            | 2.96  | 629,994       | AVERAGE    |
| ALEXANDRIA  | GOVERNORATE    | 11          | 3             | 2.91  | 1,004,609     | AVERAGE    |
| GIZA        | NORTH          | 21          | 10            | 2.87  | 572,323       | AVERAGE    |
| CAIRO       | CENTRAL        | 12          | 5             | 2.86  | 584,535       | AVERAGE    |
| GIZA        | GOVERNORATE    | 17          | 8             | 2.84  | 535,967       | AVERAGE    |
| CAIRO       | NASR CITY      | 3           | 1             | 2.80  | 190,571       | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 17          | 13            | 2.80  | 1,114,538     | AVERAGE    |
| CAIRO       | WEST           | 19          | 11            | 2.78  | 508,664       | AVERAGE    |
| GIZA        | SOUTH          | 13          | 6             | 2.77  | 461,427       | AVERAGE    |
| CAIRO       | EL SALAM       | 6           | 5             | 2.72  | 284,313       | AVERAGE    |
| CAIRO       | MAADI          | 12          | 7             | 2.72  | 449,584       | AVERAGE    |
| CAIRO       | SOUTH          | 21          | 11            | 2.71  | 414,602       | AVERAGE    |
| CAIRO       | ABDEEN         | 18          | 9             | 2.63  | 413,907       | AVERAGE    |
| CAIRO       | HELIOPLIS      | 12          | 7             | 2.62  | 350,084       | AVERAGE    |
| CAIRO       | HELWAN         | 22          | 14            | 2.60  | 777,733       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 29          | 16            | 2.57  | 879,199       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 26          | 13            | 2.53  | 548,511       | AVERAGE    |
| QALIUBIA    | EAST           | 15          | 9             | 2.43  | 622,854       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 23          | 9             | 2.36  | 798,567       | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 27          | 7             | 2.31  | 338,320       | AVERAGE    |
| CAIRO       | ZEITOUN        | 19          | 10            | 2.29  | 782,822       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 19          | 12            | 2.23  | 548,115       | AVERAGE    |
| ALEXANDRIA  | WEST           | 27          | 15            | 2.17  | 591,983       | AVERAGE    |
| QALIUBIA    | WEST           | 15          | 10            | 2.16  | 776,574       | AVERAGE    |
| CAIRO       | WAILY          | 12          | 9             | 1.85  | 845,855       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 14          | 11            | 1.65  | 768,663       | BELOW      |
| GIZA        | WEST           | 29          | 8             | 1.52  | 311,996       | BELOW      |
| CAIRO       | GOVERNORATE    | 4           | 0             | 0.00  | 0             | -          |
| QALIUBIA    | GOVERNORATE    | 1           | 0             | 0.00  | 0             | -          |
| TOTAL       |                | 538         | 273           |       | 17,118,518    |            |

MEAN VALUE : 2.59  
 STD. DEVIATION : 0.80  
 AVERAGE LOW END : 1.79  
 AVERAGE HIGH END : 3.40  
 % L.E. ABOVE AVERAGE : 1.00  
 % L.E. AVERAGE : 92.00  
 % L.E. BELOW AVERAGE : 6.00

TABLE 4-3  
ADHERANCE TO SCHEDULE (CONST. S.P.)  
FY 88

AS OF 12/14/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO. | WITHIN<br>SCHEDULE | LESS THAN 20%<br>OVERRUN | OVER 20%<br>OVERRUN |
|--------------------------|--------------|--------------------|--------------------------|---------------------|
| CAIRO                    |              |                    |                          |                     |
| GOVERNORATE              | 0            | 0                  | 0                        | 0                   |
| HELIWAN                  | 14           | 11                 | 1                        | 2                   |
| HELIOPOLIS               | 7            | 7                  | 0                        | 0                   |
| WEST                     | 11           | 0                  | 1                        | 10                  |
| ABDEEN                   | 0            | 5                  | 2                        | 2                   |
| CENTRAL                  | 5            | 3                  | 1                        | 1                   |
| NORTH                    | 0            | 7                  | 1                        | 1                   |
| EL MATAREYA              | 16           | 2                  | 2                        | 12                  |
| ZEITOUN                  | 10           | 5                  | 2                        | 3                   |
| SOUTH                    | 11           | 0                  | 0                        | 3                   |
| MISR EL KADIMA           | 11           | 0                  | 1                        | 2                   |
| ROD EL FARAG             | 0            | 7                  | 1                        | 1                   |
| SHUBRA                   | 4            | 4                  | 0                        | 0                   |
| MASR CITY                | 1            | 1                  | 0                        | 0                   |
| EL ZAWIA                 | 12           | 0                  | 4                        | 0                   |
| EL SALAM                 | 5            | 2                  | 0                        | 3                   |
| MAADI                    | 7            | 5                  | 0                        | 2                   |
| EL SAHEL                 | 0            | 0                  | 0                        | 0                   |
| AIN SHAMS                | 0            | 0                  | 0                        | 0                   |
| TEBBEEN                  | 0            | 0                  | 0                        | 0                   |
| SUB-TOTAL                | 141          | 83                 | 16                       | 42                  |
| ALEXANDRIA               |              |                    |                          |                     |
| GOVERNORATE              | 3            | 2                  | 0                        | 1                   |
| EASTERN                  | 7            | 5                  | 0                        | 2                   |
| MID-TOWN                 | 13           | 6                  | 2                        | 5                   |
| WEST                     | 15           | 13                 | 0                        | 2                   |
| AMREYA                   | 13           | 5                  | 2                        | 6                   |
| MONTAZAH                 | 13           | 6                  | 3                        | 4                   |
| COMPOD                   | 7            | 5                  | 2                        | 0                   |
| SUB-TOTAL                | 71           | 42                 | 9                        | 20                  |
| GIZA                     |              |                    |                          |                     |
| GOVERNORATE              | 0            | 3                  | 1                        | 4                   |
| NORTH                    | 10           | 0                  | 0                        | 1                   |
| SOUTH                    | 6            | 5                  | 0                        | 1                   |
| WEST                     | 0            | 4                  | 0                        | 4                   |
| CENTRAL                  | 10           | 4                  | 3                        | 1                   |
| EL HARASH                | 0            | 0                  | 0                        | 0                   |
| SUB-TOTAL                | 42           | 27                 | 4                        | 11                  |
| DALIUBIA                 |              |                    |                          |                     |
| GOVERNORATE              | 0            | 0                  | 0                        | 0                   |
| EAST                     | 0            | 4                  | 1                        | 4                   |
| WEST                     | 10           | 1                  | 6                        | 3                   |
| SUB-TOTAL                | 10           | 5                  | 7                        | 7                   |
| TOTAL                    | 273          | 157                | 36                       | 80                  |

TABLE 4-4  
ADHERANCE TO SCHEDULE (EQUIP. S.P.)  
FY 88

PAGE 1  
AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO. | LESS OR<br>EQ. 0 | PER.<br>%  | GREAT. 0<br>LESS 20 | PER.<br>% | OVER<br>20 | PER.<br>% |
|--------------------------|--------------|------------------|------------|---------------------|-----------|------------|-----------|
| <b>CAIRO</b>             |              |                  |            |                     |           |            |           |
| GOVERNORATE              | 4            | 4                | 100        | 0                   | 0         | 0          | 0         |
| HELMAN                   | 4            | 4                | 100        | 0                   | 0         | 0          | 0         |
| HELIOPOLIS               | 5            | 4                | 80         | 0                   | 0         | 1          | 20        |
| WEST                     | 5            | 5                | 100        | 0                   | 0         | 0          | 0         |
| ABOEN                    | 7            | 7                | 100        | 0                   | 0         | 0          | 0         |
| CENTRAL                  | 5            | 5                | 100        | 0                   | 0         | 0          | 0         |
| WAILY                    | 2            | 2                | 100        | 0                   | 0         | 0          | 0         |
| EL MATAREYA              | 4            | 4                | 100        | 0                   | 0         | 0          | 0         |
| ZEITOUN                  | 5            | 3                | 60         | 1                   | 20        | 1          | 20        |
| SOUTH                    | 7            | 7                | 100        | 0                   | 0         | 0          | 0         |
| MISR EL KADIMA           | 2            | 2                | 100        | 0                   | 0         | 0          | 0         |
| ROD EL FARAG             | 11           | 11               | 100        | 0                   | 0         | 0          | 0         |
| SHOUBRA                  | 5            | 5                | 100        | 0                   | 0         | 0          | 0         |
| NASR CITY                | 2            | 1                | 50         | 0                   | 0         | 1          | 50        |
| EL ZAWIA                 | 6            | 6                | 100        | 0                   | 0         | 0          | 0         |
| EL SALAM                 | 1            | 1                | 99         | 0                   | 0         | 0          | 0         |
| MAADI                    | 3            | 3                | 100        | 0                   | 0         | 0          | 0         |
| EI. SAHEL                | 0            | 0                | 0          | 0                   | 0         | 0          | 0         |
| AIN SHAMS                | 0            | 0                | 0          | 0                   | 0         | 0          | 0         |
| TEBBEEN                  | 0            | 0                | 0          | 0                   | 0         | 0          | 0         |
| <b>SUB-TOTAL</b>         | <b>78</b>    | <b>74</b>        | <b>95</b>  | <b>1</b>            | <b>1</b>  | <b>3</b>   | <b>4</b>  |
| <b>AL EXANDRIA</b>       |              |                  |            |                     |           |            |           |
| GOVERNORATE              | 0            | 0                | 0          | 0                   | 0         | 0          | 0         |
| EASTERN                  | 4            | 3                | 75         | 0                   | 0         | 1          | 25        |
| MID-TOWN                 | 2            | 2                | 100        | 0                   | 0         | 0          | 0         |
| WEST                     | 3            | 2                | 66         | 0                   | 0         | 1          | 33        |
| AMEYA                    | 4            | 4                | 100        | 0                   | 0         | 0          | 0         |
| MONTAZAH                 | 4            | 2                | 50         | 0                   | 0         | 2          | 50        |
| GOMRKY                   | 8            | 5                | 62         | 1                   | 12        | 2          | 25        |
| <b>SUB-TOTAL</b>         | <b>25</b>    | <b>18</b>        | <b>72</b>  | <b>1</b>            | <b>4</b>  | <b>6</b>   | <b>24</b> |
| <b>GIZA</b>              |              |                  |            |                     |           |            |           |
| GOVERNORATE              | 4            | 3                | 75         | 0                   | 0         | 1          | 25        |
| NORTH                    | 2            | 2                | 100        | 0                   | 0         | 0          | 0         |
| SOUTH                    | 4            | 3                | 75         | 0                   | 0         | 1          | 25        |
| WEST                     | 4            | 4                | 100        | 0                   | 0         | 0          | 0         |
| CENTRAL                  | 5            | 4                | 80         | 0                   | 0         | 1          | 20        |
| EL HARAH                 | 0            | 0                | 0          | 0                   | 0         | 0          | 0         |
| <b>SUB-TOTAL</b>         | <b>19</b>    | <b>16</b>        | <b>84</b>  | <b>0</b>            | <b>0</b>  | <b>3</b>   | <b>16</b> |
| <b>DALIUBIA</b>          |              |                  |            |                     |           |            |           |
| GOVERNORATE              | 0            | 0                | 0          | 0                   | 0         | 0          | 0         |
| EAST                     | 4            | 4                | 100        | 0                   | 0         | 0          | 0         |
| WEST                     | 3            | 3                | 100        | 0                   | 0         | 0          | 0         |
| <b>SUB-TOTAL</b>         | <b>7</b>     | <b>7</b>         | <b>100</b> | <b>0</b>            | <b>0</b>  | <b>0</b>   | <b>0</b>  |
| <b>TOTAL</b>             | <b>129</b>   | <b>115</b>       | <b>89</b>  | <b>2</b>            | <b>2</b>  | <b>12</b>  | <b>9</b>  |

TABLE 4-5  
ADHERANCE TO SCHEDULE (UTILITIES)  
FY 88

AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO. | LESS OR<br>EQ. 0 | PER.<br>% | GREAT. 0<br>LESS 20 | PER.<br>% | OVER<br>20 | PER.<br>% |
|--------------------------|--------------|------------------|-----------|---------------------|-----------|------------|-----------|
| <b>CAIRO</b>             |              |                  |           |                     |           |            |           |
| GOVERNORATE              | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| HELWAN                   | 3            | 3                | 100       | 0                   | 0         | 0          | 0         |
| HELIOPLIS                | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| WEST                     | 1            | 0                | 0         | 0                   | 0         | 1          | 99        |
| ABDEEN                   | 2            | 0                | 0         | 0                   | 0         | 2          | 100       |
| CENTRAL                  | 2            | 1                | 50        | 0                   | 0         | 1          | 50        |
| WAILY                    | 1            | 1                | 99        | 0                   | 0         | 0          | 0         |
| EL MATAREYA              | 4            | 3                | 75        | 0                   | 0         | 1          | 25        |
| ZEITOUN                  | 3            | 2                | 66        | 0                   | 0         | 1          | 33        |
| SOUTH                    | 3            | 1                | 33        | 0                   | 0         | 2          | 66        |
| MISR EL KADIMA           | 1            | 1                | 99        | 0                   | 0         | 0          | 0         |
| ROD EL FARAG             | 3            | 3                | 100       | 0                   | 0         | 0          | 0         |
| SHOUBRA                  | 1            | 1                | 99        | 0                   | 0         | 0          | 0         |
| NASR CITY                | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| EL ZAWIA                 | 1            | 1                | 99        | 0                   | 0         | 0          | 0         |
| EL SALAM                 | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| MAADI                    | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| EL SAHEL                 | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| ATN SHAMS                | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| TEBREEN                  | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| <b>SUB-TOTAL</b>         | <b>25</b>    | <b>17</b>        | <b>68</b> | <b>0</b>            | <b>0</b>  | <b>8</b>   | <b>32</b> |
| <b>ALEXANDRIA</b>        |              |                  |           |                     |           |            |           |
| GOVERNORATE              | 2            | 0                | 0         | 0                   | 0         | 2          | 100       |
| EASTERN                  | 15           | 12               | 80        | 0                   | 0         | 3          | 20        |
| MID-TOWN                 | 2            | 2                | 100       | 0                   | 0         | 0          | 0         |
| WEST                     | 8            | 4                | 50        | 2                   | 25        | 2          | 25        |
| AMREYA                   | 6            | 3                | 50        | 0                   | 0         | 3          | 50        |
| MONTAZAH                 | 6            | 3                | 50        | 1                   | 17        | 2          | 33        |
| GOMROF                   | 3            | 0                | 0         | 0                   | 0         | 3          | 100       |
| <b>SUB-TOTAL</b>         | <b>42</b>    | <b>24</b>        | <b>57</b> | <b>3</b>            | <b>7</b>  | <b>15</b>  | <b>36</b> |
| <b>GIZA</b>              |              |                  |           |                     |           |            |           |
| GOVERNORATE              | 4            | 3                | 75        | 0                   | 0         | 1          | 25        |
| NORTH                    | 4            | 3                | 75        | 0                   | 0         | 1          | 25        |
| SOUTH                    | 3            | 1                | 33        | 1                   | 33        | 1          | 33        |
| WEST                     | 16           | 6                | 37        | 1                   | 6         | 9          | 56        |
| CENTRAL                  | 4            | 2                | 50        | 0                   | 0         | 2          | 50        |
| EL HARAM                 | 0            | 0                | 0         | 0                   | 0         | 0          | 0         |
| <b>SUB-TOTAL</b>         | <b>31</b>    | <b>15</b>        | <b>48</b> | <b>2</b>            | <b>6</b>  | <b>14</b>  | <b>45</b> |
| <b>DALIUBIA</b>          |              |                  |           |                     |           |            |           |
| GOVERNORATE              | 1            | 1                | 99        | 0                   | 0         | 0          | 0         |
| EAST                     | 2            | 1                | 50        | 0                   | 0         | 1          | 50        |
| WEST                     | 2            | 2                | 100       | 0                   | 0         | 0          | 0         |
| <b>SUB-TOTAL</b>         | <b>5</b>     | <b>4</b>         | <b>80</b> | <b>0</b>            | <b>0</b>  | <b>1</b>   | <b>20</b> |
| <b>TOTAL</b>             | <b>103</b>   | <b>60</b>        | <b>58</b> | <b>5</b>            | <b>5</b>  | <b>38</b>  | <b>37</b> |

TABLE 4-6  
ADEQUACY OF LAND SCAPING / SURROUNDING AREAS  
FY 88

| GOVERNORATE/<br>DISTRICT | TOTAL<br>No. | GOOD<br>No. | MODERATE<br>No. | POOR<br>No. |
|--------------------------|--------------|-------------|-----------------|-------------|
| <b>CAIRO</b>             |              |             |                 |             |
| HELMAN                   | 14           | 5           | 9               | 0           |
| HELIOPOLIS               | 7            | 3           | 4               | 0           |
| WEST                     | 11           | 6           | 5               | 0           |
| ABDEEN                   | 9            | 3           | 6               | 0           |
| CENTRAL                  | 5            | 3           | 2               | 0           |
| WATLY                    | 9            | 3           | 2               | 4           |
| EL MATAREYA              | 16           | 5           | 11              | 0           |
| ZEITOUN                  | 10           | 1           | 8               | 1           |
| SOUTH                    | 11           | 5           | 3               | 3           |
| MISR EL YADIMA           | 11           | 1           | 6               | 4           |
| ROD EL FARAG             | 9            | 4           | 4               | 1           |
| SHOUERA                  | 4            | 3           | 1               | 0           |
| MASF CITY                | 1            | 1           | 0               | 0           |
| EL ZAWIA                 | 12           | 2           | 9               | 1           |
| EL SALAM                 | 5            | 2           | 3               | 0           |
| MAADI                    | 7            | 4           | 2               | 1           |
| <b>SUBTOTAL</b>          | <b>141</b>   | <b>51</b>   | <b>75</b>       | <b>15</b>   |
| <b>ALEXANDRIA</b>        |              |             |                 |             |
| GOVERNORATE              | 3            | 2           | 1               | 0           |
| EASTERN                  | 7            | 2           | 2               | 3           |
| MID-TOWN                 | 13           | 5           | 8               | 0           |
| WEST                     | 15           | 5           | 9               | 1           |
| AMREYA                   | 13           | 4           | 9               | 0           |
| MONTAZAH                 | 13           | 6           | 5               | 0           |
| BOMRAH                   | 7            | 5           | 2               | 0           |
| <b>SUBTOTAL</b>          | <b>71</b>    | <b>31</b>   | <b>36</b>       | <b>4</b>    |
| <b>GIZA</b>              |              |             |                 |             |
| GOVERNORATE              | 8            | 3           | 5               | 0           |
| NORTH                    | 10           | 4           | 6               | 0           |
| SOUTH                    | 6            | 3           | 3               | 0           |
| WEST                     | 6            | 1           | 4               | 1           |
| CENTRAL                  | 10           | 6           | 4               | 0           |
| <b>SUBTOTAL</b>          | <b>42</b>    | <b>17</b>   | <b>22</b>       | <b>1</b>    |
| <b>DALHOUBIA</b>         |              |             |                 |             |
| EAST                     | 9            | 3           | 6               | 0           |
| WEST                     | 10           | 0           | 7               | 3           |
| <b>SUBTOTAL</b>          | <b>19</b>    | <b>3</b>    | <b>13</b>       | <b>3</b>    |
| <b>PORT SAID</b>         |              |             |                 |             |
| <b>TOTAL</b>             | <b>273</b>   | <b>102</b>  | <b>146</b>      | <b>25</b>   |

**Section 5**

**IMPLEMENTATION & OPERATION**

## 5. IMPLEMENTATION AND OPERATION

### 5.1 General

In this section implementation scores were generally higher than operational scores. This indicates that any success during planning and construction was not matched by the degree of utilization and/or maintenance. The average difference between implementation and operation scores was 0.1 (2.5%). It is important to mention that those results are better than 1987.

**Implementation Scores** from Table 5-2 show that only one governorate was above average (Cairo), 2 Governorates were average (Alexandria, and Qaliubia) the Giza was below average.

**Operation Scores** from Table 5-2 show that only Alexandria Governorate was above average, two others were average (Cairo and Qaliubia) and Giza was below average. The highest proportion of the allocation was for the Education sector, this was followed by infrastructure, vehicle maintenance, public health, road maintenance, social affairs, and building maintenance. The worst sector was food security.

### 5.2 Breakdown by Sub Sector - Implementation (Tables 5-3 Through 8)

Implementation Scores in descending order were:

|                             | <u>Scores</u> | <u>Allocation (L.E.)</u> |
|-----------------------------|---------------|--------------------------|
| 1. Public Health            | 3.05          | 5,805,900                |
| 2. Road Maintenance         | 2.93          | 2,352,054                |
| 3. Education                | 2.92          | 11,924,364               |
| 4. Social Affairs           | 2.79          | 2,174,965                |
| 5. Infrastructure/Utilities | 2.70          | 9,156,540                |
| 6. Vehicle Maintenance      | 2.60          | 6,792,387                |
| 7. Building Maintenance     | 2.59          | 435,041                  |
| 8. Food Security            | 2.45          | 38,767                   |

The standard deviation analysis shown in Table 5-7 shows that Infrastructure (public W.C.s and bridges) and social affairs (other facilities) sectors were below average. The Education (miscellaneous), vehicle maintenance (garages construction), Infrastructure (solid waste), and Education (laboratories) sectors were above average, with the remainder being classified as average.

The more significant results are discussed below:

#### 5.2.1 Infrastructure/Utilities

The performance of the districts was apparently best on street lighting, potable water and solid waste projects. The lowest rated infrastructure sub-projects were for the construction of public W.C.s, bridges and sewers and drains. Generally, although the number of sub-projects and allocation increased since 1987, the performance levels for implementation of those types of sub-project decreased, reference Table 5-25.

#### 5.2.2 Education

The expenditure on the 200 sub-projects in this category was approximately 29% of the total with allocation of L.E. 12,157,216. In this sector there were 133 sub-projects to construct or renovate classrooms, 3 were for laboratories, 28 for W.C.'s and 36 for miscellaneous. The Education sector had the highest number of beneficiaries, and this sector normally exhibited an urgent need for sub-project maintenance. In general, the performance for implementation increased in relation to FY 87 (increases include both the number of sub-projects and their allocations).

### **5.2.3 Public Health**

Scores for construction and equipment in public hospitals were generally better than those for clinics. This was apparently a result of the closer control which was generally exhibited at the hospital sites. In general, the performance of implementation increased in relation to FY 87.

### **5.2.4 Vehicle Maintenance**

Results from construction of new facilities (3.19) were better than when upgrading existing facilities (2.46).

## **5.3 Breakdown of Sub Sector - Operation**

Operation scores in descending order were:

1. Road Maintenance
2. Education
3. Public Health
4. Infrastructure/Utilities
5. Social Affairs
6. Food Security
7. Vehicle Maintenance
8. Building Maintenance

Particularly significant aspects of the results are described below:

### **5.3.1 Education**

Although this sector receives the highest percentage of financial allocation. Reference figure 5-8. It had an average score for operation, above average for miscellaneous and average for laboratories, classrooms and W.C.'s. The fact that this sector did not have the highest score for operation although it did have the greatest number of beneficiaries may be due to its relatively low budget for maintenance. The operation score has increased since FY 87 but this may be due to the relative age of the sub-projects rather than a difference of emphasis.

### **5.3.2 Vehicle Maintenance**

Reference Figure 5-8. This sector had a high percentage of the allocation (about 19% with L.E. 7,902,773). There were, however, great differences in operation scores. The operation score for the construction of new sites was above average (3.30), whereas garage upgrading was below average (2.07). This may be due to two sub-projects for garage equipment which were not installed; these sub-projects received a nil rating.

### **5.3.3 Infrastructure/Utilities**

This sector received the second largest sum from to the budget. It had 24% of the financial allocation with L.E. 9,718,284. The worst cases for operation were potable water (1.28) and public W.C.'s (2.35). Greater effort is needed for the maintenance of these kind of facilities.

### **5.3.4 Food Security**

There was only one sub-project in the food security sector in FY 88. This had an allocation of L.E. 38,767. The operation score was 2.38 (average).

### **5.3.5 Social Affairs**

There were 54 projects in this sector with 6% of the allocation (L.E. 2,424,642). The operation scores for this sector varied. This variability seems to be linked to the maintenance budget, i.e. when allocations were sufficient scores were high, when it was low scores were poor.

## 5.4 Analysis by Sector - Reference Tables 5-9 to 5-24

5.4.1 In the comparisons by sector for each governorate/district, it may be seen that:

- The construction of the education and public health facilities in the Alexandria Governorate (El Gomrok) was better than Alexandria (West).
- The construction of the education and public health facilities at Alexandria (El Gomrok District) was better than the vehicle maintenance at the same district.

### 5.4.2 Implementation Scores

Typical examples of inferences which may be determined from the tables are given below:

- Cairo (Misr El-Kadima and El-Salam) and Alexandria (EL-Gomrok and Mid-Town) recorded the highest scores for implementation of projects for the infrastructure, and the worst scores for that sector were for Cairo (West, Maadi and Mataria), Giza (South), Qaliubia (Governorate).
- With reference to the education sector it may be seen that the best score was for Alexandria (El-Gomrok) followed by Cairo (South, Helwan, Nasr City and Shoubra). The worst scores for that sector were Giza West followed by Cairo (Zeitoun, Central, Misr El-Kadima) and Qaliubia (West and East).

Table 5-25 draws a comparison for implementation between FY 87 and FY 88.

### 5.4.3 Operation Scores

The best districts for operation were Nasr City in Cairo Governorate, El-Gomrok in Alexandria, Central in Giza, and West in Qaliubia.

The operation scores in descending order according to the rating were:

|    | <u>Sector</u>        | <u>Score</u> |
|----|----------------------|--------------|
| 1. | Road Maintenance     | 3.03         |
| 2. | Education            | 2.91         |
| 3. | Public Health        | 2.91         |
| 4. | Infrastructure       | 2.70         |
| 5. | Social Affairs       | 2.62         |
| 6. | Food Security        | 2.38         |
| 7. | Vehicle Maintenance  | 2.31         |
| 8. | Building Maintenance | 2.31         |

Table 5-26 draws a comparison for operation between FY 87 and FY 88.

TABLE 5-1  
COMPARISON BY DISTRICT

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | RATING YEAR 1988 |                | OPER.<br>SCORE |
|--------------------------|-------------|------------------|----------------|----------------|
|                          |             | TOTAL<br>COST    | IMPL.<br>SCORE |                |
| <b>CAIRO</b>             |             |                  |                |                |
| GOVERNORATE              | 4           | 5435028          | 2.45           | 2.11           |
| HELWAN                   | 21          | 1682434          | 3.14           | 2.98           |
| HELIPOLIS                | 12          | 617763           | 2.89           | 2.98           |
| WEST                     | 17          | 972237           | 2.62           | 2.67           |
| ABDEEN                   | 18          | 990735           | 2.59           | 2.32           |
| CENTRAL                  | 12          | 1482754          | 2.77           | 2.46           |
| WAILY                    | 12          | 1003423          | 2.99           | 3.05           |
| EL MATAREYA              | 24          | 1008991          | 2.79           | 2.61           |
| ZEITOUN                  | 18          | 1553055          | 2.94           | 3.01           |
| SOUTH                    | 21          | 1365883          | 3.03           | 2.96           |
| MISR EL KADIMA           | 14          | 1021063          | 2.86           | 2.88           |
| ROD EL FARAG             | 23          | 1639190          | 2.86           | 2.75           |
| SHOUBRA                  | 10          | 576703           | 3.29           | 2.89           |
| NASR CITY                | 3           | 282997           | 3.14           | 3.29           |
| EL ZAWIA                 | 19          | 1075633          | 2.84           | 2.52           |
| EL SALAM                 | 6           | 300332           | 2.99           | 2.53           |
| MAADI                    | 10          | 500689           | 2.73           | 2.62           |
| EL SAHEL                 | 0           | 0                | 0.00           | 0.00           |
| AIN SHAMS                | 0           | 0                | 0.00           | 0.00           |
| TEBREEN                  | 0           | 0                | 0.00           | 0.00           |
| <b>SUB-TOTAL</b>         | <b>244</b>  | <b>21508910</b>  | <b>2.78</b>    | <b>2.61</b>    |
| <b>ALEXANDRIA</b>        |             |                  |                |                |
| GOVERNORATE              | 5           | 1276609          | 3.27           | 3.46           |
| EASTERN                  | 26          | 1220236          | 2.80           | 2.92           |
| MID-TOWN                 | 17          | 1334845          | 3.02           | 3.09           |
| WEST                     | 26          | 1179265          | 2.85           | 2.83           |
| AMREYA                   | 23          | 1303155          | 2.99           | 3.12           |
| MONTAZAH                 | 23          | 1400318          | 2.90           | 2.69           |
| GOMROI                   | 18          | 1234740          | 3.33           | 3.31           |
| <b>SUB-TOTAL</b>         | <b>138</b>  | <b>8949168</b>   | <b>3.02</b>    | <b>3.06</b>    |
| <b>GIZA</b>              |             |                  |                |                |
| GOVERNORATE              | 16          | 1336133          | 2.62           | 2.47           |
| NORTH                    | 16          | 904778           | 2.96           | 2.58           |
| SOUTH                    | 13          | 1010325          | 2.81           | 2.86           |
| WEST                     | 28          | 1488734          | 2.57           | 2.66           |
| CENTRAL                  | 19          | 746936           | 2.63           | 3.01           |
| EL HARAM                 | 0           | 0                | 0.00           | 0.00           |
| <b>SUB-TOTAL</b>         | <b>92</b>   | <b>5486906</b>   | <b>2.70</b>    | <b>2.68</b>    |

TABLE 5-1  
COMPARISON BY DISTRICT

PAGE NO: 2  
AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | RATING YEAR 1988 |                | OPER.<br>SCORE |
|--------------------------|-------------|------------------|----------------|----------------|
|                          |             | TOTAL<br>COST    | IMPL.<br>SCORE |                |
| <b>DALYUBIA</b>          |             |                  |                |                |
| GOVERNORATE              | 1           | 445939           | 2.26           | 2.64           |
| EAST                     | 15          | 1052794          | 2.68           | 2.46           |
| WEST                     | 15          | 1236301          | 2.85           | 2.51           |
| SUB-TOTAL                | 31          | 2735034          | 2.69           | 2.51           |
| <b>PORT SAID</b>         |             |                  |                |                |
| GOVERNORATE              | 0           | 0                | 0.00           | 0.00           |
| PORT FOUAD               | 0           | 0                | 0.00           | 0.00           |
| EL ARAB                  | 0           | 0                | 0.00           | 0.00           |
| EAST                     | 0           | 0                | 0.00           | 0.00           |
| EL MANAKH                | 0           | 0                | 0.00           | 0.00           |
| EL DAWAHY                | 0           | 0                | 0.00           | 0.00           |
| SUB-TOTAL                | 0           | 0                | 0.00           | 0.00           |
| <b>SUEZ</b>              |             |                  |                |                |
| GOVERNORATE              | 0           | 0                | 0.00           | 0.00           |
| SUEZ                     | 0           | 0                | 0.00           | 0.00           |
| EL ARBEEIN               | 0           | 0                | 0.00           | 0.00           |
| ATAKAH                   | 0           | 0                | 0.00           | 0.00           |
| EI GANAJEN               | 0           | 0                | 0.00           | 0.00           |
| SUB-TOTAL                | 0           | 0                | 0.00           | 0.00           |
| <b>TOTAL</b>             | <b>505</b>  | <b>38680018</b>  | <b>2.82</b>    | <b>2.72</b>    |

TABLE 5-2  
COMPARISON BY GOVERNORATE

AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | RATING YEAR 1988 |                | OPER.<br>SCORE |
|--------------------------|-------------|------------------|----------------|----------------|
|                          |             | TOTAL<br>COST    | IMPL.<br>SCORE |                |
| CAIRO                    | 255         | 21911482         | 2.73           | 2.56           |
| ALEXANDRIA               | 150         | 10343654         | 2.62           | 2.64           |
| GIZA                     | 102         | 6015883          | 2.46           | 2.45           |
| DALHUBIA                 | 31          | 2735034          | 2.69           | 2.51           |
| PORT SAID                | 0           | 0                | 0.00           | 0.00           |
| SUEZ                     | 0           | 0                | 0.00           | 0.00           |
| TOTAL                    | 538         | 41006053         | 2.66           | 2.56           |

TABLE 5-3  
COMPARISON BY SECTOR TITLE

AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | RATING YEAR 1988 |                | OPER.<br>SCORE |
|--------------------------|-------------|------------------|----------------|----------------|
|                          |             | TOTAL<br>COST    | IMPL.<br>SCORE |                |
| INFRASTRUCTURE/UTILITIES | 144         | 9156540          | 2.70           | 2.70           |
| FOOD SECURITY            | 1           | 38767            | 2.45           | 2.38           |
| EDUCATION                | 193         | 11924364         | 2.92           | 2.91           |
| PUBLIC HEALTH            | 73          | 5805900          | 3.05           | 2.76           |
| SOCIAL AFFAIRS           | 49          | 2174965          | 2.79           | 2.62           |
| VEHICLE MAINTENANCE      | 14          | 6792387          | 2.60           | 2.31           |
| ROAD MAINTENANCE         | 20          | 2352054          | 2.93           | 3.03           |
| BUILDING MAINTENANCE     | 11          | 435041           | 2.59           | 2.31           |
| TOTAL                    | 505         | 38680018         | 2.82           | 2.77           |

TABLE 5-4  
COMPARISON BY SUB-SECTOR

PAGE NO: 1  
AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT        | TOTAL<br>NO | RATING YEAR 1988 |                | OPER.<br>SCORE |
|---------------------------------|-------------|------------------|----------------|----------------|
|                                 |             | TOTAL<br>COST    | IMPL.<br>SCORE |                |
| <b>INFRASTRUCTURE/UTILITIES</b> |             |                  |                |                |
| PAVING                          | 42          | 4735122          | 2.67           | 2.71           |
| BRIDGES                         | 1           | 36491            | 1.25           | 2.15           |
| STREET LIGHTING                 | 33          | 1529709          | 2.90           | 2.87           |
| POTABLE WATER                   | 9           | 315626           | 2.83           | 1.28           |
| SEWERS AND DRAINAGE             | 24          | 1057221          | 2.75           | 2.72           |
| SOLID WASTE                     | 4           | 183021           | 3.15           | 3.23           |
| PUBLIC WC'S                     | 6           | 157235           | 2.15           | 2.35           |
| MISCELLANEOUS                   | 25          | 1142115          | 2.53           | 2.79           |
| SUB-TOTAL                       | 144         | 9156540          | 2.70           | 2.70           |
| <b>FOOD SECURITY</b>            |             |                  |                |                |
| GOVERNMENT OUTLETS              | 1           | 38767            | 2.45           | 2.38           |
| MARKETS                         | 0           | 0                | 0.00           | 0.00           |
| OTHER FACILITIES                | 0           | 0                | 0.00           | 0.00           |
| SUB-TOTAL                       | 1           | 38767            | 2.45           | 2.38           |
| <b>EDUCATION</b>                |             |                  |                |                |
| CLASSROOMS                      | 126         | 9454674          | 2.87           | 2.87           |
| LABORATORIES                    | 3           | 64908            | 3.14           | 3.12           |
| W.C.'s                          | 28          | 640363           | 2.87           | 2.70           |
| MISCELLANEOUS                   | 36          | 1764419          | 3.20           | 3.15           |
| SUB-TOTAL                       | 193         | 11924364         | 2.92           | 2.91           |
| <b>PUBLIC HEALTH</b>            |             |                  |                |                |
| CLINICS                         | 35          | 2416670          | 3.05           | 2.69           |
| HOSPITALS                       | 34          | 3082435          | 3.06           | 2.90           |
| OTHER FACILITIES                | 4           | 306795           | 2.84           | 1.97           |
| SUB-TOTAL                       | 73          | 5805900          | 3.05           | 2.76           |
| <b>SOCIAL AFFAIRS</b>           |             |                  |                |                |
| YOUTH FACILITIES                | 40          | 1766898          | 2.84           | 2.62           |
| SOCIAL SERVICES                 | 3           | 157428           | 2.53           | 1.81           |
| CULTURAL FACILITIES             | 5           | 242653           | 2.58           | 3.23           |
| OTHER FACILITIES                | 1           | 7986             | 2.22           | 1.63           |
| SUB-TOTAL                       | 49          | 2174965          | 2.79           | 2.62           |

TABLE 5-4  
COMPARISON BY SUB-SECTOR

PAGE NO: 2  
AS OF 12/12/90

| GOVERNORATE/<br>DISTRICT    | TOTAL<br>NO | RATING YEAR 1988 |                | OPER.<br>SCORE |
|-----------------------------|-------------|------------------|----------------|----------------|
|                             |             | TOTAL<br>COST    | IMPL.<br>SCORE |                |
| <b>VEHICLE MAINTENANCE</b>  |             |                  |                |                |
| GARAGES CONSTRUCTION        | 8           | 1313641          | 3.19           | 3.30           |
| GARAGES UPGRADING           | 6           | 5478746          | 2.46           | 2.07           |
| GARAGES EQUIPMENT           | 0           | 0                | 0.00           | 0.00           |
| CLINICS CONSTRUCTION        | 0           | 0                | 0.00           | 0.00           |
| W.C.'s CONSTRUCTION         | 0           | 0                | 0.00           | 0.00           |
| SHEDS CONSTRUCTION          | 0           | 0                | 0.00           | 0.00           |
| FENCES CONSTRUCTION         | 0           | 0                | 0.00           | 0.00           |
| UTILITY CONNECTIONS         | 0           | 0                | 0.00           | 0.00           |
| SITE PAVING                 | 0           | 0                | 0.00           | 0.00           |
| <b>SUB-TOTAL</b>            | <b>14</b>   | <b>6792387</b>   | <b>2.60</b>    | <b>2.31</b>    |
| <b>ROAD MAINTENANCE</b>     |             |                  |                |                |
| ROAD CONSTRUCTION           | 4           | 320301           | 2.35           | 3.06           |
| ROAD RENOVATION             | 12          | 1502603          | 3.00           | 2.95           |
| SHEDS CONSTRUCTION          | 0           | 0                | 0.00           | 0.00           |
| FENCES CONSTRUCTION         | 0           | 0                | 0.00           | 0.00           |
| W.C.'s CONSTRUCTION         | 0           | 0                | 0.00           | 0.00           |
| UTILITY CONNECTIONS         | 0           | 0                | 0.00           | 0.00           |
| SITE PAVING                 | 0           | 0                | 0.00           | 0.00           |
| EQUIPMENT                   | 4           | 529150           | 3.08           | 3.22           |
| <b>SUB-TOTAL</b>            | <b>20</b>   | <b>2352054</b>   | <b>2.93</b>    | <b>3.03</b>    |
| <b>BUILDING MAINTENANCE</b> |             |                  |                |                |
| BUILDING CONST.             | 5           | 163668           | 2.42           | 2.14           |
| RENOVATION UPGRAD.          | 6           | 271373           | 2.69           | 2.42           |
| FENCES CONSTRUCTION         | 0           | 0                | 0.00           | 0.00           |
| PLUMBER EQUIP.              | 0           | 0                | 0.00           | 0.00           |
| CARPENTARY EQUIP.           | 0           | 0                | 0.00           | 0.00           |
| ELECTRICITY EQUIP.          | 0           | 0                | 0.00           | 0.00           |
| MEANS OF TRANSPORT          | 0           | 0                | 0.00           | 0.00           |
| <b>SUB-TOTAL</b>            | <b>11</b>   | <b>435041</b>    | <b>2.59</b>    | <b>2.31</b>    |
| <b>TOTAL</b>                | <b>505</b>  | <b>38680018</b>  | <b>2.82</b>    | <b>2.72</b>    |

TABLE 5-5  
IMPLEMENTATION BY DISTRICT

AS OF 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPFMT | STATUS     |
| ALEXANDRIA  | GOMROK         | 18          | 18            | 3.33  | 1,234,740     | ABOVE AVG. |
| CAIRO       | SHOUBRA        | 10          | 10            | 3.29  | 576,703       | ABOVE AVG. |
| ALEXANDRIA  | GOVERNORATE    | 11          | 5             | 3.27  | 1,276,609     | ABOVE AVG. |
| CAIRO       | HELMAN         | 22          | 21            | 3.14  | 1,682,434     | ABOVE AVG. |
| CAIRO       | NASR CITY      | 3           | 3             | 3.14  | 282,997       | ABOVE AVG. |
| CAIRO       | SOUTH          | 21          | 21            | 3.03  | 1,365,883     | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 17          | 17            | 3.02  | 1,334,845     | AVERAGE    |
| CAIRO       | WAILY          | 12          | 12            | 2.99  | 1,003,423     | AVERAGE    |
| CAIRO       | EL SALAM       | 6           | 6             | 2.99  | 300,332       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 26          | 23            | 2.99  | 1,303,155     | AVERAGE    |
| GIZA        | NORTH          | 21          | 16            | 2.96  | 904,778       | AVERAGE    |
| CAIRO       | ZEITOUN        | 19          | 18            | 2.94  | 1,553,055     | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 24          | 23            | 2.90  | 1,400,318     | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 12          | 12            | 2.89  | 617,763       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 14          | 14            | 2.86  | 1,021,063     | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 23          | 23            | 2.86  | 1,639,190     | AVERAGE    |
| ALEXANDRIA  | WEST           | 27          | 26            | 2.85  | 1,179,265     | AVERAGE    |
| QALIUBIA    | WEST           | 15          | 15            | 2.85  | 1,236,301     | AVERAGE    |
| CAIRO       | EL ZAWIA       | 19          | 19            | 2.84  | 1,075,633     | AVERAGE    |
| GIZA        | SOUTH          | 13          | 13            | 2.81  | 1,010,325     | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 27          | 26            | 2.80  | 1,220,236     | AVERAGE    |
| CAIRO       | EL MATAREYA    | 29          | 24            | 2.79  | 1,008,991     | AVERAGE    |
| CAIRO       | CENTRAL        | 12          | 12            | 2.77  | 1,482,754     | AVERAGE    |
| CAIRO       | MAADI          | 12          | 10            | 2.73  | 500,689       | AVERAGE    |
| QALIUBIA    | EAST           | 15          | 15            | 2.68  | 1,052,794     | AVERAGE    |
| GIZA        | CENTRAL        | 22          | 19            | 2.63  | 746,936       | AVERAGE    |
| CAIRO       | WEST           | 19          | 17            | 2.62  | 972,237       | BELOW      |
| GIZA        | GOVERNORATE    | 17          | 16            | 2.62  | 1,336,133     | BELOW      |
| CAIRO       | ABDEEN         | 18          | 18            | 2.59  | 990,735       | BELOW      |
| GIZA        | WEST           | 29          | 28            | 2.57  | 1,488,734     | BELOW      |
| CAIRO       | GOVERNORATE    | 4           | 4             | 2.45  | 5,435,028     | BELOW      |
| QALIUBIA    | GOVERNORATE    | 1           | 1             | 2.26  | 445,939       | BELOW      |
| TOTAL       |                | 538         | 505           |       | 38,680,018    |            |

MEAN VALUE : 2.86  
 STD. DEVIATION : 0.24  
 BELOW AVERAGE : 2.67  
 ABOVE AVERAGE : 3.09  
 % L.E. ABOVE AVERAGE : 13.00  
 % L.E. AVERAGE : 59.00  
 % L.E. BELOW AVERAGE : 28.00

TABLE 4-1  
PREPARATION BY DISTRICT

15 OF 12/12/90

| FY 98       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCOPE | FUND<br>SPENT | STATUS     |
| ALEXANDRIA  | GOVERNORATE    | 11          | 5             | 3.46  | 1,276,609     | ABOVE AVG. |
| ALEXANDRIA  | GOMROK         | 10          | 10            | 3.31  | 1,234,740     | ABOVE AVG. |
| CAIRO       | NASR CITY      | 3           | 3             | 3.29  | 282,997       | ABOVE AVG. |
| ALEXANDRIA  | AMREYA         | 26          | 23            | 3.12  | 1,303,155     | ABOVE AVG. |
| ALEXANDRIA  | MID-TOWN       | 17          | 17            | 3.09  | 1,334,845     | ABOVE AVG. |
| CAIRO       | WAILY          | 12          | 12            | 3.05  | 1,003,423     | AVERAGE    |
| CAIRO       | ZEITOUN        | 19          | 18            | 3.01  | 1,553,055     | AVERAGE    |
| GIZA        | CENTRAL        | 22          | 19            | 3.01  | 746,936       | AVERAGE    |
| CAIRO       | HELWAN         | 22          | 21            | 2.98  | 1,582,434     | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 12          | 12            | 2.98  | 617,763       | AVERAGE    |
| CAIRO       | SOUTH          | 21          | 21            | 2.96  | 1,365,883     | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 27          | 26            | 2.92  | 1,220,236     | AVERAGE    |
| CAIRO       | SHOUBRA        | 10          | 10            | 2.89  | 576,703       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 14          | 14            | 2.88  | 1,021,063     | AVERAGE    |
| GIZA        | SOUTH          | 13          | 13            | 2.86  | 1,010,325     | AVERAGE    |
| ALEXANDRIA  | WEST           | 27          | 26            | 2.83  | 1,179,265     | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 23          | 23            | 2.75  | 1,639,170     | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 24          | 23            | 2.69  | 1,400,318     | AVERAGE    |
| CAIRO       | WEST           | 19          | 17            | 2.67  | 972,237       | AVERAGE    |
| GIZA        | WEST           | 29          | 28            | 2.66  | 1,498,734     | AVERAGE    |
| QALIUBIA    | GOVERNORATE    | 1           | 1             | 2.64  | 445,939       | AVERAGE    |
| CAIRO       | MAADI          | 12          | 10            | 2.62  | 500,689       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 29          | 24            | 2.61  | 1,008,991     | AVERAGE    |
| GIZA        | NORTH          | 21          | 16            | 2.58  | 904,778       | AVERAGE    |
| CAIRO       | EL SALAM       | 6           | 6             | 2.53  | 300,332       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 19          | 19            | 2.52  | 1,075,633     | AVERAGE    |
| QALIUBIA    | WEST           | 15          | 15            | 2.51  | 1,236,301     | AVERAGE    |
| GIZA        | GOVERNORATE    | 17          | 16            | 2.47  | 1,336,133     | BELOW      |
| CAIRO       | CENTRAL        | 12          | 12            | 2.46  | 1,482,754     | BELOW      |
| QALIUBIA    | EAST           | 15          | 15            | 2.46  | 1,052,794     | BELOW      |
| CAIRO       | ABDEEN         | 18          | 18            | 2.32  | 990,735       | BELOW      |
| CAIRO       | GOVERNORATE    | 4           | 4             | 2.11  | 5,435,028     | BELOW      |
| TOTAL       |                | 538         | 505           |       | 38,680,018    |            |

MEAN VALUE : 2.79  
 STD. DEVIATION : 0.70  
 BELOW AVERAGE : 2.49  
 ABOVE AVERAGE : 3.09  
 % L.E. ABOVE AVERAGE : 14.00  
 % L.E. AVERAGE : 59.00  
 % L.E. BELOW AVERAGE : 27.00

TABLE 5-7  
IMPLEMENTATION BY SUBSECTOR

AS OF 12/12/90

-----  
FY 88

| SECTOR          | SEC. TITLE      | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
|-----------------|-----------------|-------------|---------------|-------|---------------|------------|
| EDUCATION       | MISCELLANEOUS   | 36          | 36            | 3.20  | 1,764,417     | ABOVE AVG. |
| VEHICLE MAINTEN | GARAGES CONSTRU | 9           | 8             | 3.19  | 1,313,641     | ABOVE AVG. |
| INFRASTRUCTURE/ | SOLID WASTE     | 4           | 4             | 3.15  | 183,021       | ABOVE AVG. |
| EDUCATION       | LABORATORIES    | 3           | 3             | 3.14  | 64,908        | ABOVE AVG. |
| ROAD MAINTENANC | EQUIPMENT       | 4           | 4             | 3.08  | 529,150       | AVERAGE    |
| PUBLIC HEALTH   | HOSPITALS       | 35          | 34            | 3.06  | 3,082,435     | AVERAGE    |
| PUBLIC HEALTH   | CLINICS         | 39          | 35            | 3.05  | 2,416,670     | AVERAGE    |
| ROAD MAINTENANC | ROAD RENOVATION | 12          | 12            | 3.00  | 1,502,603     | AVERAGE    |
| INFRASTRUCTURE/ | STREET LIGHTING | 35          | 33            | 2.90  | 1,529,709     | AVERAGE    |
| EDUCATION       | CLASSROOMS      | 133         | 126           | 2.87  | 7,454,674     | AVERAGE    |
| EDUCATION       | W.C. s          | 28          | 28            | 2.87  | 640,363       | AVERAGE    |
| PUBLIC HEALTH   | OTHER FACILITIE | 6           | 4             | 2.84  | 306,795       | AVERAGE    |
| SOCIAL AFFAIRS  | YOUTH FACILITIE | 42          | 40            | 2.84  | 1,766,898     | AVERAGE    |
| INFRASTRUCTURE/ | POTABLE WATER   | 10          | 9             | 2.83  | 315,626       | AVERAGE    |
| INFRASTRUCTURE/ | SEWERS AND DRAI | 25          | 24            | 2.75  | 1,057,221     | AVERAGE    |
| BUILDING MAINTE | RENOVATION UPGR | 6           | 6             | 2.69  | 271,373       | AVERAGE    |
| INFRASTRUCTURE/ | PAVING          | 44          | 42            | 2.67  | 4,735,122     | AVERAGE    |
| SOCIAL AFFAIRS  | CULTURAL FACILI | 5           | 5             | 2.58  | 242,653       | AVERAGE    |
| INFRASTRUCTURE/ | MISCELLANEOUS   | 28          | 25            | 2.53  | 1,142,115     | AVERAGE    |
| SOCIAL AFFAIRS  | SOCIAL SERVICES | 5           | 3             | 2.53  | 157,428       | AVERAGE    |
| VEHICLE MAINTEN | GARAGES UPGRADI | 7           | 6             | 2.46  | 5,478,746     | AVERAGE    |
| FOOD SECURITY   | GOVERNMENT OUTL | 1           | 1             | 2.45  | 38,767        | AVERAGE    |
| BUILDING MAINTE | BUILDING CONST. | 5           | 5             | 2.42  | 163,668       | AVERAGE    |
| ROAD MAINTENANC | ROAD CONSTRUCTI | 5           | 4             | 2.35  | 320,301       | AVERAGE    |
| SOCIAL AFFAIRS  | OTHER FACILITIE | 2           | 1             | 2.22  | 7,986         | BELOW      |
| INFRASTRUCTURE/ | PUBLIC WC's     | 6           | 6             | 2.15  | 157,235       | BELOW      |
| INFRASTRUCTURE/ | BRIDGES         | 1           | 1             | 1.25  | 36,491        | BELOW      |
| VEHICLE MAINTEN | GARAGES EQUIPME | 2           | 0             | 0.00  | 0             |            |
| TOTAL           |                 | 538         | 505           |       | 38,680,018    |            |

MEAN VALUE : 2.71  
 STD. DEVIATION : 0.41  
 BELOW AVERAGE : 2.30  
 ABOVE AVERAGE : 3.12  
 % L.E. ABOVE AVERAGE : 9.00  
 % L.E. AVERAGE : 91.00  
 % L.E. BELOW AVERAGE : 1.00

TABLE 3-3  
OPERATION BY SUBSECTOR

46 OF 12-12-99

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FY 99

| SECTOR          | SEC. TITLE       | SP's<br>NO. | SP's<br>PATED | SCORE | FUND<br>SPFNT | STATUS     |
|-----------------|------------------|-------------|---------------|-------|---------------|------------|
| VEHICLE MAINTEN | GARAGES CONSTRU  | 9           | 8             | 3.30  | 1,313,641     | ABOVE AVG. |
| INFRASTRUCTURE/ | SOLID WASTE      | 4           | 4             | 3.23  | 183,021       | ABOVE AVG. |
| SOCIAL AFFAIRS  | CULTURAL FACILI  | 5           | 5             | 3.23  | 242,653       | ABOVE AVG. |
| ROAD MAINTENANC | EQUIPMENT        | 4           | 4             | 3.22  | 529,150       | ABOVE AVG. |
| EDUCATION       | MISCELLANEOUS    | 36          | 36            | 3.15  | 1,764,419     | ABOVE AVG. |
| EDUCATION       | LABORATORIES     | 3           | 3             | 3.12  | 64,908        | AVERAGE    |
| ROAD MAINTENANC | ROAD CONSTRUCTI  | 5           | 4             | 3.06  | 320,301       | AVERAGE    |
| ROAD MAINTENANC | ROAD RENOVATION  | 12          | 12            | 2.95  | 1,502,603     | AVERAGE    |
| PUBLIC HEALTH   | HOSPITALS        | 35          | 34            | 2.90  | 3,082,435     | AVERAGE    |
| INFRASTRUCTURE/ | STREET LIGHTING  | 35          | 33            | 2.87  | 1,529,709     | AVERAGE    |
| EDUCATION       | CLASSROOMS       | 133         | 126           | 2.87  | 9,454,674     | AVERAGE    |
| INFRASTRUCTURE/ | MISCELLANEOUS    | 28          | 25            | 2.79  | 1,142,115     | AVERAGE    |
| INFRASTRUCTURE/ | SEWERS AND DRAI  | 25          | 24            | 2.72  | 1,057,221     | AVERAGE    |
| INFRASTRUCTURE/ | PAVING           | 44          | 42            | 2.71  | 4,735,122     | AVERAGE    |
| EDUCATION       | W.C. s           | 28          | 28            | 2.70  | 640,363       | AVERAGE    |
| PUBLIC HEALTH   | CLINICS          | 39          | 35            | 2.69  | 2,416,670     | AVERAGE    |
| SOCIAL AFFAIRS  | YOUTH FACILITIE  | 42          | 40            | 2.62  | 1,766,898     | AVERAGE    |
| BUILDING MAINTE | RENOVATION UPGR  | 6           | 6             | 2.42  | 271,373       | AVERAGE    |
| FOOD SECURITY   | GOVERNMENT OUTL. | 1           | 1             | 2.38  | 38,767        | AVERAGE    |
| INFRASTRUCTURE/ | PUBLIC WC's      | 6           | 6             | 2.35  | 157,235       | AVERAGE    |
| INFRASTRUCTURE/ | BRIDGES          | 1           | 1             | 2.15  | 36,471        | AVERAGE    |
| BUILDING MAINTE | BUILDING CONST.  | 5           | 5             | 2.14  | 163,668       | AVERAGE    |
| VEHICLE MAINTEN | GARAGES UPGRADI  | 7           | 6             | 2.07  | 5,478,746     | BELOW      |
| PUBLIC HEALTH   | OTHER FACILITIE  | 6           | 4             | 1.97  | 306,795       | BELOW      |
| SOCIAL AFFAIRS  | SOCIAL SERVICES  | 5           | 3             | 1.81  | 157,428       | BELOW      |
| SOCIAL AFFAIRS  | OTHER FACILITIE  | 2           | 1             | 1.63  | 7,986         | BELOW      |
| INFRASTRUCTURE/ | POTABLE WATER    | 10          | 9             | 1.28  | 315,626       | BELOW      |
| VEHICLE MAINTEN | GARAGES EQUIPME  | 2           | 0             | 6.00  | 0             |            |
| TOTAL           |                  | 538         | 505           |       | 38,680,018    |            |

MEAN VALUE : 2.60  
 STD. DEVIATION : 0.52  
 BELOW AVERAGE : 2.08  
 ABOVE AVERAGE : 3.13  
 % L.E. ABOVE AVERAGE : 10.00  
 % L.E. AVERAGE : 73.00  
 % L.E. BELOW AVERAGE : 16.00

TABLE 5-9  
INFRASTRUCTURE/UTILITIES  
IMPLEMENTATION

As of 12/12/90

| GOVERNORATE | DISTRICT       | FY88        |               | SCORE | FUND<br>SPFMT | STATUS     |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
|             |                | SP's<br>NO. | SP's<br>RATED |       |               |            |
| CAIRO       | MISR EL KADIMA | 1           | 1             | 3.43  | 149,123       | ABOVE AVG. |
| CAIRO       | EL SALAM       | 1           | 1             | 3.10  | 16,019        | ABOVE AVG. |
| ALEXANDRIA  | MID-TOWN       | 3           | 3             | 3.09  | 205,310       | ABOVE AVG. |
| CAIRO       | GOVERNORATE    | 2           | 2             | 3.05  | 364,050       | ABOVE AVG. |
| ALEXANDRIA  | GOMROK         | 4           | 4             | 3.05  | 231,130       | ABOVE AVG. |
| ALEXANDRIA  | AMREYA         | 9           | 8             | 3.03  | 489,557       | ABOVE AVG. |
| CAIRO       | HELWAN         | 5           | 5             | 2.96  | 478,019       | AVERAGE    |
| CAIRO       | CENTRAL        | 2           | 2             | 2.94  | 239,597       | AVERAGE    |
| GIZA        | NORTH          | 5           | 5             | 2.94  | 257,253       | AVERAGE    |
| CAIRO       | SHOUBRA        | 3           | 3             | 2.92  | 57,020        | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 2           | 2             | 2.89  | 94,648        | AVERAGE    |
| ALEXANDRIA  | GOVERNORATE    | 2           | 2             | 2.84  | 272,000       | AVERAGE    |
| CAIRO       | ZEITOUN        | 5           | 4             | 2.82  | 382,525       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 8           | 7             | 2.78  | 506,517       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 4           | 4             | 2.75  | 168,540       | AVERAGE    |
| ALEXANDRIA  | WEST           | 8           | 8             | 2.74  | 509,174       | AVERAGE    |
| QALIUBIA    | WEST           | 2           | 2             | 2.71  | 76,589        | AVERAGE    |
| QALIUBIA    | EAST           | 3           | 3             | 2.69  | 282,871       | AVERAGE    |
| CAIRO       | SOUTH          | 5           | 5             | 2.65  | 412,767       | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 18          | 17            | 2.63  | 616,799       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 6           | 6             | 2.59  | 508,770       | AVERAGE    |
| CAIRO       | MAILY          | 2           | 2             | 2.58  | 18,098        | AVERAGE    |
| GIZA        | GOVERNORATE    | 8           | 7             | 2.56  | 554,606       | AVERAGE    |
| GIZA        | WEST           | 17          | 16            | 2.47  | 943,079       | AVERAGE    |
| GIZA        | CENTRAL        | 4           | 4             | 2.43  | 138,064       | AVERAGE    |
| CAIRO       | ABDEEN         | 4           | 4             | 2.42  | 234,241       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 6           | 6             | 2.37  | 101,576       | BELOW      |
| CAIRO       | MAADI          | 2           | 1             | 2.30  | 38,208        | BELOW      |
| QALIUBIA    | GOVERNORATE    | 1           | 1             | 2.26  | 445,939       | BELOW      |
| GIZA        | SOUTH          | 5           | 5             | 2.25  | 216,543       | BELOW      |
| CAIRO       | WEST           | 6           | 4             | 1.80  | 147,908       | BELOW      |
| TOTAL       |                | 153         | 144           |       | 9,156,540     |            |

MEAN VALUE : 2.71  
 STD. DEVIATION : 0.32  
 BELOW AVERAGE : 2.39  
 ABOVE AVERAGE : 3.03  
 % L.E. ABOVE AVERAGE : 16.00  
 % L.E. AVERAGE : 74.00  
 % L.E. BELOW AVERAGE : 10.00

TABLE 5-10  
INFRASTRUCTURE/UTILITIES  
OPERATION

As of 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPFNT | STATUS     |
| ALEXANDRIA  | GOMROK         | 4           | 4             | 3.71  | 231,130       | ABOVE AVG. |
| CAIRO       | HELIOPLIS      | 2           | 2             | 3.53  | 94,648        | ABOVE AVG. |
| CAIRO       | WAILY          | 2           | 2             | 3.43  | 18,098        | ABOVE AVG. |
| ALEXANDRIA  | GOVERNORATE    | 2           | 2             | 3.34  | 272,000       | ABOVE AVG. |
| GIZA        | CENTRAL        | 4           | 4             | 3.31  | 138,064       | ABOVE AVG. |
| CAIRO       | MISR EL KADIMA | 1           | 1             | 3.28  | 149,123       | ABOVE AVG. |
| CAIRO       | GOVERNORATE    | 2           | 2             | 3.24  | 364,950       | AVERAGE    |
| CAIRO       | EL SALAM       | 1           | 1             | 3.20  | 16,019        | AVERAGE    |
| DALIUBIA    | EAST           | 3           | 3             | 3.14  | 282,871       | AVERAGE    |
| CAIRO       | HELWAN         | 5           | 5             | 3.02  | 478,019       | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 3           | 3             | 3.01  | 205,310       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 8           | 7             | 2.96  | 506,517       | AVERAGE    |
| DALIUBIA    | WEST           | 2           | 2             | 2.93  | 76,589        | AVERAGE    |
| CAIRO       | MAADI          | 2           | 1             | 2.90  | 38,208        | AVERAGE    |
| CAIRO       | SHOUBRA        | 3           | 3             | 2.89  | 57,020        | AVERAGE    |
| ALEXANDRIA  | WEST           | 8           | 8             | 2.89  | 509,174       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 9           | 8             | 2.73  | 489,557       | AVERAGE    |
| GIZA        | WEST           | 17          | 16            | 2.71  | 943,079       | AVERAGE    |
| DALIUBIA    | GOVERNORATE    | 1           | 1             | 2.64  | 445,939       | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 18          | 17            | 2.60  | 616,799       | AVERAGE    |
| CAIRO       | ZEITOUN        | 5           | 4             | 2.59  | 382,525       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 6           | 6             | 2.56  | 508,770       | AVERAGE    |
| CAIRO       | CENTRAL        | 2           | 2             | 2.44  | 239,597       | AVERAGE    |
| GIZA        | NORTH          | 5           | 5             | 2.39  | 257,253       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 4           | 4             | 2.36  | 168,540       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 6           | 6             | 2.28  | 101,576       | BELOW      |
| CAIRO       | ABDEEN         | 4           | 4             | 2.20  | 234,241       | BELOW      |
| CAIRO       | WEST           | 6           | 4             | 2.11  | 147,908       | BELOW      |
| GIZA        | GOVERNORATE    | 8           | 7             | 2.04  | 554,606       | BELOW      |
| GIZA        | SOUTH          | 5           | 5             | 2.00  | 216,543       | BELOW      |
| CAIRO       | SOUTH          | 5           | 5             | 1.94  | 412,767       | BELOW      |
| TOTAL       |                | 153         | 144           |       | 9,156,540     |            |

MEAN VALUE : 2.79  
 STD. DEVIATION : 0.47  
 BELOW AVERAGE : 2.31  
 ABOVE AVERAGE : 3.26  
 % L.E. ABOVE AVERAGE : 10.00  
 % L.E. AVERAGE : 72.00  
 % L.E. BELOW AVERAGE : 18.00

TABLE 5-11  
 FOOD SECURITY  
 IMPLEMENTATION

As of 12/12/90

| GOVERNORATE | DISTRICT | FY 88       |               | SCORE | FUND<br>SPENT | STATUS |
|-------------|----------|-------------|---------------|-------|---------------|--------|
|             |          | SP's<br>NO. | SP's<br>RATED |       |               |        |
| GIZA        | NORTH    | 1           | 1             | 2.45  | 38,767        |        |
| TOTAL       |          | 1           | 1             |       | 38,767        |        |
| MEAN VALUE  |          | : 2.45      |               |       |               |        |

TABLE 5-12  
 FOOD SECURITY  
 OPERATION

As of 12/12/90

-----  
 FY 88

| GOVERNORATE | DISTRICT | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS |
|-------------|----------|-------------|---------------|-------|---------------|--------|
| GIZA        | NORTH    | 1           | 1             | 2.38  | 38.767        |        |
| TOTAL       |          | 1           | 1             |       | 38.767        |        |

MEAN VALUE : 2.38

TABLE 5-13  
EDUCATION  
IMPLEMENTATION

As of 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| ALEXANDRIA  | GOMROK         | 6           | 6             | 3.56  | 371,601       | ABOVE AVG. |
| CAIRO       | SOUTH          | 7           | 7             | 3.35  | 377,355       | ABOVE AVG. |
| CAIRO       | HELMAN         | 11          | 11            | 3.22  | 657,892       | ABOVE AVG. |
| CAIRO       | NASR CITY      | 2           | 2             | 3.20  | 200,571       | ABOVE AVG. |
| CAIRO       | SHOUBRA        | 2           | 2             | 3.16  | 43,464        | ABOVE AVG. |
| ALEXANDRIA  | MONTAZAH       | 8           | 8             | 3.14  | 333,335       | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 5           | 5             | 3.06  | 236,716       | AVERAGE    |
| CAIRO       | ABDEEN         | 6           | 6             | 3.03  | 264,432       | AVERAGE    |
| CAIRO       | EL SALAM       | 4           | 4             | 3.02  | 129,728       | AVERAGE    |
| GIZA        | SOUTH          | 3           | 3             | 3.02  | 396,836       | AVERAGE    |
| CAIRO       | WAILY          | 9           | 9             | 3.00  | 920,400       | AVERAGE    |
| GIZA        | GOVERNORATE    | 3           | 3             | 3.00  | 194,671       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 8           | 7             | 2.97  | 438,250       | AVERAGE    |
| GIZA        | CENTRAL        | 10          | 9             | 2.95  | 276,355       | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 7           | 7             | 2.94  | 506,946       | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 5           | 5             | 2.93  | 228,892       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 9           | 9             | 2.92  | 543,925       | AVERAGE    |
| ALEXANDRIA  | WEST           | 13          | 12            | 2.91  | 419,534       | AVERAGE    |
| CAIRO       | WEST           | 8           | 8             | 2.96  | 402,222       | AVERAGE    |
| CAIRO       | MAADI          | 4           | 4             | 2.84  | 264,266       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 18          | 14            | 2.82  | 830,234       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 8           | 8             | 2.78  | 651,903       | AVERAGE    |
| GIZA        | NORTH          | 5           | 5             | 2.76  | 146,285       | AVERAGE    |
| DALIUBIA    | EAST           | 8           | 8             | 2.71  | 577,047       | BELOW      |
| DALIUBIA    | WEST           | 10          | 10            | 2.71  | 776,574       | BELOW      |
| CAIRO       | MISR EL KADIMA | 7           | 7             | 2.68  | 528,286       | BELOW      |
| CAIRO       | CENTRAL        | 2           | 2             | 2.67  | 373,708       | BELOW      |
| CAIRO       | ZETTOUN        | 6           | 6             | 2.65  | 575,286       | BELOW      |
| GIZA        | WEST           | 6           | 6             | 2.61  | 257,650       | BELOW      |
| TOTAL       |                | 200         | 193           |       | 11,924,364    |            |

MEAN VALUE : 2.95  
 STD. DEVIATION : 0.27  
 BELOW AVERAGE : 2.73  
 ABOVE AVERAGE : 3.16  
 % L.E. ABOVE AVERAGE :14.00  
 % L.E. AVERAGE :60.00  
 % L.E. BELOW AVERAGE :26.00

TABLE 5-14  
EDUCATION  
OPERATION

As of 12/12/90

-----  
FY 88

| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| CAIRO       | SOUTH          | 7           | 7             | 3.50  | 377,355       | ABOVE AVG. |
| ALEXANDRIA  | GOMROK         | 6           | 6             | 3.41  | 371,601       | ABOVE AVG. |
| ALEXANDRIA  | AMREYA         | 8           | 7             | 3.38  | 438,250       | ABOVE AVG. |
| CAIRO       | CENTRAL        | 7           | 2             | 3.32  | 373,708       | ABOVE AVG. |
| ALEXANDRIA  | EASTERN        | 5           | 5             | 3.31  | 228,892       | ABOVE AVG. |
| CAIRO       | ZEITOUN        | 6           | 6             | 3.21  | 575,286       | AVERAGE    |
| CAIRO       | NASR CITY      | 2           | 2             | 3.21  | 200,571       | AVERAGE    |
| CAIRO       | WAILY          | 9           | 9             | 3.17  | 920,400       | AVERAGE    |
| GIZA        | SOUTH          | 3           | 3             | 3.09  | 396,836       | AVERAGE    |
| GIZA        | GOVERNORATE    | 3           | 3             | 3.07  | 194,671       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 7           | 7             | 3.05  | 528,286       | AVERAGE    |
| GIZA        | CENTRAL        | 10          | 9             | 3.02  | 276,355       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 8           | 8             | 3.00  | 333,335       | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 7           | 7             | 2.97  | 506,946       | AVERAGE    |
| CAIRO       | HELMAN         | 11          | 11            | 2.95  | 657,892       | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 5           | 5             | 2.92  | 236,716       | AVERAGE    |
| CAIRO       | WEST           | 8           | 8             | 2.92  | 402,222       | AVERAGE    |
| CAIRO       | MAADI          | 4           | 4             | 2.87  | 264,266       | AVERAGE    |
| ALEXANDRIA  | WEST           | 13          | 12            | 2.84  | 419,534       | AVERAGE    |
| CAIRO       | ABDEEN         | 6           | 6             | 2.78  | 264,432       | AVERAGE    |
| CAIRO       | EL ZAWIA       | 9           | 9             | 2.78  | 543,925       | AVERAGE    |
| CAIRO       | EL SALAM       | 4           | 4             | 2.77  | 129,728       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 8           | 8             | 2.72  | 651,903       | AVERAGE    |
| CAIRO       | EL MATAREYA    | 18          | 14            | 2.67  | 830,234       | AVERAGE    |
| CAIRO       | SHOUBRA        | 7           | 2             | 2.54  | 43,464        | BELOW      |
| GIZA        | WEST           | 6           | 6             | 2.48  | 257,650       | BELOW      |
| GIZA        | NORTH          | 5           | 5             | 2.39  | 146,285       | BELOW      |
| QALIUBIA    | EAST           | 8           | 8             | 2.27  | 577,047       | BELOW      |
| QALIUBIA    | WEST           | 10          | 10            | 2.10  | 776,574       | BELOW      |
| TOTAL       |                | 200         | 193           |       | 11,924,364    |            |

MEAN VALUE : 2.92  
 STD. DEVIATION : 0.34  
 BELOW AVERAGE : 2.58  
 ABOVE AVERAGE : 3.26  
 Z L.E. ABOVE AVERAGE :15.00  
 Z L.E. AVERAGE :70.00  
 Z L.E. BELOW AVERAGE :15.00

TABLE 5-15  
PUBLIC HEALTH  
IMPLEMENTATION

As of 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| GIZA        | CENTRAL        | 1           | 1             | 3.49  | 49,551        | ABOVE AVG. |
| CAIRO       | ZEITOUN        | 3           | 3             | 3.48  | 323,553       | ABOVE AVG. |
| GIZA        | WEST           | 2           | 2             | 3.48  | 142,239       | ABOVE AVG. |
| CAIRO       | SHOUBRA        | 4           | 4             | 3.35  | 396,762       | ABOVE AVG. |
| CAIRO       | SOUTH          | 3           | 3             | 3.30  | 278,514       | AVERAGE    |
| ALEXANDRIA  | GOMROK         | 5           | 5             | 3.27  | 512,741       | AVERAGE    |
| CAIRO       | HELWAN         | 6           | 5             | 3.19  | 546,523       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 7           | 7             | 3.15  | 334,850       | AVERAGE    |
| GIZA        | SOUTH          | 2           | 2             | 3.12  | 231,951       | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 4           | 4             | 3.08  | 408,529       | AVERAGE    |
| ALEXANDRIA  | WEST           | 5           | 5             | 3.08  | 150,584       | AVERAGE    |
| GIZA        | NORTH          | 7           | 4             | 3.08  | 387,271       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 2           | 2             | 3.05  | 245,983       | AVERAGE    |
| DALIUBIA    |                | 1           | 1             | 3.04  | 60,000        | AVERAGE    |
| CAIRO       | EL SALAM       | 1           | 1             | 2.95  | 154,585       | AVERAGE    |
| GIZA        | GOVERNORATE    | 1           | 1             | 2.89  | 160,000       | AVERAGE    |
| CAIRO       | WEST           | 4           | 4             | 2.72  | 375,988       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 1           | 1             | 2.67  | 127,526       | AVERAGE    |
| CAIRO       | MAADI          | 3           | 3             | 2.66  | 91,894        | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 6           | 5             | 2.63  | 149,427       | AVERAGE    |
| CAIRO       | HELIPOLIS      | 1           | 1             | 2.60  | 89,000        | AVERAGE    |
| CAIRO       | CENTRAL        | 2           | 2             | 2.57  | 303,000       | BELOW      |
| CAIRO       | EL ZAWIA       | 3           | 3             | 2.55  | 122,691       | BELOW      |
| DALIUBIA    | EAST           | 3           | 3             | 2.25  | 117,431       | BELOW      |
| ALEXANDRIA  | EASTERN        | 1           | 1             | 2.10  | 50,307        | BELOW      |
| CAIRO       | EL MATAREYA    | 1           | 0             | 0.00  | 0             |            |
| ALEXANDRIA  | GOVERNORATE    | 1           | 0             | 0.00  | 0             |            |
| TOTAL       |                | 80          | 73            |       | 5,805,900     |            |

MEAN VALUE : 2.95  
 STD. DEVIATION : 0.37  
 BELOW AVERAGE : 2.58  
 ABOVE AVERAGE : 3.32  
 % L.E. ABOVE AVERAGE : 16.00  
 % L.E. AVERAGE : 74.00  
 % L.E. BELOW AVERAGE : 10.00

TABLE 5-16  
PUBLIC HEALTH  
OPERATION

As of 12/12/90

|             |                | FY 88       |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| CAIRO       | SOUTH          | 3           | 3             | 4.00  | 278,514       | ABOVE AVG. |
| CAIRO       | HELIOPOLIS     | 1           | 1             | 3.40  | 89,000        | ABOVE AVG. |
| GIZA        | CENTRAL        | 1           | 1             | 3.35  | 49,551        | ABOVE AVG. |
| CAIRO       | ZEITOUN        | 3           | 3             | 3.21  | 323,553       | AVERAGE    |
| GIZA        | SOUTH          | 2           | 2             | 3.19  | 231,951       | AVERAGE    |
| ALEXANDRIA  | WEST           | 5           | 5             | 3.18  | 150,584       | AVERAGE    |
| ALEXANDRIA  | MID-TOWN       | 4           | 4             | 3.16  | 408,529       | AVERAGE    |
| GIZA        | WEST           | 2           | 2             | 3.16  | 142,239       | AVERAGE    |
| CAIRO       | HELWAN         | 6           | 5             | 2.99  | 546,523       | AVERAGE    |
| ALEXANDRIA  | GOMROK         | 5           | 5             | 2.99  | 512,741       | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 7           | 7             | 2.98  | 334,850       | AVERAGE    |
| CAIRO       | WEST           | 4           | 4             | 2.81  | 375,988       | AVERAGE    |
| CAIRO       | SHOUBRA        | 4           | 4             | 2.76  | 395,767       | AVERAGE    |
| GIZA        | NORTH          | 7           | 4             | 2.66  | 387,271       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 6           | 5             | 2.65  | 149,427       | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 1           | 1             | 2.40  | 50,307        | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 2           | 2             | 2.30  | 245,983       | AVERAGE    |
| QALIUBIA    | WEST           | 1           | 1             | 2.30  | 60,000        | AVERAGE    |
| CAIRO       | EL SALAM       | 1           | 1             | 2.26  | 154,585       | AVERAGE    |
| CAIRO       | MAADI          | 3           | 3             | 2.17  | 91,894        | AVERAGE    |
| CAIRO       | EL ZAWIA       | 3           | 3             | 1.96  | 122,691       | BELOW      |
| CAIRO       | MISR EL KADIMA | 1           | 1             | 1.78  | 122,526       | BELOW      |
| CAIRO       | CENTRAL        | 2           | 2             | 1.69  | 303,000       | BELOW      |
| GIZA        | GOVERNORATE    | 1           | 1             | 1.58  | 160,000       | BELOW      |
| QALIUBIA    | EAST           | 3           | 3             | 1.08  | 117,431       | BELOW      |
| CAIRO       | EL MATAREYA    | 1           | 0             | 0.00  | 0             |            |
| ALEXANDRIA  | GOVERNORATE    | 1           | 0             | 0.00  | 0             |            |
| TOTAL       |                | 80          | 73            |       | 5,805,900     |            |

MEAN VALUF : 2.64  
 STD. DEVIATION : 0.67  
 BELOW AVERAGE : 1.97  
 ABOVE AVERAGE : 3.31  
 % L.E. ABOVE AVERAGE : 7.00  
 % L.E. AVERAGE : 79.00  
 % L.E. BELOW AVERAGE : 14.00

TABLE 5-17  
SOCIAL AFFAIRS  
IMPLEMENTATION

As of 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| ALEXANDRIA  | GOMROK         | 2           | 2             | 3.56  | 27,796        | ABOVE AVG. |
| DALIUBIA    | EAST           | 1           | 1             | 3.10  | 75,445        | ABOVE AVG. |
| DALIUBIA    | WEST           | 1           | 1             | 3.10  | 93,472        | ABOVE AVG. |
| ALEXANDRIA  | MID-TOWN       | 3           | 3             | 3.07  | 214,060       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 1           | 1             | 3.07  | 69,983        | AVERAGE    |
| CAIRO       | EL MATAREYA    | 4           | 4             | 3.06  | 77,181        | AVERAGE    |
| GIZA        | CENTRAL        | 4           | 2             | 2.96  | 45,091        | AVERAGE    |
| CAIRO       | MATLY          | 1           | 1             | 2.95  | 64,925        | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 2           | 2             | 2.91  | 128,964       | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 4           | 4             | 2.81  | 197,399       | AVERAGE    |
| CAIRO       | SOUTH          | 5           | 5             | 2.77  | 257,247       | AVERAGE    |
| ALEXANDRIA  | WEST           | 1           | 1             | 2.73  | 99,973        | AVERAGE    |
| CAIRO       | MAADI          | 2           | 1             | 2.63  | 103,363       | AVERAGE    |
| CAIRO       | ZEITOUN        | 4           | 4             | 2.62  | 89,506        | AVERAGE    |
| CAIRO       | EL ZAWIA       | 2           | 2             | 2.60  | 22,190        | AVERAGE    |
| GIZA        | SOUTH          | 2           | 2             | 2.57  | 144,681       | AVERAGE    |
| CAIRO       | ABDEEN         | 4           | 4             | 2.56  | 110,082       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 2           | 2             | 2.56  | 37,971        | AVERAGE    |
| CAIRO       | CENTRAL        | 1           | 1             | 2.47  | 123,475       | BELOW      |
| GIZA        | WEST           | 2           | 2             | 2.47  | 64,310        | BELOW      |
| CAIRO       | MISR EL KADIMA | 4           | 4             | 2.40  | 127,851       | BELOW      |
| ALEXANDRIA  | GOVERNORATE    | 1           | 0             | 0.00  | 0             |            |
| GIZA        | NORTH          | 1           | 0             | 0.00  | 0             |            |
| TOTAL       |                | 54          | 49            |       | 2,174,965     |            |

MEAN VALUE : 2.81  
 STD. DEVIATION : 0.28  
 BELOW AVERAGE : 2.53  
 ABOVE AVERAGE : 3.09  
 % L.E. ABOVE AVERAGE : 9.00  
 % L.E. AVERAGE : 76.00  
 % L.E. BELOW AVERAGE : 15.00

TABLE 5-18  
SOCIAL AFFAIRS  
OPERATION

As of 12/12/90

| GOVERNORATE | DISTRICT       | FY 88       |               | SCORE | FUND<br>SPFNT | STATUS     |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
|             |                | SP's<br>NO. | SP's<br>RATED |       |               |            |
| ALEXANDRIA  | GOMROK         | 2           | 2             | 3.86  | 27,796        | ABOVE AVG. |
| QALIUBIA    | EAST           | 1           | 1             | 3.50  | 75,445        | ABOVE AVG. |
| QALIUBIA    | WEST           | 1           | 1             | 3.50  | 93,472        | ABOVE AVG. |
| ALEXANDRIA  | MID-TOWN       | 3           | 3             | 3.28  | 214,060       | ABOVE AVG. |
| ALEXANDRIA  | EASTERN        | 2           | 2             | 3.22  | 128,964       | ABOVE AVG. |
| GIZA        | SOUTH          | 2           | 2             | 2.98  | 144,681       | AVERAGE    |
| CAIRO       | SOUTH          | 5           | 5             | 2.67  | 257,247       | AVERAGE    |
| CAIRO       | HELIOPOLIS     | 4           | 4             | 2.60  | 197,399       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 1           | 1             | 2.55  | 69,983        | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 4           | 4             | 2.53  | 127,851       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 2           | 2             | 2.42  | 37,971        | AVERAGE    |
| CAIRO       | EL MATAREYA    | 4           | 4             | 2.38  | 77,181        | AVERAGE    |
| CAIRO       | EL ZAWIA       | 2           | 2             | 2.37  | 22,190        | AVERAGE    |
| CAIRO       | MAADI          | 2           | 1             | 2.33  | 103,363       | AVERAGE    |
| GIZA        | WEST           | 2           | 2             | 2.28  | 64,310        | AVERAGE    |
| GIZA        | CENTRAL        | 4           | 2             | 2.15  | 45,091        | AVERAGE    |
| CAIRO       | ZEITOUN        | 4           | 4             | 2.09  | 89,506        | AVERAGE    |
| CAIRO       | APDEEN         | 4           | 4             | 2.05  | 110,082       | AVERAGE    |
| CAIRO       | CENTRAL        | 1           | 1             | 2.04  | 123,475       | AVERAGE    |
| ALEXANDRIA  | WEST           | 1           | 1             | 1.96  | 99,973        | BELOW      |
| CAIRO       | WAILY          | 1           | 1             | 1.32  | 64,925        | BELOW      |
| ALEXANDRIA  | GOVERNORATE    | 1           | 0             | 0.00  | 0             |            |
| GIZA        | NORTH          | 1           | 0             | 0.00  | 0             |            |
| TOTAL       |                | 54          | 49            |       | 2,174,965     |            |

MEAN VALUE : 2.58  
 STD. DEVIATION : 0.60  
 BELOW AVERAGE : 1.97  
 ABOVE AVERAGE : 3.18  
 % L.E. ABOVE AVERAGE : 25.00  
 % L.E. AVERAGE : 68.00  
 % L.E. BELOW AVERAGE : 8.00

TABLE 5-19  
VEHICLE MAINTENANCE  
IMPLEMENTATION

As of 12/12/90

| -----                |             |             |               |       |               |            |
|----------------------|-------------|-------------|---------------|-------|---------------|------------|
| FY 98                |             |             |               |       |               |            |
| GOVERNORATE          | DISTRICT    | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| CAIRO                | MAADI       | 1           | 1             | 3.70  | 2,958         | ABOVE AVG. |
| ALEXANDRIA           | GOVERNORATE | 7           | 3             | 3.38  | 1,004,609     | AVERAGE    |
| QALIUBIA             | WEST        | 1           | 1             | 3.20  | 229,666       | AVERAGE    |
| CAIRO                | CENTRAL     | 3           | 3             | 3.00  | 280,280       | AVERAGE    |
| CAIRO                | ABDEEN      | 1           | 1             | 2.80  | 31,500        | AVERAGE    |
| CAIRO                | GOVERNORATE | 2           | 2             | 2.41  | 5,070,978     | BELOW      |
| GIZA                 | GOVERNORATE | 3           | 3             | 2.13  | 172,396       | BELOW      |
| TOTAL                |             | 18          | 14            |       | 6,792,387     |            |
|                      |             |             |               |       |               |            |
| MEAN VALUE           | :           | 2.95        |               |       |               |            |
| STD. DEVIATION       | :           | 0.51        |               |       |               |            |
| BELOW AVERAGE        | :           | 2.44        |               |       |               |            |
| ABOVE AVERAGE        | :           | 3.45        |               |       |               |            |
| % L.E. ABOVE AVERAGE | :           | 0.00        |               |       |               |            |
| % L.E. AVERAGE       | :           | 23.00       |               |       |               |            |
| % L.E. BELOW AVERAGE | :           | 77.00       |               |       |               |            |

TABLE 5-20  
VEHICLE MAINTENANCE  
OPERATION

As of 12/12/90

| -----       |             |             |               |       |               |            |
|-------------|-------------|-------------|---------------|-------|---------------|------------|
| FY 88       |             |             |               |       |               |            |
| GOVERNORATE | DISTRICT    | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| ALEXANDRIA  | GOVERNORATE | 7           | 3             | 3.50  | 1,004,609     | ABOVE AVG. |
| DALIUBIA    | WEST        | 1           | 1             | 3.40  | 229,666       | ABOVE AVG. |
| GIZA        | GOVERNORATE | 3           | 3             | 2.86  | 172,396       | AVERAGE    |
| CAIRO       | MAADI       | 1           | 1             | 2.20  | 2,958         | AVERAGE    |
| CAIRO       | GOVERNORATE | 2           | 2             | 2.03  | 5,070,978     | AVERAGE    |
| CAIRO       | CENTRAL     | 3           | 3             | 1.96  | 280,280       | AVERAGE    |
| CAIRO       | ABDEEN      | 1           | 1             | 1.30  | 31,500        | BELOW      |
| TOTAL       |             | 18          | 14            |       | 6,792,387     |            |

MEAN VALUE : 2.46  
 STD. DEVIATION : 0.75  
 BELOW AVERAGE : 1.71  
 ABOVE AVERAGE : 3.22  
 % L.E. ABOVE AVERAGE : 18.00  
 % L.E. AVERAGE : 81.00  
 % L.E. BELOW AVERAGE : 0.00

TABLE 5-21  
ROAD MAINTENANCE  
IMPLEMENTATION

As of 12/12/90

| FY 88       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| CAIRO       | MISR EL KADIMA | 1           | 1             | 3.80  | 93,277        | ABOVE AVG. |
| CAIRO       | ROD EL FARAG   | 2           | 2             | 3.48  | 143,667       | ABOVE AVG. |
| ALEXANDRIA  | GOMROK         | 1           | 1             | 3.40  | 91,472        | AVERAGE    |
| CAIRO       | ZEITOUN        | 1           | 1             | 3.30  | 182,185       | AVERAGE    |
| CAIRO       | SHOUBRA        | 1           | 1             | 3.30  | 79,457        | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 1           | 1             | 3.30  | 195,274       | AVERAGE    |
| ALEXANDRIA  | AMREYA         | 1           | 1             | 3.30  | 187,950       | AVERAGE    |
| GIZA        | NORTH          | 2           | 1             | 3.10  | 75,202        | AVERAGE    |
| GIZA        | WEST           | 1           | 1             | 3.10  | 42,478        | AVERAGE    |
| CAIRO       | CENTRAL        | 1           | 1             | 3.00  | 136,578       | AVERAGE    |
| CAIRO       | NASR CITY      | 1           | 1             | 3.00  | 82,426        | AVERAGE    |
| CAIRO       | EL ZAWIA       | 1           | 1             | 2.90  | 218,287       | AVERAGE    |
| ALEXANDRIA  | MONTAZAH       | 2           | 2             | 2.51  | 145,926       | BELOW      |
| GIZA        | GOVERNORATE    | 1           | 1             | 2.50  | 220,000       | BELOW      |
| CAIRO       | ABDEEN         | 1           | 1             | 2.40  | 220,000       | BELOW      |
| GIZA        | CENTRAL        | 3           | 3             | 2.13  | 237,875       | BELOW      |
| TOTAL       |                | 21          | 20            |       | 2,352,054     |            |

MEAN VALUE : 3.03  
 STD. DEVIATION : 0.43  
 BELOW AVERAGE : 2.60  
 ABOVE AVERAGE : 3.47  
 % L.E. ABOVE AVERAGE : 10.00  
 % L.E. AVERAGE : 55.00  
 % L.E. BELOW AVERAGE : 35.00

TABLE 5-22  
ROAD MAINTENANCE  
OPERATION

As of 12/12/90

| -----       |                |             |               |       |               |            |
|-------------|----------------|-------------|---------------|-------|---------------|------------|
| FY 88       |                |             |               |       |               |            |
| GOVERNORATE | DISTRICT       | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| ALEXANDRIA  | AMREYA         | 1           | 1             | 4.00  | 187,950       | ABOVE AVG. |
| CAIRO       | SHOUBRA        | 1           | 1             | 3.70  | 79,457        | ABOVE AVG. |
| CAIRO       | NASR CITY      | 1           | 1             | 3.50  | 82,426        | AVERAGE    |
| ALEXANDRIA  | GOMROK         | 1           | 1             | 3.50  | 91,472        | AVERAGE    |
| CAIRO       | ZEITOUN        | 1           | 1             | 3.40  | 182,185       | AVERAGE    |
| ALEXANDRIA  | EASTERN        | 1           | 1             | 3.40  | 195,274       | AVERAGE    |
| GIZA        | GOVERNORATE    | 1           | 1             | 3.30  | 220,000       | AVERAGE    |
| GIZA        | NORTH          | 2           | 1             | 3.30  | 75,202        | AVERAGE    |
| CAIRO       | CENTRAL        | 1           | 1             | 3.20  | 136,578       | AVERAGE    |
| CAIRO       | MISR EL KADIMA | 1           | 1             | 3.20  | 93,277        | AVERAGE    |
| CAIRO       | ROD EL FARAG   | 2           | 2             | 2.95  | 143,667       | AVERAGE    |
| GIZA        | CENTRAL        | 3           | 3             | 2.90  | 237,875       | AVERAGE    |
| GIZA        | WEST           | 1           | 1             | 2.50  | 42,478        | BELOW      |
| CAIRO       | EL ZAWTA       | 1           | 1             | 2.30  | 218,287       | BELOW      |
| CAIRO       | ABDEEN         | 1           | 1             | 2.10  | 220,000       | BELOW      |
| ALEXANDRIA  | MONTAZAH       | 2           | 2             | 1.99  | 145,926       | BELOW      |
| TOTAL       |                | 21          | 20            |       | 2,352,054     |            |

MEAN VALUE : 3.08  
 STD. DEVIATION : 0.56  
 BELOW AVERAGE : 2.57  
 ABOVE AVERAGE : 3.64  
 % L.E. ABOVE AVERAGE : 11.00  
 % L.E. AVERAGE : 62.00  
 % L.E. BELOW AVERAGE : 27.00

TABLE 5-23  
BUILDING MAINTENANCE  
IMPLEMENTATION

As of 12/12/90

| -----       |             |             |               |       |               |            |
|-------------|-------------|-------------|---------------|-------|---------------|------------|
| FY 88       |             |             |               |       |               |            |
| GOVERNORATE | DISTRICT    | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
| CAIRO       | SOUTH       | 1           | 1             | 3.80  | 40,000        | ABOVE AVG. |
| GIZA        | GOVERNORATE | 1           | 1             | 3.30  | 34,460        | AVERAGE    |
| ALEXANDRIA  | MONTAZAH    | 3           | 3             | 2.87  | 98,574        | AVERAGE    |
| CAIRO       | CENTRAL     | 1           | 1             | 2.66  | 26,116        | AVERAGE    |
| GIZA        | SOUTH       | 1           | 1             | 2.60  | 20,314        | AVERAGE    |
| CAIRO       | ABDEEN      | 2           | 2             | 2.34  | 130,480       | AVERAGE    |
| CAIRO       | WEST        | 1           | 1             | 2.30  | 46,119        | AVERAGE    |
| GIZA        | WEST        | 1           | 1             | 1.14  | 38,978        | BELOW      |
| TOTAL       |             | 11          | 11            |       | 435,041       |            |

MEAN VALUE : 2.63  
 STD. DEVIATION : 0.73  
 BELOW AVERAGE : 1.89  
 ABOVE AVERAGE : 3.36  
 % L.E. ABOVE AVERAGE : 9.00  
 % L.E. AVERAGE : 82.00  
 % L.E. BELOW AVERAGE : 9.00

TABLE 5-24  
 BUILDING MAINTENANCE  
 OPERATION FY 88  
 -----

AS OF 12/12/90

| GOVERNORATE | DISTRICT    | SP's<br>NO. | SP's<br>RATED | SCORE | FUND<br>SPENT | STATUS     |
|-------------|-------------|-------------|---------------|-------|---------------|------------|
| CAIRO       | SOUTH       | 1           | 1             | 3.20  | 40,000        | ABOVE AVG. |
| GIZA        | SOUTH       | 1           | 1             | 2.80  | 20,314        | AVERAGE    |
| GIZA        | GOVERNORATE | 1           | 1             | 2.70  | 34,460        | AVERAGE    |
| CAIRO       | ABDEEN      | 2           | 2             | 2.48  | 130,480       | AVERAGE    |
| CAIRO       | CENTRAL     | 1           | 1             | 2.40  | 26,116        | AVERAGE    |
| ALEXANDRIA  | MONTAZAH    | 3           | 3             | 2.28  | 98,574        | AVERAGE    |
| GIZA        | WEST        | 1           | 1             | 1.58  | 38,978        | BELOW      |
| CAIRO       | WEST        | 1           | 1             | 1.20  | 46,119        | BELOW      |
| TOTAL       |             | 11          | 11            |       | 435,041       |            |

MEAN VALUE : 2.33  
 STD. DEVIATION : 0.61  
 BELOW AVERAGE : 1.72  
 ABOVE AVERAGE : 2.94  
 % L.E. ABOVE AVERAGE : 9.00  
 % L.E. AVERAGE : 71.00  
 % L.E. BELOW AVERAGE : 20.00

TABLE 5 - 25  
 STATUS OF THE IMPLEMENTATION  
 BY SECTOR

|                      | FY 87      |               |               |       | FY 88      |               |               |       |
|----------------------|------------|---------------|---------------|-------|------------|---------------|---------------|-------|
|                      | SP'S<br>NO | SP'S<br>RATED | FUND<br>SPENT | SCORE | SP'S<br>NO | SP'S<br>RATED | FUND<br>SPENT | SCORE |
| INFRASTRUCTURE       | 80         | 74            | 3784080       | 2.86  | 153        | 144           | 9156540       | 2.71  |
| FOOD SECURITY        | 6          | 6             | 283645        | 2.59  | 1          | 1             | 38767         | 2.45  |
| EDUCATION            | 115        | 114           | 3598546       | 2.76  | 200        | 193           | 11924364      | 2.95  |
| PUBLIC HEALTH        | 61         | 61            | 2284087       | 2.67  | 80         | 73            | 5805900       | 2.95  |
| SOCIAL AFFAIRS       | 29         | 28            | 1055633       | 2.75  | 54         | 49            | 2174965       | 2.81  |
| VEHICLE MAINTENANCE  | 42         | 41            | 5279956       | 2.66  | 18         | 14            | 6792387       | 2.95  |
| ROAD MAINTENANCE     | 27         | 27            | 1842816       | 2.96  | 21         | 20            | 2352054       | 3.03  |
| BUILDING MAINTENANCE | 23         | 23            | 248846        | 2.69  | 11         | 11            | 435041        | 2.63  |

TABLE 5 - 24  
STATUS OF THE OPERATION  
BY SECTOR.

|                      | FY 87      |               |               |       | FY 88      |               |               |       |
|----------------------|------------|---------------|---------------|-------|------------|---------------|---------------|-------|
|                      | SP's<br>NO | SP's<br>RATED | FUND<br>SPENT | SCORE | SP's<br>NO | SP's<br>RATED | FUND<br>SPENT | SCORE |
| INFRASTRUCTURE       | 80         | 74            | 3784080       | 2.61  | 153        | 144           | 9156540       | 2.79  |
| FOOD SECURITY        | 6          | 6             | 283645        | 2.21  | 1          | 1             | 38767         | 2.38  |
| EDUCATION            | 115        | 114           | 3598546       | 2.79  | 200        | 193           | 11924364      | 2.92  |
| PUBLIC HEALTH        | 61         | 61            | 2284087       | 2.46  | 80         | 73            | 5805900       | 2.64  |
| SOCIAL AFFAIRS       | 29         | 28            | 1055633       | 2.33  | 54         | 49            | 21/4965       | 2.58  |
| VEHICLE MAINTENANCE  | 42         | 41            | 5279956       | 1.91  | 18         | 14            | 6792387       | 2.46  |
| ROAD MAINTENANCE     | 27         | 27            | 1842816       | 2.89  | 21         | 20            | 2352054       | 3.08  |
| BUILDING MAINTENANCE | 23         | 23            | 248846        | 2.74  | 11         | 11            | 535041        | 2.33  |

**Section 6**

**INCOME GENERATION**

*50w*

## 6. INCOME GENERATION

### 6.1 Cost Recovery

Tables 6.1 and 6.2 show that cost recovery (income generation) for construction projects varies between the 56% which were good or moderate, (these include public health, education and markets), to the 45% which were categorized as poor.

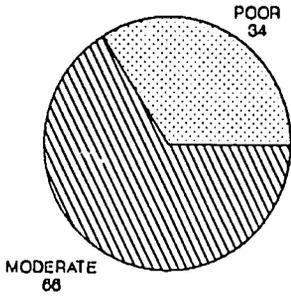
It may be seen that the best governorate for income generation through sub-projects was Qaliubia with 79% of their construction sub-projects showing good cost recovery. These projects represented 90% of the total financial allocation. The second best governorate was Cairo, with 66% of sub-projects being classified as good. This represented 79% of their allocation.

14% of the equipment sub-projects were considered good to moderate for cost recovery.

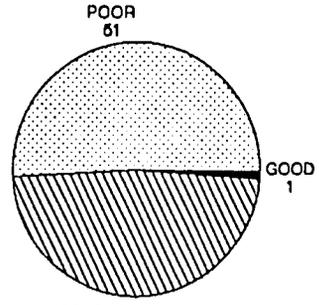
100% of the utilities sub-projects (services sub-projects) were considered as having no cost recovery.

The results of these observations are shown pictorially on the following pages.

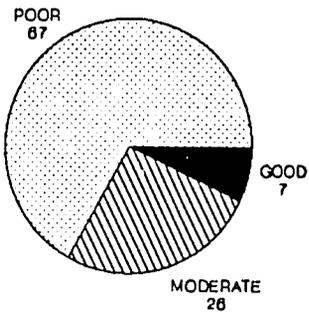
# INCOME GENERATION RELATIVE TO NUMBER OF SUB-PROJECTS CONTRACTED



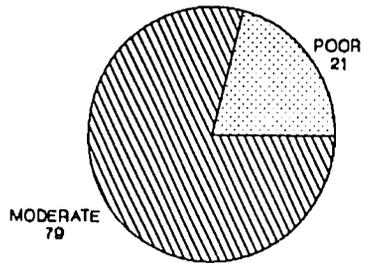
CAIRO



ALEXANDRIA

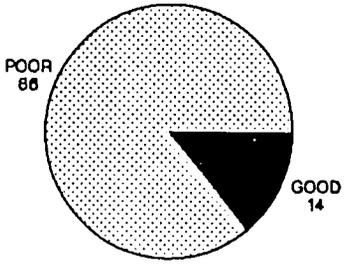


GIZA

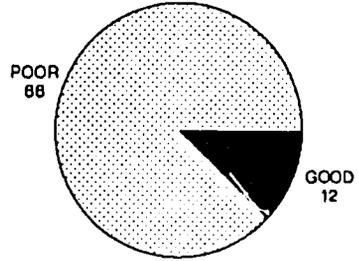


QALIUBIA

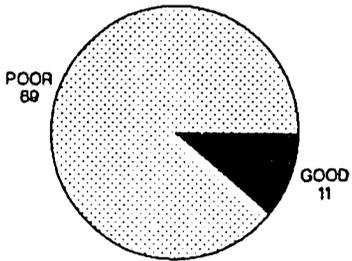
# INCOME GENERATION - EQUIPMENT SUB-PROJECTS



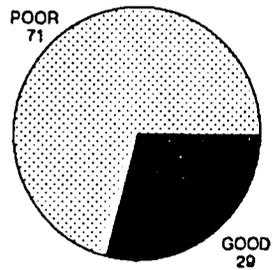
CAIRO



ALEXANDRIA



GIZA



QALIUBIA

TABLE 6-1  
ADEQUACY OF INCOME GENERATION (CONST. S.P.)  
FY 88

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | ACTUAL<br>COST | GOOD |   |         |    | MODERATE |     |           |     | POOR |     |           |     |
|--------------------------|-------------|----------------|------|---|---------|----|----------|-----|-----------|-----|------|-----|-----------|-----|
|                          |             |                | NO.  | Z | COST    | Z  | NO.      | Z   | COST      | Z   | NO.  | Z   | COST      | Z   |
| CAIRO                    |             |                |      |   |         |    |          |     |           |     |      |     |           |     |
| -----                    |             |                |      |   |         |    |          |     |           |     |      |     |           |     |
| HELWAN                   | 14          | 777.733        | 0    | 0 | 0       | 0  | 5        | 36  | 474.595   | 61  | 9    | 64  | 303.138   | 39  |
| HELIOPOLIS               | 7           | 350.084        | 0    | 0 | 0       | 0  | 7        | 100 | 350.084   | 100 | 0    | 0   | 0         | 0   |
| WEST                     | 11          | 508.664        | 0    | 0 | 0       | 0  | 8        | 73  | 402,222   | 79  | 3    | 27  | 106,422   | 21  |
| ARDEEN                   | 9           | 413.907        | 0    | 0 | 0       | 0  | 5        | 55  | 280,379   | 68  | 4    | 44  | 133,528   | 32  |
| CENTRAL                  | 5           | 584.535        | 0    | 0 | 0       | 0  | 3        | 60  | 497,183   | 85  | 2    | 40  | 87,352    | 15  |
| MAILY                    | 9           | 845.855        | 0    | 0 | 0       | 0  | 5        | 55  | 771,852   | 91  | 4    | 44  | 74,003    | 9   |
| EL MATAREYA              | 16          | 879.199        | 0    | 0 | 0       | 0  | 13       | 81  | 818,854   | 93  | 3    | 19  | 60,345    | 7   |
| ZEITOUN                  | 10          | 782.822        | 0    | 0 | 0       | 0  | 10       | 100 | 782.822   | 100 | 0    | 0   | 0         | 0   |
| SOUTH                    | 11          | 414.602        | 0    | 0 | 0       | 0  | 10       | 91  | 364,256   | 88  | 1    | 9   | 50,346    | 12  |
| MISR EL KADIMA           | 11          | 768.663        | 0    | 0 | 0       | 0  | 8        | 73  | 580,846   | 76  | 3    | 27  | 187,817   | 24  |
| ROD EL FARAG             | 9           | 798.567        | 0    | 0 | 0       | 0  | 6        | 67  | 551,508   | 69  | 3    | 33  | 247,059   | 31  |
| SHOUBRA                  | 4           | 255.057        | 0    | 0 | 0       | 0  | 0        | 0   | 0         | 0   | 4    | 100 | 255,057   | 100 |
| NASR CITY                | 1           | 190.571        | 0    | 0 | 0       | 0  | 1        | 99  | 190,571   | 100 | 0    | 0   | 0         | 0   |
| EL ZAWIA                 | 12          | 548.115        | 0    | 0 | 0       | 0  | 5        | 42  | 444,800   | 81  | 7    | 58  | 103,315   | 19  |
| EL SALAM                 | 5           | 284.313        | 0    | 0 | 0       | 0  | 3        | 60  | 119,009   | 42  | 2    | 40  | 165,304   | 58  |
| MAADI                    | 7           | 449.584        | 0    | 0 | 0       | 0  | 4        | 57  | 357,690   | 80  | 3    | 43  | 91,894    | 20  |
| SUB-TOTAL                | 141         | 8,852.271      | 0    | 0 | 0       | 0  | 93       | 66  | 6,986,671 | 79  | 48   | 34  | 1,865,600 | 21  |
| ALEXANDRIA               |             |                |      |   |         |    |          |     |           |     |      |     |           |     |
| -----                    |             |                |      |   |         |    |          |     |           |     |      |     |           |     |
| GOVERNORATE              | 3           | 1,004.609      | 0    | 0 | 0       | 0  | 0        | 0   | 0         | 0   | 3    | 100 | 1,004,609 | 100 |
| EASTERN                  | 7           | 338.320        | 0    | 0 | 0       | 0  | 3        | 43  | 239,909   | 71  | 4    | 57  | 98,411    | 29  |
| MID-TOWN                 | 13          | 1,114.538      | 1    | 8 | 207,696 | 19 | 6        | 46  | 533,148   | 48  | 6    | 46  | 373,694   | 34  |
| WEST                     | 15          | 591.983        | 0    | 0 | 0       | 0  | 10       | 67  | 482,423   | 81  | 5    | 33  | 109,560   | 19  |
| AMREYA                   | 13          | 548.511        | 0    | 0 | 0       | 0  | 6        | 46  | 381,430   | 70  | 7    | 54  | 167,081   | 30  |
| MONTAZAH                 | 13          | 629.994        | 0    | 0 | 0       | 0  | 5        | 38  | 349,477   | 55  | 8    | 61  | 280,517   | 45  |
| GOMPOK                   | 7           | 426.326        | 0    | 0 | 0       | 0  | 4        | 57  | 262,436   | 62  | 3    | 43  | 163,890   | 38  |
| SUB-TOTAL                | 71          | 4,654.281      | 1    | 1 | 207,696 | 4  | 34       | 48  | 2,248,823 | 48  | 36   | 51  | 2,197,762 | 47  |

TABLE 6-1  
ADEQUACY OF INCOME GENERATION (CONST. S.P.)  
FY 88

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | ACTUAL<br>COST | GOOD |    |         |    | MODERATE |    |            |    | POOR |    |           |    |
|--------------------------|-------------|----------------|------|----|---------|----|----------|----|------------|----|------|----|-----------|----|
|                          |             |                | NO.  | %  | COST    | %  | NO.      | %  | COST       | %  | NO.  | %  | COST      | %  |
| <b>GIZA</b>              |             |                |      |    |         |    |          |    |            |    |      |    |           |    |
| GOVERNORATE              | 8           | 535.967        | 1    | 12 | 5.346   | 1  | 1        | 12 | 175,000    | 33 | 6    | 75 | 355,621   | 66 |
| NORTH                    | 10          | 572.323        | 1    | 10 | 38,767  | 7  | 2        | 20 | 65,242     | 11 | 7    | 70 | 468,314   | 82 |
| SOUTH                    | 6           | 461.427        | 1    | 17 | 89,057  | 19 | 2        | 33 | 125,560    | 27 | 3    | 50 | 246,810   | 53 |
| WEST                     | 8           | 311,996        | 0    | 0  | 0       | 0  | 2        | 25 | 176,684    | 57 | 6    | 75 | 135,312   | 43 |
| CENTRAL                  | 10          | 330,825        | 0    | 0  | 0       | 0  | 4        | 40 | 118,323    | 36 | 6    | 60 | 212,502   | 64 |
| SUB-TOTAL                | 42          | 2,212,538      | 3    | 7  | 133,170 | 6  | 11       | 26 | 660,809    | 30 | 28   | 67 | 1,418,559 | 64 |
| <b>QALIUBIA</b>          |             |                |      |    |         |    |          |    |            |    |      |    |           |    |
| EAST                     | 9           | 622,854        | 0    | 0  | 0       | 0  | 8        | 89 | 577,047    | 93 | 1    | 11 | 45,807    | 7  |
| WEST                     | 10          | 776,574        | 0    | 0  | 0       | 0  | 7        | 70 | 685,079    | 88 | 3    | 30 | 91,495    | 12 |
| SUB-TOTAL                | 19          | 1,399,428      | 0    | 0  | 0       | 0  | 15       | 79 | 1,262,126  | 90 | 4    | 21 | 137,302   | 10 |
| TOTAL                    | 273         | 17,118,518     | 4    | 1  | 340,866 | 2  | 153      | 56 | 11,158,429 | 65 | 116  | 42 | 5,619,223 | 33 |

TABLE 6-2  
ADEQUACY OF INCOME GENERATION (EQUIPMENT)  
FY 88

PAGE 1  
As of 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | ACTUAL<br>COST | GOOD |    |         |    | MODERATE |   |      |    | POOR |           |      |   |
|--------------------------|-------------|----------------|------|----|---------|----|----------|---|------|----|------|-----------|------|---|
|                          |             |                | NO.  | %  | COST    | %  | NO.      | % | COST | %  | NO.  | %         | COST | % |
| CAIRO                    |             |                |      |    |         |    |          |   |      |    |      |           |      |   |
| -----                    |             |                |      |    |         |    |          |   |      |    |      |           |      |   |
| GOVERNORATE              | 4           | 5,435,028      | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 4  | 100  | 5,435,028 | 100  |   |
| HELWAN                   | 4           | 494,963        | 2    | 50 | 236,014 | 48 | 0        | 0 | 0    | 2  | 50   | 258,949   | 52   |   |
| HELIOPOLIS               | 5           | 267,679        | 1    | 20 | 89,000  | 33 | 0        | 0 | 0    | 4  | 80   | 178,679   | 67   |   |
| WEST                     | 5           | 378,119        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 5  | 100  | 378,119   | 100  |   |
| ABDEEN                   | 7           | 364,532        | 1    | 14 | 24,673  | 7  | 0        | 0 | 0    | 6  | 86   | 339,859   | 93   |   |
| CENTRAL                  | 5           | 658,622        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 5  | 100  | 658,622   | 100  |   |
| WAILY                    | 2           | 155,590        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 2  | 100  | 155,590   | 100  |   |
| EL MATAREYA              | 4           | 67,817         | 3    | 75 | 64,707  | 95 | 0        | 0 | 0    | 1  | 25   | 3,110     | 5    |   |
| ZEITOUN                  | 5           | 404,508        | 2    | 40 | 196,243 | 49 | 0        | 0 | 0    | 3  | 60   | 208,265   | 51   |   |
| SOUTH                    | 7           | 596,275        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 7  | 100  | 596,275   | 100  |   |
| MISR EL KADIMA           | 2           | 103,277        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 2  | 100  | 103,277   | 100  |   |
| POD EL FARAS             | 11          | 654,904        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 11 | 100  | 654,904   | 100  |   |
| SHOUBRA                  | 5           | 289,687        | 2    | 40 | 170,949 | 59 | 0        | 0 | 0    | 3  | 60   | 118,738   | 41   |   |
| MASR CITY                | 2           | 92,426         | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 2  | 100  | 92,426    | 100  |   |
| EL ZAWIA                 | 6           | 456,902        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 6  | 100  | 456,902   | 100  |   |
| EL SALAM                 | 1           | 16,019         | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 1  | 99   | 16,019    | 100  |   |
| MAADI                    | 3           | 51,105         | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 3  | 100  | 51,105    | 100  |   |
| SUB-TOTAL                | 78          | 10,487,453     | 11   | 14 | 781,586 | 7  | 0        | 0 | 0    | 67 | 86   | 9,705,867 | 93   |   |
| ALEXANDRIA               |             |                |      |    |         |    |          |   |      |    |      |           |      |   |
| -----                    |             |                |      |    |         |    |          |   |      |    |      |           |      |   |
| EASTERN                  | 4           | 297,186        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 4  | 100  | 297,186   | 100  |   |
| MID-TOWN                 | 2           | 71,151         | 1    | 50 | 10,191  | 14 | 0        | 0 | 0    | 1  | 50   | 60,960    | 86   |   |
| WEST                     | 3           | 78,108         | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 3  | 100  | 78,108    | 100  |   |
| AMREYA                   | 4           | 310,860        | 0    | 0  | 0       | 0  | 0        | 0 | 0    | 4  | 100  | 310,860   | 100  |   |
| MONTAZAH                 | 4           | 285,913        | 1    | 25 | 99,990  | 35 | 0        | 0 | 0    | 3  | 75   | 185,923   | 65   |   |
| GOMRUK                   | 8           | 670,997        | 1    | 12 | 19,841  | 3  | 0        | 0 | 0    | 7  | 87   | 651,156   | 97   |   |
| SUB-TOTAL                | 25          | 1,714,215      | 3    | 12 | 130,022 | 8  | 0        | 0 | 0    | 22 | 88   | 1,584,193 | 92   |   |

TABLE 6-2  
ADEQUACY OF INCOME GENERATION (EQUIPMENT)  
FY 88

PAGE 2  
As of 12/12/90

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | ACTUAL<br>COST | GOOD |    |           |    | MODERATE |   |      |   | POOR |     |      |            |     |
|--------------------------|-------------|----------------|------|----|-----------|----|----------|---|------|---|------|-----|------|------------|-----|
|                          |             |                | NO.  | %  | COST      | %  | NO.      | % | COST | % | NO.  | %   | COST | %          |     |
| GIZA                     |             |                |      |    |           |    |          |   |      |   |      |     |      |            |     |
| ----                     |             |                |      |    |           |    |          |   |      |   |      |     |      |            |     |
| GOVERNORATE              | 4           | 297.718        | 0    | 0  | 0         | 0  | 0        | 0 | 0    | 0 | 0    | 4   | 100  | 297.718    | 100 |
| NORTH                    | 2           | 99.137         | 0    | 0  | 0         | 0  | 0        | 0 | 0    | 0 | 0    | 2   | 100  | 99.137     | 100 |
| SOUTH                    | 4           | 359.818        | 2    | 50 | 334.652   | 93 | 0        | 0 | 0    | 0 | 0    | 2   | 50   | 25.166     | 7   |
| WEST                     | 4           | 233.659        | 0    | 0  | 0         | 0  | 0        | 0 | 0    | 0 | 0    | 4   | 100  | 233.659    | 100 |
| CENTRAL                  | 5           | 278.047        | 0    | 0  | 0         | 0  | 0        | 0 | 0    | 0 | 0    | 5   | 100  | 278.047    | 100 |
| SUB-TOTAL                | 19          | 1.268.379      | 2    | 11 | 334.652   | 26 | 0        | 0 | 0    | 0 | 0    | 17  | 89   | 933.727    | 74  |
| QALIUBIA                 |             |                |      |    |           |    |          |   |      |   |      |     |      |            |     |
| -----                    |             |                |      |    |           |    |          |   |      |   |      |     |      |            |     |
| FAST                     | 4           | 196.336        | 1    | 25 | 75.445    | 38 | 0        | 0 | 0    | 0 | 0    | 3   | 75   | 120.891    | 62  |
| WEST                     | 3           | 383.138        | 1    | 33 | 93.472    | 24 | 0        | 0 | 0    | 0 | 0    | 2   | 66   | 289.666    | 76  |
| SUB-TOTAL                | 7           | 579.474        | 2    | 29 | 168.917   | 29 | 0        | 0 | 0    | 0 | 0    | 5   | 71   | 410.557    | 71  |
| TOTAL                    | 129         | 14.049.521     | 18   | 14 | 1.415.177 | 10 | 0        | 0 | 0    | 0 | 0    | 111 | 86   | 12.634.344 | 90  |

Section 7

# MAINTENANCE

57a

## 7. MAINTENANCE

### 7.1 General

Internal and external maintenance have been generally rated poorly in the facilities visited. Maintenance is however a complex issue and therefore difficult to rate in that it consists of a number of interrelated factors, such as:

- a) Periodic structural repairs and renovations
- b) General repairs in any of the following categories:
  - o Electrical
  - o Plumbing
  - o Carpentry
  - o Flooring
  - o Insulation
  - o Painting
  - o Glazing
- c) Cleaning
- d) Emergency maintenance

Budgets for maintenance tend to be insufficient to maintain sub-projects. Periodic and urgent maintenance items are often done by annual contractors whose performance is not always acceptable. Maintenance priorities are not determined by needs assessment at the districts. Available budgets are usually distributed to maintain the greatest number of facilities. These sometimes results in a superficial level of maintenance. According to the analysis, FY 88, 23% of the construction sub-projects needed urgent maintenance and 68% needed periodic maintenance, i.e. 91% of the construction sub-projects needed urgent or periodic maintenance. Sectors reflecting the worst maintenance records were education and public health. It may be observed that the maintenance status for 88 is better than 87.

### 7.2 Education Sector

One hundred sixty-nine (169) facilities out of the two hundred (200) rated needed urgent and/or periodic maintenance.

General Observations of Education Sub-Projects:

1. The majority of door frames were coming loose from the wall. (It seems there was a problem in the method used to attach door frames to the wall).
2. Window panes were broken; some schools left them broken, others fixed plastic sheets instead of glass.
3. Rating scores for electrical wiring, outlets, switches and light bulbs were generally poor. The electrical fixtures were seriously neglected in a number of schools.
4. Blackboards tended to be poorly constructed.
5. The majority of the sanitary connections were not maintained and therefore did not work to full capacity. In some cases the W.C. units were used as storerooms.
6. Plaster and wall finishing items were often poor.

### **7.3 Public Health**

Twenty-six (26) facilities out of 80 needed urgent or periodic maintenance.

#### **General Observations for the Public Health Sub-Projects**

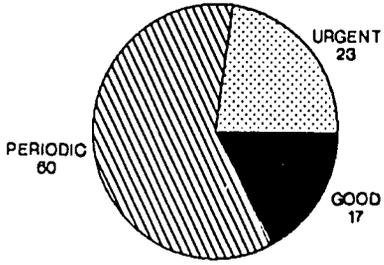
1. Floor tiles not according to specification.
2. Plumbing work was poor, water taps, risers and most of the plumbing fixtures did not work. W.C.'s, hand basins, etc. tended to be unsatisfactory.
3. Doors frames poorly fixed.
4. Window panes broken.

### **7.4 Conclusions**

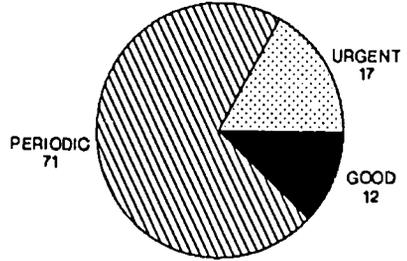
1. Maintenance budgets should be increased.
2. Contractors should be evaluated according to their performance; contracting with the contractor tendering the lowest sum for annual maintenance purposes can sometimes prove counter productive.

Maintenance issues are shown pictorially on the following pages.

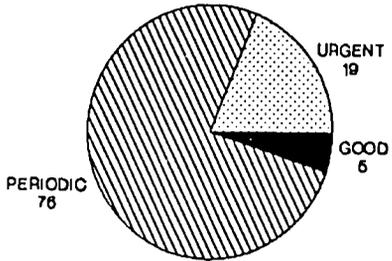
# MAINTENANCE NEEDS OF CONSTRUCTION SUB-PROJECTS - RELATIVE TO NUMBER



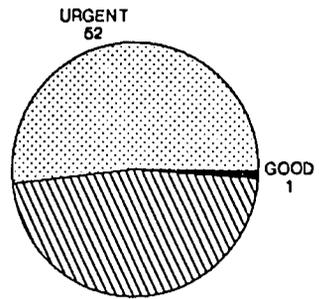
CAIRO



ALEXANDRIA

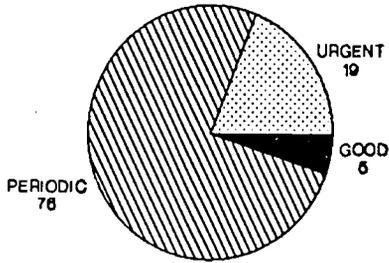


GIZA

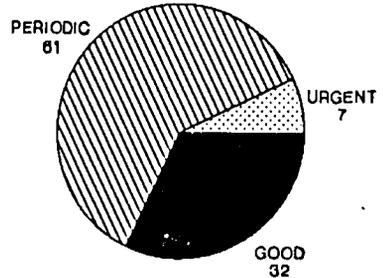


QALIUBIA

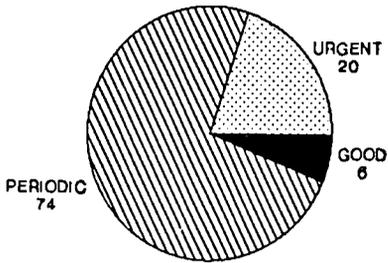
# MAINTENANCE NEEDS OF CONSTRUCTION SUB PROJECTS RELATIVE TO CAPITAL EXPENDITURE



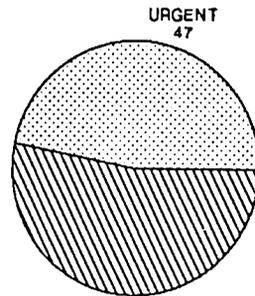
CAIRO



ALEXANDRIA



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QALIUBIA

TABLE 7-1  
ADEQUACY OF MAINTENANCE  
BY DISTRICT  
FY 98

PAGE 1  
AS OF 12/12/99

| GOVERNORATE/<br>DISTRICT | TOTAL<br>NO | TOTAL<br>COST | URGENT REQUIRED |                |                 | PERIODIC REQUIRED |                |                 |
|--------------------------|-------------|---------------|-----------------|----------------|-----------------|-------------------|----------------|-----------------|
|                          |             |               | NO.             | CONST.<br>COST | % TOTAL<br>COST | NO.               | CONST.<br>COST | % TOTAL<br>COST |
| <b>CAIRO</b>             |             |               |                 |                |                 |                   |                |                 |
| HELMAN                   | 14          | 777,733       | 4               | 136,919        | 18              | 8                 | 554,419        | 71              |
| HELTOPOLIS               | 7           | 350,984       | 2               | 110,299        | 32              | 3                 | 103,095        | 29              |
| WEST                     | 11          | 508,664       | 1               | 15,000         | 3               | 9                 | 478,090        | 94              |
| ABBEEN                   | 9           | 413,907       | 3               | 53,048         | 13              | 6                 | 360,859        | 87              |
| CENTRAL                  | 5           | 584,535       | 1               | 61,236         | 10              | 4                 | 523,299        | 90              |
| WAILY                    | 9           | 845,855       | 0               | 0              | 0               | 9                 | 845,855        | 100             |
| EL NATAREYA              | 16          | 879,199       | 5               | 252,828        | 29              | 10                | 589,880        | 67              |
| 7EITOWM                  | 10          | 782,822       | 3               | 332,370        | 42              | 7                 | 450,452        | 58              |
| SOUTH                    | 11          | 414,602       | 5               | 107,009        | 26              | 4                 | 207,327        | 50              |
| NTSR EL KADIMA           | 11          | 768,663       | 1               | 122,526        | 16              | 9                 | 623,371        | 81              |
| ROB EL FARAG             | 9           | 798,567       | 4               | 394,614        | 49              | 5                 | 403,953        | 51              |
| SHOUBRA                  | 4           | 255,057       | 0               | 0              | 0               | 3                 | 237,013        | 93              |
| NASR CITY                | 1           | 190,571       | 0               | 0              | 0               | 1                 | 190,571        | 100             |
| EL ZAWIA                 | 12          | 548,115       | 2               | 18,877         | 3               | 10                | 529,238        | 97              |
| EL SALAM                 | 5           | 284,313       | 1               | 17,186         | 6               | 3                 | 256,408        | 90              |
| MAADI                    | 7           | 449,584       | 1               | 21,441         | 5               | 5                 | 338,275        | 75              |
| SUB-TOTAL                | 141         | 8,852,271     | 33              | 1,643,353      | 19              | 96                | 6,692,105      | 76              |
| <b>ALEXANDRIA</b>        |             |               |                 |                |                 |                   |                |                 |
| GOVERNORATE              | 3           | 1,004,609     | 0               | 0              | 0               | 1                 | 176,828        | 18              |
| EASTERN                  | 7           | 338,320       | 1               | 26,304         | 8               | 5                 | 216,458        | 64              |
| MID-TOWN                 | 13          | 1,114,538     | 1               | 29,996         | 3               | 9                 | 623,886        | 56              |
| WEST                     | 15          | 591,983       | 4               | 129,726        | 22              | 11                | 462,257        | 78              |
| ARREYA                   | 13          | 548,511       | 2               | 62,593         | 11              | 11                | 485,928        | 89              |
| MONTAZAH                 | 13          | 629,994       | 3               | 70,785         | 11              | 9                 | 520,633        | 83              |
| GORROK                   | 7           | 426,326       | 1               | 26,761         | 6               | 5                 | 349,120        | 82              |
| SUB-TOTAL                | 71          | 4,654,281     | 12              | 346,155        | 7               | 51                | 2,835,310      | 61              |
| <b>GIZA</b>              |             |               |                 |                |                 |                   |                |                 |
| GOVERNORATE              | 8           | 535,967       | 0               | 0              | 0               | 8                 | 535,967        | 100             |
| NORTH                    | 10          | 572,323       | 4               | 112,327        | 20              | 5                 | 374,199        | 65              |
| SOUTH                    | 6           | 461,427       | 2               | 119,164        | 26              | 4                 | 342,263        | 74              |
| WEST                     | 8           | 311,996       | 1               | 135,540        | 43              | 7                 | 176,456        | 57              |
| CENTRAL                  | 10          | 330,825       | 1               | 68,146         | 21              | 8                 | 213,128        | 64              |
| SUB-TOTAL                | 42          | 2,212,538     | 8               | 435,177        | 20              | 32                | 1,642,013      | 74              |
| <b>QALUBYA</b>           |             |               |                 |                |                 |                   |                |                 |
| EAST                     | 9           | 622,854       | 6               | 533,983        | 86              | 3                 | 88,871         | 14              |
| WEST                     | 10          | 776,574       | 4               | 124,649        | 16              | 6                 | 651,925        | 84              |
| SUB-TOTAL                | 19          | 1,399,428     | 10              | 658,632        | 47              | 9                 | 740,796        | 53              |
| TOTAL                    | 273         | 17,118,518    | 63              | 3,083,317      | 18              | 188               | 11,910,224     | 70              |

TABLE 7-2  
ADEQUACY OF MAINTENANCE  
BY SUB-SECTOR  
FY 88

PAGE 1  
36 OF 12/12/90

| SECTOR                          | TOTAL<br>NO. | TOTAL<br>COST | URGENT REQUIRED |                |                 | PERIODIC REQUIRED |                |                 |
|---------------------------------|--------------|---------------|-----------------|----------------|-----------------|-------------------|----------------|-----------------|
|                                 |              |               | NO.             | CONST.<br>COST | % TOTAL<br>COST | NO.               | CONST.<br>COST | % TOTAL<br>COST |
| <b>INFRASTRUCTURE/UTILITIES</b> |              |               |                 |                |                 |                   |                |                 |
| PAVING                          | 0            | 0             | 0               | 0              | 0               | 0                 | 0              | 0               |
| BRIDGES                         | 1            | 36,491        | 0               | 0              | 0               | 0                 | 0              | 0               |
| STREET LIGHTING                 | 0            | 0             | 0               | 0              | 0               | 0                 | 0              | 0               |
| POTABLE WATER                   | 0            | 0             | 0               | 0              | 0               | 0                 | 0              | 0               |
| SEWERS AND DRAINAGE             | 0            | 0             | 0               | 0              | 0               | 0                 | 0              | 0               |
| SOLID WASTE                     | 1            | 18,492        | 0               | 0              | 0               | 1                 | 18,492         | 100             |
| PUBLIC WC's                     | 6            | 157,235       | 0               | 0              | 0               | 6                 | 157,235        | 100             |
| MISCELLANEOUS                   | 8            | 350,512       | 1               | 219,857        | 63              | 6                 | 115,081        | 33              |
| SUB-TOTAL                       | 16           | 562,730       | 1               | 219,857        | 39              | 13                | 290,808        | 52              |
| <b>FOOD SECURITY</b>            |              |               |                 |                |                 |                   |                |                 |
| GOVERNMENT OUTLETS              | 1            | 38,767        | 0               | 0              | 0               | 1                 | 38,767         | 100             |
| MARKETS                         | 0            | 0             | 0               | 0              | 0               | 0                 | 0              | 0               |
| OTHER FACILITIES                | 0            | 0             | 0               | 0              | 0               | 0                 | 0              | 0               |
| SUB-TOTAL                       | 1            | 38,767        | 0               | 0              | 0               | 1                 | 38,767         | 100             |
| <b>EDUCATION</b>                |              |               |                 |                |                 |                   |                |                 |
| CLASSROOMS                      | 124          | 9,428,260     | 42              | 2,113,906      | 22              | 80                | 7,132,288      | 76              |
| LABORATORIES                    | 1            | 15,000        | 1               | 15,000         | 100             | 0                 | 0              | 0               |
| W.C.'s                          | 28           | 640,363       | 5               | 154,672        | 24              | 20                | 426,448        | 67              |
| MISCELLANEOUS                   | 22           | 687,409       | 7               | 199,550        | 29              | 14                | 437,503        | 64              |
| SUB-TOTAL                       | 175          | 10,771,032    | 55              | 2,483,138      | 23              | 114               | 7,996,239      | 74              |
| <b>PUBLIC HEALTH</b>            |              |               |                 |                |                 |                   |                |                 |
| CLINICS                         | 18           | 1,302,844     | 3               | 271,277        | 21              | 14                | 945,770        | 73              |
| HOSPITALS                       | 10           | 882,812       | 0               | 0              | 0               | 6                 | 519,205        | 59              |
| OTHER FACILITIES                | 3            | 276,795       | 0               | 0              | 0               | 3                 | 276,795        | 100             |
| SUB-TOTAL                       | 31           | 2,462,451     | 3               | 271,277        | 11              | 23                | 1,741,770      | 71              |

TABLE 7-2  
ADEQUACY OF MAINTENANCE  
BY SUB-SECTOR  
FY 88

PAGE 2  
As Of 12/12/90

| SECTOR                      | TOTAL<br>NO. | TOTAL<br>COST     | URGENT REQUIRED |                  |                 | PERIODIC REQUIRED |                   |                 |
|-----------------------------|--------------|-------------------|-----------------|------------------|-----------------|-------------------|-------------------|-----------------|
|                             |              |                   | NO.             | CONST.<br>COST   | % TOTAL<br>COST | NO.               | CONST.<br>COST    | % TOTAL<br>COST |
| <b>SOCIAL AFFAIRS</b>       |              |                   |                 |                  |                 |                   |                   |                 |
| -----                       |              |                   |                 |                  |                 |                   |                   |                 |
| YOUTH FACILITIES            | 32           | 1,495,287         | 2               | 39,823           | 3               | 24                | 989,968           | 66              |
| SOCIAL SERVICES             | 1            | 123,475           | 0               | 0                | 0               | 1                 | 123,475           | 100             |
| CULTURAL FACILITIES         | 3            | 188,464           | 0               | 0                | 0               | 3                 | 188,464           | 100             |
| OTHER FACILITIES            | 1            | 7,986             | 1               | 7,986            | 100             | 0                 | 0                 | 0               |
| <b>SUB-TOTAL</b>            | <b>37</b>    | <b>1,815,212</b>  | <b>3</b>        | <b>47,809</b>    | <b>3</b>        | <b>28</b>         | <b>1,301,907</b>  | <b>72</b>       |
| <b>VEHICLE MAINTENANCE</b>  |              |                   |                 |                  |                 |                   |                   |                 |
| -----                       |              |                   |                 |                  |                 |                   |                   |                 |
| GARAGES CONSTRUCTION        | 6            | 1,212,141         | 1               | 61,236           | 5               | 3                 | 323,124           | 27              |
| GARAGES UPGRADING           | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| GARAGES EQUIPMENT           | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| CLINICS CONSTRUCTION        | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| M.C.'s CONSTRUCTION         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| SHEDS CONSTRUCTION          | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| FENCES CONSTRUCTION         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| UTILITY CONNECTIONS         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| SITE PAVING                 | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| <b>SUB-TOTAL</b>            | <b>6</b>     | <b>1,212,141</b>  | <b>1</b>        | <b>61,236</b>    | <b>5</b>        | <b>3</b>          | <b>323,124</b>    | <b>27</b>       |
| <b>ROAD MAINTENANCE</b>     |              |                   |                 |                  |                 |                   |                   |                 |
| -----                       |              |                   |                 |                  |                 |                   |                   |                 |
| ROAD CONSTRUCTION           | 1            | 12,037            | 0               | 0                | 0               | 1                 | 12,037            | 100             |
| ROAD RENOVATION             | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| SHEDS CONSTRUCTION          | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| FENCES CONSTRUCTION         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| M.C.'s CONSTRUCTION         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| UTILITY CONNECTIONS         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| SITE PAVING                 | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| EQUIPMENT                   | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| <b>SUB-TOTAL</b>            | <b>1</b>     | <b>12,037</b>     | <b>0</b>        | <b>0</b>         | <b>0</b>        | <b>1</b>          | <b>12,037</b>     | <b>100</b>      |
| <b>BUILDING MAINTENANCE</b> |              |                   |                 |                  |                 |                   |                   |                 |
| -----                       |              |                   |                 |                  |                 |                   |                   |                 |
| BUILDING CONST.             | 5            | 163,668           | 0               | 0                | 0               | 4                 | 125,092           | 76              |
| RENOVATION UPGRAD.          | 1            | 80,480            | 0               | 0                | 0               | 1                 | 80,480            | 100             |
| FENCES CONSTRUCTION         | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| PLUMBER EQUIP.              | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| CARPENTARY EQUIP.           | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| ELECTRICITY EQUIP.          | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| MEANS OF TRANSPORT          | 0            | 0                 | 0               | 0                | 0               | 0                 | 0                 | 0               |
| <b>SUB-TOTAL</b>            | <b>6</b>     | <b>244,148</b>    | <b>0</b>        | <b>0</b>         | <b>0</b>        | <b>5</b>          | <b>205,572</b>    | <b>84</b>       |
| <b>TOTAL</b>                | <b>273</b>   | <b>17,118,518</b> | <b>63</b>       | <b>3,083,317</b> | <b>18</b>       | <b>188</b>        | <b>11,910,224</b> | <b>70</b>       |

**Section 8**

**USAID PLAQUES**

6902

## **8. USAID PLAQUES**

### **USAID Plaques - Reference Table 8.1**

**96% of the construction sub-projects did not have plaques.**

TABLE B-1  
USAID PLAQUE  
FY 88

PAGE 1

| GOVERNORATE/<br>DISTRICT | TOTAL<br>No. | No. WITHOUT<br>PLAQUES | %   |
|--------------------------|--------------|------------------------|-----|
| CAIRO                    |              |                        |     |
| GOVERNORATE              | 0            | 0                      | 0   |
| HELWAN                   | 14           | 8                      | 57  |
| HELIOPOLIS               | 7            | 7                      | 100 |
| WEST                     | 11           | 11                     | 100 |
| ABDEEN                   | 9            | 9                      | 100 |
| CENTRAL                  | 5            | 5                      | 100 |
| WAILY                    | 9            | 9                      | 100 |
| EL MATAREYA              | 16           | 15                     | 94  |
| ZEITOUN                  | 10           | 10                     | 100 |
| SOUTH                    | 11           | 11                     | 100 |
| MISR EL KADIMA           | 11           | 11                     | 100 |
| ROD EL FARAG             | 9            | 9                      | 100 |
| SHOURRA                  | 4            | 4                      | 100 |
| NASR CITY                | 1            | 1                      | 99  |
| EL ZAWIA                 | 12           | 12                     | 100 |
| EL SALAM                 | 5            | 5                      | 100 |
| MAADI                    | 7            | 7                      | 100 |
| EL SAHEL                 | 0            | 0                      | 0   |
| AJN SHAME                | 0            | 0                      | 0   |
| TERBEEN                  | 0            | 0                      | 0   |
| SUE-TOTAL                | 141          | 134                    | 95  |
| ALEXANDRIA               |              |                        |     |
| GOVERNORATE              | 3            | 2                      | 66  |
| EASTERN                  | 7            | 7                      | 100 |
| MID-TOWN                 | 13           | 13                     | 100 |
| WEST                     | 15           | 15                     | 100 |
| AMPEYA                   | 13           | 13                     | 100 |
| MONTAZAH                 | 13           | 12                     | 92  |
| GOMROI                   | 7            | 5                      | 71  |
| SUE-TOTAL                | 71           | 67                     | 94  |
| GIZA                     |              |                        |     |
| GOVERNORATE              | 8            | 8                      | 100 |
| NORTH                    | 10           | 10                     | 100 |
| SOUTH                    | 6            | 6                      | 100 |
| WEST                     | 8            | 8                      | 100 |
| CENTRAL                  | 10           | 10                     | 100 |
| EL HARAM                 | 0            | 0                      | 0   |
| SUE-TOTAL                | 42           | 42                     | 100 |
| DALIUBJA                 |              |                        |     |
| GOVERNORATE              | 0            | 0                      | 0   |
| EAST                     | 9            | 9                      | 100 |
| WEST                     | 10           | 10                     | 100 |
| SUE-TOTAL                | 19           | 19                     | 100 |
| TOTAL                    | 273          | 262                    | 96  |

Section 9

**SUMMARY OF CONCLUSIONS**

## 9. SUMMARY OF CONCLUSIONS

### Summary Of Conclusions

1. Create design sections at the district level, which would be responsible for design and preparation of all tender and contract documents.
2. Concentrate on design training courses.
3. Hire consultants on an annual basis to assist district chiefs when their "in house" engineering skills are inadequate.
4. The drawings and specifications for the project should be approved by and/or discussed with the system operator/user prior to tender.
5. Contractors should be evaluated according to their performance.
6. Contracting Departments should not necessarily contract with the lowest bidder.
7. Creation of a small concrete laboratory in each district, zone or governorate would benefit quality control efforts.
8. Concentrate on engineering site inspection.
9. Specifications should be enforced.
10. Maintenance budgets should be increased.
11. Maintenance plans should be prepared based on the results of the rating program.

# APPENDICES

SUB-PROJECT PROFILE

FY 88

| SECTOR          | NO. OF SUB-PROJECTS | ALLOCATION        | % OF ALLOCATION |
|-----------------|---------------------|-------------------|-----------------|
| Infrastructure  | 153                 | 9,718,284         | 24              |
| Food Security   | 1                   | 38,767            | 0               |
| Education       | 200                 | 12,157,216        | 29              |
| Public Health   | 80                  | 6,147,471         | 15              |
| Social Affair   | 54                  | 2,424,642         | 6               |
| Vehicle Maint.  | 18                  | 7,902,773         | 19              |
| Road Maint.     | 21                  | 2,427,054         | 6               |
| Building Maint. | 11                  | 435,041           | 1               |
| <b>TOTAL</b>    | <b>538</b>          | <b>41,251,248</b> | <b>100</b>      |

**SUB-PROJECT IMPLEMENTATION RATING (Field Work Sheet)**

Governorate \_\_\_\_\_ Sub-project No. \_\_\_\_\_  
 District \_\_\_\_\_ Sub-Project Title \_\_\_\_\_  
 Program Year \_\_\_\_\_ Type: \_\_\_\_\_ Inspection Date: \_\_\_\_\_

|                  | ANALYSIS PROCEDURE  | MAX                            | REPORTED              | TOTAL SCORE         | REMARKS               |          |           |  |  |  |  |
|------------------|---|--------------------------------|-----------------------|---------------------|-----------------------|----------|-----------|--|--|--|--|
| 1                | <b>MATCHES NEEDS ASSESSMENT: (Give % of Compliance)</b><br>- For Education, Health and Youth sub-projects, check with Needs Assessment (NA) reports<br>- For Garage equipment, check with O&M NA reports<br>- For other sub-projects, use your own judgement but always placing major emphasis on the type and number of beneficiaries.   |                                |                       |                     |                       |          |           |  |  |  |  |
|                  |   | 100                            |                       |                     |                       |          |           |  |  |  |  |
| 2                | <b>MEETS LD-II CRITERIA:</b><br>- Serving low income areas<br>- Sub-projects either priority I or II<br>- Income generation<br>- Sub-project type:<br>a. more beneficial: Health, Education, Youth and utilities;<br>b. less beneficial: office buildings, gardens, ceremony halls<br>- USAID plaque installed  | 25<br>15<br>15<br>25<br><br>20 |                       |                     |                       |          |           |  |  |  |  |
|                  |   | 100                            |                       |                     |                       |          |           |  |  |  |  |
| 3                | <b>FUNCTIONAL DESIGN QUALITY:</b><br>1. Require functional areas provided<br>2. Adequacy of unit size (5x8m classroom size, or 13 m2 2-bed hospital room, for example)<br>3. Adequacy of circulation<br>4. Adequacy of ventilation<br>5. Accessibility  | 20<br>20<br>20<br>20<br>20     |                       |                     |                       |          |           |  |  |  |  |
|                  |   | 100                            |                       |                     |                       |          |           |  |  |  |  |
| 4                | <b>CONSTRUCTION QUALITY</b><br>- Compliance with specifications (review tender documents)<br>- Quality of materials (with respect to appearance, durability, and maintainability)<br>- Workmanship (by observation)   | 30<br>35<br>35                 |                       |                     |                       |          |           |  |  |  |  |
|                  |   | 100                            |                       |                     |                       |          |           |  |  |  |  |
| 5                | <b>ADHERENCE TO SCHEDULE</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">Date of Turnover</td> <td style="width:10%;">Final Accept.</td> <td style="width:10%;">Actual Const.Period</td> <td style="width:10%;">Planned Constr.Period</td> <td style="width:10%;">%Overrun</td> <td style="width:50%;">see Notes</td> </tr> </table> | Date of Turnover               | Final Accept.         | Actual Const.Period | Planned Constr.Period | %Overrun | see Notes |  |  |  |  |
| Date of Turnover | Final Accept.   | Actual Const.Period            | Planned Constr.Period | %Overrun            | see Notes             |          |           |  |  |  |  |
|                  |   | /                              |                       |                     |                       |          |           |  |  |  |  |
| 6                | <b>ADHERENCE TO COST</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">Orig Alloc.</td> <td style="width:10%;">Actual Final Cost</td> <td style="width:10%;">% Over-run</td> <td style="width:70%;">see Notes</td> </tr> </table>  | Orig Alloc.                    | Actual Final Cost     | % Over-run          | see Notes             |          |           |  |  |  |  |
| Orig Alloc.      | Actual Final Cost   | % Over-run                     | see Notes             |                     |                       |          |           |  |  |  |  |
|                  |   | /                              |                       |                     |                       |          |           |  |  |  |  |
|                  | <b>Total Sub-project Score</b>  | /                              | /                     |                     | /                     |          |           |  |  |  |  |

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**SUB-PROJECT OPERATIONS RATING (Field Work Sheet)**

Governorate: \_\_\_\_\_ Sub-project No.: \_\_\_\_\_

District : \_\_\_\_\_ Sub-project Title: \_\_\_\_\_

Program Year: \_\_\_\_\_ Type: \_\_\_\_\_ Inspection Date: \_\_\_\_\_

|   | ANALYSIS PROCEDURE   | MAX                  | REPORTED | TOTAL SCORE | REMARKS |
|---|--|----------------------|----------|-------------|---------|
| 1 | <b>ADEQUACY OF FURNISHINGS/EQUIPMENT:</b><br>(Rating will be given only to the ones in use, not the ones in storage)<br>- Quantity:<br>- Quality:<br>- Function:   | 30<br>30<br>40       |          |             |         |
|   |  | 100                  |          |             |         |
| 2 | <b>ADEQUACY OF STAFFING:</b><br>- Number:<br>- Qualifications:<br>- Attendance:  | 30<br>30<br>40       |          |             |         |
|   |  | 100                  |          |             |         |
| 3 | <b>LEVEL OF BENEFICIARY USAGE:</b><br>- Check the facility or equipment operation records for the preceding 3 months, if needed.<br><br><b>FOR GUIDANCE:</b><br>- Closed facilities or equipment not in use for more than 70% of the year give (0) rating<br>- For miscellaneous sub-projects, give % according to the degree of population density in served area<br>- For schools, give 4 for furnishings/equipment in use<br>- For hospitals, give rating according to patients/day or degree of occupancy (average No. of beds occupied/ total No. of beds for in-patients)<br>- For youth centers, according to participation records |                      |          |             |         |
|   |  | 100                  |          |             |         |
| 4 | <b>OUTSIDE/GROUNDS MAINTENANCE</b><br>- Street paving<br>- Cleanliness of grounds/site<br>- Outside landscaping  | 40<br>30<br>30       |          |             |         |
|   |  | 100                  |          |             |         |
| 5 | <b>INSIDE MAINTENANCE</b><br>- Cleanliness<br>- Corrective Maintenance - Degree of Performance<br>Carpentry, painting, floors, roofs, windows<br>Sanitary (water taps, WCs, risers, fixtures)<br>Electrical (panels, inter wiring, lighting, outlets)  | 40<br>20<br>20<br>20 |          |             |         |
|   |  | 100                  |          |             |         |
|   | <b>Total Score</b>   |                      |          |             |         |

Notes: Rating will be 0-4 and will be precisely quantified in accordance with the reported percentage

- a. Sub-project Implementation, Items 5:6
- 0- more than 60
  - 1- 36 to 60
  - 2- 21 to 35
  - 3- 10 to 20
  - 4- less than 10

b. The following coefficients will be used to emphasize that certain items have greater importance:

|                  |             |              |             |
|------------------|-------------|--------------|-------------|
| ITEM             | COEFFICIENT | ITEM         | COEFFICIENT |
| -----            | -----       | -----        | -----       |
| Implementation 2 | 2.50        | Operations 3 | 2.00        |
| Implementation 4 | 2.00        | Operations 5 | 1.50        |

MAXIMUM SCORE IMPLEMENTATION 30      ACTUAL SCORE \_\_\_\_\_; WEIGHTED AVERAGE \_\_\_\_\_

MAXIMUM SCORE OPERATIONS 26      ACTUAL SCORE \_\_\_\_\_; WEIGHTED AVERAGE \_\_\_\_\_

\* UTILITY SUB-PROJECT IMPLEMENTATION RATING (Field Work Sheet)

Governorate : \_\_\_\_\_

Sub-project No.: \_\_\_\_\_

District : \_\_\_\_\_

Sub-project Title: \_\_\_\_\_

Program Year: \_\_\_\_\_

Type: \_\_\_\_\_

Inspection Date: \_\_\_\_\_

|                                | ANALYSIS PROCEDURE   | MAX %               | REPORTED %           | TOTAL SCORE         | REMARKS              |           |           |  |  |  |  |
|--------------------------------|--|---------------------|----------------------|---------------------|----------------------|-----------|-----------|--|--|--|--|
| 1                              | <b>MEETS LD-II CRITERIA:</b><br>- Serving low income areas<br>- Sub-projects either Priority I or II<br>- Income generation  | 65<br>20<br>15      |                      |                     |                      |           |           |  |  |  |  |
|                                |  | 100                 |                      |                     |                      |           |           |  |  |  |  |
| 2                              | <b>FUNCTIONAL DESIGN QUALITY:</b><br>- For roads, check adequacy of paved roadway, drainage, and sidewalks<br>- For sewer and water sub-projects, check the adequacy of pipes and appurtenances<br>- For street lighting, check spacing of poles, size of luminaires, and effectiveness of illumination  |                     |                      |                     |                      |           |           |  |  |  |  |
|                                |  | 100                 |                      |                     |                      |           |           |  |  |  |  |
| 3                              | <b>CONSTRUCTION QUALITY:</b><br>- Compliance with specifications (review Tender documents)<br>- Quality of materials (with respect to appearance, durability, and maintainability)<br>- Workmanship (by observation, if possible. If work is covered up as with underground cables and pipes, split 30 points between two other items. If paving look at such as parameters as joins with existing pavement, drainage, riding quality setting of tops of new MH covers and valves boxes to grade ... etc.) | 40<br>30<br>30      |                      |                     |                      |           |           |  |  |  |  |
|                                |  | 100                 |                      |                     |                      |           |           |  |  |  |  |
| 4                              | <b>ADHERENCE TO SCHEDULES</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">Date of Turnover</td> <td style="width:10%;">Final Accept.</td> <td style="width:15%;">Actual Const.Period</td> <td style="width:15%;">Planned Const.Period</td> <td style="width:10%;">% Overrun</td> <td style="width:10%;">See Notes</td> </tr> </table>   | Date of Turnover    | Final Accept.        | Actual Const.Period | Planned Const.Period | % Overrun | See Notes |  |  |  |  |
| Date of Turnover               | Final Accept.  | Actual Const.Period | Planned Const.Period | % Overrun           | See Notes            |           |           |  |  |  |  |
|                                |  | /                   |                      |                     |                      |           |           |  |  |  |  |
| 5                              | <b>ADHERENCE TO COST</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Orig Alloc.</td> <td style="width:15%;">Actual Final Cost</td> <td style="width:15%;">% Overruns</td> <td style="width:10%;">See Notes</td> </tr> </table>   | Orig Alloc.         | Actual Final Cost    | % Overruns          | See Notes            |           |           |  |  |  |  |
| Orig Alloc.                    | Actual Final Cost  | % Overruns          | See Notes            |                     |                      |           |           |  |  |  |  |
|                                |  | /                   |                      |                     |                      |           |           |  |  |  |  |
| <b>Total Sub-project Score</b> |  | /                   | /                    |                     | /                    |           |           |  |  |  |  |

nm/Utilimpb

\* UTILITY SUB-PROJECT OPERATIONS RATING (Field Work Sheet)

Governorate : \_\_\_\_\_

Sub-project No.: \_\_\_\_\_

District : \_\_\_\_\_

Sub-project Title: \_\_\_\_\_

Program Year: \_\_\_\_\_

Type: \_\_\_\_\_

Inspection Date: \_\_\_\_\_

|   | ANALYSIS PROCEDURE   | MAX % | REPORTED % | TOTAL SCORE | REMARKS |
|---|--|-------|------------|-------------|---------|
| 1 | <b>LEVEL OF BENEFICIARY USAGE:</b><br><br>Observed usage backed up by official records, as needed  |       |            |             |         |
|   |  | 100   |            |             |         |
| 2 | <b>CONDITION/STATUS OF MAINTENANCE:</b><br><br>Corrective maintenance has been taken to Eliminate<br>a) potholes and pavement failures<br><br>b) leaky water pipes and fixtures<br><br>c) clogged sewers and missing manhole covers<br><br>d) non-operational or defective street lights |       |            |             |         |
|   | Total Score  | 100   |            |             |         |

Notes: Rating will be 0-4 and will be precisely quantified in accordance with the reported percentage

A. Utility Implementation, Items 4,5

- 0 more than 60
- 1- 36 to 60
- 2- 21 to 35
- 3- 10 to 20
- 4- less than 10

B. The following coefficients will be used to emphasize that certain items have greater importance:

| <u>ITEM</u>      | <u>COEFFICIENT</u> | <u>ITEM</u>  | <u>COEFFICIENT</u> |
|------------------|--------------------|--------------|--------------------|
| Implementation 1 | 1.5                | Operations 1 | 2.0                |
| Implementation 3 | 2.0                | Operations 2 | 3.0                |

MAXIMUM SCORE IMPLEMENTATION 26      ACTUAL SCORE \_\_\_\_\_; WEIGHTED AVERAGE \_\_\_\_\_

MAXIMUM SCORE OPERATIONS 20      ACTUAL SCORE \_\_\_\_\_; WEIGHTED AVERAGE \_\_\_\_\_

nm/Utilimpa

SUB-PROJECT EQUIPMENT RATING (Field Work Sheet)

GOVERNORATE: \_\_\_\_\_ SUB-PROJECT NO.: \_\_\_\_\_ SUB-PROJECT TITLE: \_\_\_\_\_  
 DISTRICT : \_\_\_\_\_ TYPE: \_\_\_\_\_ INSPECTION DATE: \_\_\_\_\_

|   | ANALYSIS PROCEDURE  | MAX                  | REPORTED | TOTAL SCORE | REMARKS |
|---|---|----------------------|----------|-------------|---------|
| 1 | MEETS LD-II CRITERIA<br>o Serving low income areas<br>o Sub-project Priority I or II<br>o Income generation<br>o Source & origin - either Egypt or U.S. | 20<br>20<br>10<br>50 |          |             |         |
|   |   | 100                  |          |             |         |
| 2 | ADEQUACY OF EQUIPMENT<br>o Size (production capability)<br>o Quality (durability of materials, etc...)<br>o Equip is needed                             | 30<br>30<br>40       |          |             |         |
|   |   | 100                  |          |             |         |
| 3 | OPERATIONAL EFFECTIVENESS<br>o Trained operators<br>o Supporting equipment in place<br>o Level of usage (check records)                                 | 40<br>20<br>40       |          |             |         |
|   |   | 100                  |          |             |         |
| 4 | MAINTENANCE<br>o Cleanliness<br>o Current operational efficiency<br>o Spare parts available   | 20<br>60<br>20       |          |             |         |
|   |   | 100                  |          |             |         |
|   | Total Score   |                      |          |             |         |

Notes: Rating will be 0-4 and will be precisely quantified as follows:

- 0 less than 10
- 1- 10 to 35
- 2- 36 to 50
- 3- 51 to 69
- 4- 70 to 100

MAXIMUM SCORE 16      ACTUAL SCORE \_\_\_\_\_      AVERAGE \_\_\_\_\_

JO/eqiprate

ENCLOSURE 1-5

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