



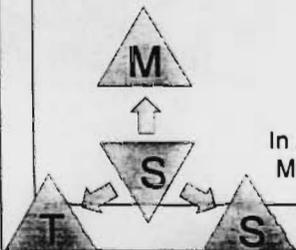
Management, Training & Systems Strengthening
for
The General Organization For Greater
Cairo Water Supply

Black & Veatch International

**Annual Progress Report
Number 1**

1 July 1993 to 30 June 1994

Cairo Water II - Institutional Development Component
USAID Project No. 263-0193



In Association with:
Montgomery Watson - National Education International - Sabbour Associates



Black & Veatch International

Management, Training & Systems Strengthening (MTSS) Project
General Organization for Greater Cairo Water Supply



Eng. Afaf El Marakby
MTSS Project Manager
GOGCWS Headquarters Building
42 Ramses Street
Cairo, A.R.E.

20 July 1994

RE: Annual Progress Report for the Period 1
July 1993 - 30 June 1994

Dear Eng. Afaf,

On behalf of Black & Veatch International and our associated subcontractors (BVI), I am pleased to submit to the General Organization for Greater Cairo Water Supply (GOGCWS), five (5) copies of the Annual Progress Report (APR-1) of the Management, Training & Systems Strengthening (MTSS) project. In accordance with Article II, Section A.2 and Appendix A, Section 5.2.2 of the BVI-GOGCWS contract, APR-1 covers the period 1 July 1993 - 30 June 1994 and also includes a summary of activities and accomplishments for each of the five MTSS programs for the fourth quarter (1 April - 30 June 1994).

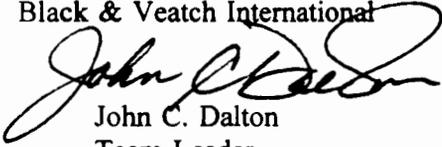
The first year of the MTSS project has been a great success. We have mobilized an outstanding team of American and Egyptian consultants; submitted baseline reports in the areas of finance and inventory management; completed a comprehensive Management Survey and conducted a very successful seminar to communicate its findings and conclusions; drafted a detailed technical report which provides both an integrated view of the physical facilities and an assessment of their operations & maintenance activities; and, developed and prepared plans for the implementation of both quantitative performance indicators and managerial policies. Each of these will guide the actions and decisions of GOGCWS management as it moves the organization forward toward financial viability and managerial autonomy. Other accomplishments are described in the report itself.

Throughout this first year BVI has had the good fortune to work with GOGCWS Chairman, Eng. Saad El Din El Deeb, and the other MTSS project Steering Committee members who have supported our efforts and provided us with advice and guidance whenever requested. The MTSS Project Implementation Unit (PIU), under your direction, has worked closely with BVI in a partnership relationship which has contributed greatly to the success of the MTSS project. Thank you very much for your continued cooperation and support and please convey to the Chairman and Steering Committee, and to the other members of the PIU, our sincere appreciation for their support.

One of the fundamental principles of the MTSS project is to work "with" not "for" the GOGCWS. At the day-to-day operational level, this partnership manifests itself in the close relationship between BVI's staff and their designated counterparts on the MTSS project. Approximately 75 GOGCWS counterparts have worked "with" us during this first year of the project. A great mutual benefit has been achieved through this relationship, which we will continue to foster over the next thirty three months of the project to promote sustainability of project achievements.

Not all our expectations for the first year have been met, however. APR-1 identifies these shortcomings and evaluates their impact openly and honestly.

In summary, we are now ready to move into an active performance improvement phase of the project thanks to the excellent foundation built during the year ended 30 June 1994. With the continued involvement and support of the organization, BVI believes we can help the GOGCWS move closer to its objectives. Thank you for giving us this opportunity to assist you in this important undertaking.

Very truly yours
Black & Veatch International

John C. Dalton
Team Leader

- cc: USAID (3)
MTSS Project (12)
- Home Offices (BVI, MW, NEI, SA, WG)
 - Program Managers (FV, MD, TSOM, MMP, PM&A)
 - Team Leader
 - Senior Advisor
 - Other ISC Projects (5)

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بلاك أند فيتش انترناشيونال
مشروع المعاونة فى تطوير الادارة والتدريب والنظم
بهيئة مياه القاهرة الكبرى

رقم المشروع: مشروع الوكالة الأمريكية للتنمية الدولية رقم ٢٦٣-٠١٩٣
المدة: ٤ سنوات من (ابريل ١٩٩٣ - مارس ١٩٩٧)
التكلفة الاجمالية للمشروع: ١٥٠٧ مليون دولار أمريكي
مصدر التمويل: منحة من الوكالة الأمريكية للتنمية الدولية
وكالة التنفيذ: الهيئة العامة لمرفق مياه القاهرة الكبرى (GOGCWS)
المستفيدون: ١٥ مليون نسمة يقيمون فى منطقة خدمات الهيئة العامة لمرفق
مياه القاهرة الكبرى بمحافظة القاهرة وأجزاء من محافظتى الجيزة
والقليوبية

اهداف المشروع: معاونة الهيئة العامة لمرفق مياه القاهرة الكبرى على تحقيق الاصلاح
المالى (الحيوية المالية) والاستقلالية الادارية

وصف المشروع: يتكون المشروع من خمسة برامج هي:
١- الاصلاح المالى (الحيوية المالية) (FV)
٢- للتنمية الادارية (MD)
٣- للدعم الفنى للتشغيل والصيانة (TSOM)
٤- ادارة المواد والمشتريات (MMP)
٥- ادارة للمشروع (PM&A)

مراحل ومهام للمشروع

المرحلة	التاريخ	المهمة
١	١ يوليو ١٩٩٣ - ٣٠ يوليو ٩٤	١- التجهيز والتعبئة ٢- جمع المعلومات الأساسية ٣- صياغة السياسة
٢	١ يوليو ١٩٩٤ - ٣٠ يونيو ٩٥	٤- متابعة الأداء والادارة ٥- التخطيط الاستراتيجى
٣	١ يوليو ١٩٩٥ - ٣٠ سبتمبر ٩٦	٦- تنفيذ النظم المطورة
٤	١ اكتوبر ١٩٩٦ - ٣١ مارس ٩٧	٧- استمرارية التخطيط

استشاريو المشروع: بلاك أند فيتش انترناشيونال بالتعاون مع الاستشارى مونجمرى ولطمن والمؤسسة الدولية
للتعليم والمكتب الهندسى الاستشارى صبور ولوردانى جروب.

الجزء الاول : الملخص التنفيذي

هذا هو التقرير السنوي الاول الذي قدمته بلاك آند فيتش الدولية (بي في اى) ومقاولي الباطن المشاركين لها عن سير العمل بمشروع المعاونة في تطوير الادارة والتدريب والنظم (مشروع الوكالة الامريكية للتنمية الدولية رقم ٠٩٣ - ٢٦٣) ويغطي التقرير الفترة من أول يوليو ١٩٩٣ حتى ٣٠ يونيو ١٩٩٤ أى المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم الذى يتكون من أربعة مراحل يتم تنفيذها خلال ٤٥ شهرا تنتهي في ٣١ مارس ١٩٩٧، ويتكون التقرير من أربعة أجزاء وهي:

الجزء الاول - الملخص التنفيذي:

ويشمل عرض عام للمشروع والانجازات التي تم احرازها علي مستوى كل برنامج، وشرح للنقاط المثيرة للقلق والقيود التي تمت مواجهتها بالاضافة الي تحديد الاولويات والخطط المتوقعة في المرحلة الثانية (فترة اثنا عشر شهرا اعتبارا من أول يوليو ١٩٩٤). ويتضمن الجزء الثاني شرحا تفصيليا لانجازات كل برنامج في المرحلة الاولى بالنسبة لخطة عمل مشروع للمعاونة في تطوير الادارة والتدريب والنظم التي تمت الموافقة عليها وشرحا تفصيليا لاولويات كل برنامج في المرحلة الثانية، ويعرض الجزء الثالث للنتائج الرئيسية التي تم التوصل لها خلال المرحلة الاولى بخصوص نقاط القوة والضعف في الهيئة العامة لمرفق مياه القاهرة الكبرى وكذا القيود الخارجية التي تؤثر علي أداء الهيئة، ويتضمن الجزء الرابع موجز عن الانشطة التي تمت خلال الربع الاخير (من أول أبريل ١٩٩٤ حتى ٣٠ يونيو ١٩٩٤).

ولقد تكونت المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم من ثلاث مهام متعاقبة وهي:

- المهمة الاولى : تعبئة العاملين
- المهمة الثانية : جمع المعلومات الاساسية
- المهمة الثالثة : صياغة السياسة

وتبع كل برنامج من البرامج الخمس لمشروع المعاونة في تطوير الادارة والتدريب والنظم، هذا الاسلوب في تنفيذ المشروع . وكان من المتوقع أن يؤدي اتباع اطار عمل ثابت لتنفيذ المشروع أن ينتهي كل برنامج من تعيين العاملين وجمع البيانات ويكون جاهزا لاعداد السياسات في الربع الاخير من فترة المشروع وأن يتم بعد ذلك مزج تلك السياسات في اطار سياسة واحدة شاملة لاخذ موافقة الهيئة العامة لمرفق مياه القاهرة الكبرى عليها وبدء تنفيذها بواسطة الهيئة بدءا من أول يوليو ١٩٩٤. ولكن في الحقيقة ثبت أن هذا الجدول الزمني كان متفائلا جدا، وكانت هناك بعض التأخيرات في تعبئة العاملين ولم تكن للبيانات متاحة في أغلب الاحيان و/أو تطلبت الكثير من الوقت لتجميعها والتحقق منها. وترتب علي ذلك أنه بالرغم من أن بعض البرامج قد بدأت في تنفيذ مهمة صياغة السياسة، لم يحدد طاقم مشروع المعاونة في تطوير الادارة والتدريب والنظم والطاقم المناظر، بعد، عددا كبيرا من السياسات اللازمة لوضع اطار سياسة شاملة للهيئة العامة لمرفق مياه القاهرة.

وعلى الرغم من هذا التأخير عن الجدول الزمني الكلي للمشروع، فقد أحرزت المرحلة الأولى من مشروع المعاونة في تطوير الإدارة والتدريب والنظم نجاحا عظيما وتم وضع أساس للتقدم مستقبلا تجاه تحقيق أهداف الحيوية المالية والاستقلالية الإدارية ، ولقد أنجز مشروع المعاونة في تطوير الإدارة والتدريب والنظم قد الكثير جدا خلال فترة قصيرة نسبيا، بالقياس لمشروع دعم تنظيمي يتم تنفيذه في دولة نامية، ومازال الطريق للامام طويلا ولكن المسافة التي تم قطعها على الطريق حتى تاريخه تدعو للاعجاب.

تعبئة العاملين:

تم تكليف وتعيين طاقم متخصص مكون من عدد (٢٧) فرد للعمل طوال الوقت، كما يتكون طاقم مشروع المعاونة في تطوير الإدارة والتدريب والنظم من عدد (١٢) مستشار أجنبي و(١٥) خبير مصري ليشكلوا طاقما من مختلف التخصصات وذو نطاق واسع و متميز من المعرفة والخبرة. وقد تكون الفترة التي استغرقتها عملية التعبئة أطول مما كان متوقعا ولكن مجموعة طاقم بلاك اند فيتش الدولية الموجود حاليا، في بداية المرحلة الثانية، تتصف بالحماس والموهبة.

ولكن مازال كل من العميل وبلاك اند فيتش الدولية قلقين لان معدل التعبئة الاجمالي ٧١ ٪ ، ويبين الجدول رقم ١ أنه قد تم تعبئة ١٨٣ شهر/رجل متخصص بالمقارنة بـ ٢٥٧ شهر/رجل متخصص المصرح بها في خطة عمل مشروع المعاونة في تطوير الإدارة والتدريب والنظم، وكان معدل تعبئة الطاقم الاجنبي ٧٦ ٪ في حين كان معدل تعبئة الطاقم المصري المتخصص ٦٦ ٪، ومع ذلك سجل معدل التعبئة خلال فترة الربع الرابع من المشروع زيادة جوهرية بالمقارنة بالفترات الثلاث السابقة مما يبشر باحراز تنفيذ فعال في السنوات القادمة .

وكما يبين الجزء التالي، فعلى الرغم من صغر حجم الجهود التي تم تعبئتها تمكن كل برنامج من البرامج الخمس من احراز تقدم جوهري، وتم تقديم أغلب النتائج التي كان متوقعا انجازها في المرحلة الأولى، غير أن هناك تأخير في بعض البرامج عن الجدول الزمني وستحتاج تلك البرامج لتركيز مواردها لكي تتمكن من اللحاق بالجدول الزمني الاصلي، في أول أكتوبر ١٩٩٤، كما سيلزم تعبئة جهود اضافية في بعض مجالات البرنامج.

الاجازات:

كانت هناك عدة انجازات جوهرية على مستوى المشروع (أى على المستوى التعاقدى/ التنظيمي للعلاقة بين بلاك اند فيتش الدولية و الهيئة العامة لمرفق مياه القاهرة الكبرى) وفيما يلي بيان تلك الانجازات:

- ١ - تم اقامة علاقة عمل قوية بين وحدة تنفيذ المشروع ومدير المشروع في الهيئة العامة لمرفق مياه القاهرة الكبرى وبلاك اند فيتش الدولية كنتيجة للمشاركة المشتركة التي تم اقرارها في خطة العمل المنقحة لمشروع المعاونة في تطوير الإدارة والتدريب والنظم، كما ساعدت الثمانية عشر اجتماعا التي تم عقدها للتسيق بين بلاك اند فيتش الدولية والهيئة العامة لمرفق مياه القاهرة الكبرى والوكالة الامريكية للتنمية الدولية على تقوية العلاقات وتنشيط العمل بالمشروع.

٢ - وقد نجحت خطة العمل المرحلية لمشروع المعاونة في تطوير الادارة والتدريب والنظم، نجاحا كبيرا، كأداة لادارة المشروع وتنسيق البرنامج، ووفرت للعميل وسيلة تمكنه من الاشراف دون فرض رقابة صارمة علي طاقم ادارة المقاول.

٣ - ساعد هيكل البرنامج الذي تم تصميمه ليعكس صورة الهيكل التنظيمي للهيئة العامة لمرفق مياه القاهرة الكبرى (أنظر الشكل رقم ١) علي تمكين مشروع المعاونة في تطوير الادارة والتدريب والنظم من احراز تقدم في بعض مجالات البرنامج (مثال الشئون المالية وادارة المهمات) هذا في حين كانت هناك برامج أخرى متأخرة (مثال التشغيل والصيانة).

٤ - أسفر قرار خطة المشروع باشتراك موظفين مناظرين من الهيئة العامة لمرفق مياه القاهرة الكبرى في كافة جوانب النشاط الخاص بجمع البيانات وصياغة السياسة عن تحقيق الاتي: أ) ساعد علي نشر "رسالة" مشروع المعاونة في تطوير الادارة والتدريب والنظم بطريقة فعالة جدا ومؤكدة ب) عزز جانب المسئولية المشتركة المشروع والتي يعمل المقاول بمقتضاها، مع الهيئة العامة لمرفق مياه القاهرة الكبرى وليس لحسابها

٥ - أسفر تقديم " أسبوع مراجعة البرنامج" لكل ربع سنة، عن فتاحة الفرصة لمراقبة سير العمل وتقييم الاداء وأثبت نجاحه كأداة فعالة لادارة المشروع.

٦ - بدأ التزام مشروع المعاونة في تطوير الادارة والتدريب والنظم بالاساليب الكمية لادارة واتخاذ القرارات في جذب مؤيدين له داخل الهيئة العامة لمرفق مياه القاهرة الكبرى فعلي سيديل المثال صدق السيد رئيس مجلس الادارة علي استخدام أسلوب " كتابة تقارير الادارة علي أساس الاداء" للسنة المالية ١٩٩٤ / ١٩٩٥ وبالإضافة لتلك الانجازات التي تم تحقيقها علي مستوى المشروع، أحرز كل برنامج من البرامج الخمس نجاحا، ونعرض فيما يلي بيان موجز للانجازات التي حققها كل برنامج في حين يتضمن الجزء الثاني شرح تفصيلي لانجازات كل برنامج في المرحلة الاولى:

الحيوية المالية:

الانجازات الرئيسية لبرنامج الحيوية المالية خلال المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم هي:

- حصر الاصول الثابتة
- عمل رسم تخطيطي وتحليل للنظام المالي
- عمل تقرير عن تقييم الاوضاع المالية
- تجهيز نموذج بالكمبيوتر للتخطيط المالي

التنمية الادارية:

الانجازات الرئيسية لبرنامج التنمية الادارية خلال المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم هي:

- اعداد تقرير عام عن الادارة
- عقد ندوات الادارة

الدعم الفني للتشغيل والصيانة:

الانجازات الرئيسية لبرنامج الدعم الفني للتشغيل والصيانة خلال المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم هي:

- جرد المنشآت
- اعداد تقرير البيانات الاساسية (مسودة)

ادارة المخازن والمشتريات:

الانجازات الرئيسية لبرنامج ادارة المخازن والمشتريات خلال المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم:

- تقييم نظام المخزون السلعي في روض الفرج
- اعداد تقرير عن اجراءات وهيكل ادارة المخزون السلعي
- حصر منشآت المخازن والمستودعات

الشفون الادارية وادارة المشروع:

انجازات برنامج الشفون الادارية وادارة المشروع خلال المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم هي:

- تأسيس مكتب للمشروع في شارع رمسيس ومكتب للمشروع في روض الفرج
- تركيب نظام كمبيوتر (شبكة محلية)
- حفظ الاتظمة والمستندات المالية

الاهتمامات والمحددات:

أسفرت المرحلة الاولى من مشروع المعاونة في تطوير الادارة والتدريب والنظم عن مايلي: ١ - اجماع واسع النطاق بين شاغلي الوظائف العليا بالهيئة العامة لمرفق مياه القاهرة الكبرى علي ضرورة تحقيق الحيوية المالية والاستقلالية الادارية ٢ - التزام قيادات الهيئة العامة لمرفق مياه القاهرة الكبرى بتحسين الاداء في مجالات الادارة والمالية والعمليات الفنية واستخدامات التكنولوجيا وادارة المهمات الخ، ولكن ٣ - لا يوجد، بعد، دليل ملموس علي ادراك وقبول الادارة العليا بالهيئة العامة لمرفق مياه القاهرة الكبرى لحجم الموقف و/أو للتغييرات الاساسية التي تقض ضرورة تنفيذها من أجل احراز النتائج واستمراريتها مع مرور الوقت.

وبالرغم من تلك النقطة الاخيرة التي سيتم الاهتمام بها في كل مناسبة يوجد أساس ايجابي جدا يبشر بنجاح المشروع، ولكن هناك بضعة عوامل مقلقة و عدة قيود قد تؤثر تأثيرا سلبيا علي المشروع وهي:

- تتلقي الهيئة العامة لمرفق مياه القاهرة الكبرى توجيهات متباينة من الحكومة المصرية ومن الوكالة الامريكية للتنمية الدولية عن القدر الذي سيلزمون به أنفسهم بالمهام الصعبة الخاصة بتحقيق "الحيوية المالية" و"الاستقلالية الادارية"، ويبدو أن الحكومة المصرية تتبع سياسة بعدم زيادة أسعار الخدمة في يبدو أن الوكالة الامريكية للتنمية الدولية تؤيد استعادة التكاليف ولكنها مازالت تود الاحتفاظ باختياراتها لمشروعات رأسمالية اضافية.

- لاتوجد رؤيا مشتركة بين العميل والمقاول عن حجم المشكلة المالية المستقبلية التي تواجهها الهيئة العامة لمرفق مياه القاهرة الكبرى أو الحاجة الملحة لاتخاذ اجراء، الان، لتخفيف أثار تلك المشكلة.

- من مواطن الضعف الرئيسية بالهيئة عدم وجود بيانات موثوق منها، علما بأن وجود بيانات دقيقة (شاملة الخرائط) هو أحد المتطلبات الاساسية المسبقة لمعظم أعال التشخيص اللازمة لتنفيذ السياسة والتخطيط الاستراتيجي وتحسين الاداء التي خططها المقاول.

- قد تؤثر التغييرات المحتملة في الوظائف القيادية بالهيئة علي سير وأولويات المشروع.

- سيتم تخصيص مكتبين لطاقت مشروع المعاونة في تطوير الادارة والتدريب والنظم ابتداء من يوليو ١٩٩٤ (مكتب في شارع رمسيس ومكتب في روض الفرج) وسيكون هذا اختبار وتحديا هاما، في الاتصالات والادارة، لكل من العميل والمقاول.

- أثر عدم وجود وسائل انتقال مناسبة لطاقت المشروع تأثيرا سلبيا علي تعبئة للعاملين وعلي انتاجية الطاقم الرئيسي وعلي العمل الميداني وجمع البيانات، لذا يجب الاهتمام بهذا الوضع علي نحو عاجل ويجاد حل فوري له والاسيتعرض المشروع للخطر. وتقع علي العميل والمقاول المسئولية المشتركة عن معالجة تلك العوامل المسببة لتلك المحددات والقيود، وذلك بمساعدة ودعم الوكالة الامريكية للتنمية الدولية في مجالات رئيسية معينة.

الخطط وأولويات الأنشطة في المرحلة الثانية:

للافادة من التقدم الذي تم احرازه مع التركيز علي موضوع ادراك الادارة العليا وقبولها لضرورة التغيير، حدد كل برنامج من البرامج الخمس لمشروع المعاونة في تطوير الادارة والتدريب والنظم، الاجراءات ذات الاولوية التي سيتم اتخاذها خلال المرحلة الثانية من المشروع .

ويبين الشكل (٢) أن المرحلة الثانية تشكل فترة هامة ودرجة في المشروع ككل، حيث لن يقتصر الامر علي اتخاذ مبادرات لتحسين الاداء لتطوير الهيئة العامة لمرفق مياه القاهرة الكبرى (مثل استخدام الميكروكمبيوتر في الادارة - صياغة / تنفيذ السياسة وخفض التكاليف وبناء الفريق وشراء السلع والتدريب ... الخ) ولكن نأمل عن طريق:

١ (ممارسة التخطيط الاستراتيجي الطويل الاجل
٢ (المفاوضات مع الهيئات المحلية الرئيسية ومع المحافظة بخصوص الاستقلالية الادارية الحقيقية و ...

٣ ... (التغييرات في الاساس المالي والقانوني للهيئة ، أن يتمكن مشروع المعاونة في تطوير الادارة والتدريب والنظم من مساعدة الهيئة علي الانتقال الي مستوى أعلى وعلي مد صلاحياتها الفنية للمجالات المالية والادارية والعلاقات مع المستهلكين.

وفيما يلي الموضوعات السبعة الرئيسية في المرحلة الثانية كما يعكسها وصف البرامج:

- تحسين الاداء / شراء السلع
- المراقبة الكمية والقياس وكتابة التقارير
- خفض التكاليف
- الخرائط والبيانات واحصائيات للبحوث الحضرية
- صياغة وتنفيذ السياسات الرئيسية
- التدريب لتحقيق النتائج
- التفكير الاستراتيجي / تنمية الاستراتيجية

وفيما يلي شرح لكل من تلك الموضوعات:

تحسين الاداء/ شراء السلع:

خلال المرحلة الثانية، سيحدد مشروع المعاونة في تطوير الادارة والتدريب والنظم سلعا معينة ويساعد الهيئة العامة لمرفق مياه القاهرة في الحصول عليها وتشغيلها لتحسين الاداء، وهناك مبلغ ١٢ مليون دولار تقريبا للمعدات والسلع الاخرى للارتقاء بمستوى أداء الهيئة العامة لمرفق مياه القاهرة الكبرى.

المتابعة الكمية والمقاييس وتقديم التقارير: من خلال انتقاء ووضع أجهزة الكمبيوتر الملائمة، سيتم اعداد تقارير لطقم الادارة العليا من خلال برنامج أجهزة الميكروكمبيوتر للادارة وسيؤدي ذلك الي تعزيز تفاقية الاداء بين الهيئة وبلاك اند فيتش الدولية التي سيتم التفاوض عليها في بداية المرحلة الثانية.

خفض التكاليف:

بالنسبة لموازنتي ١٩٩٤/١٩٩٥ ، ١٩٩٥/١٩٩٦ يسعى المرفق لبذل جهد كبير للتحكم في المصروفات كما يأمل في خفض مصروفات التشغيل.

الخراط والبيانات واحصائيات الابحاث الحضرية:
بالحصول علي الامكانيات الضرورية (مثال أجهزة كمبيوتر - خرائط - موظفين مدربين)
وتعيين طاقم لجمع وتحليل البيانات الموثوق منها سيتمكن برنامج مشروع المعاونة في تطوير
الادارة والتدريب والنظم من مساعدة الهيئة علي تحسين قدرتها علي التخطيط واتخاذ
القرارات.

صياغة وتنفيذ السياسات الرئيسية: سيتم خلال المرحلة الثانية تجهيز ومناقشة واعتماد وتنفيذ
سياسات في المجالات السبع التالية: اجتماعية - مالية - تنظيمية - فنية - أفراد - بينية -
ومعلومات، وستعكس السياسات التي تتم الموافقة عليها في موازنة الهيئة لعام
١٩٩٥/١٩٩٦.

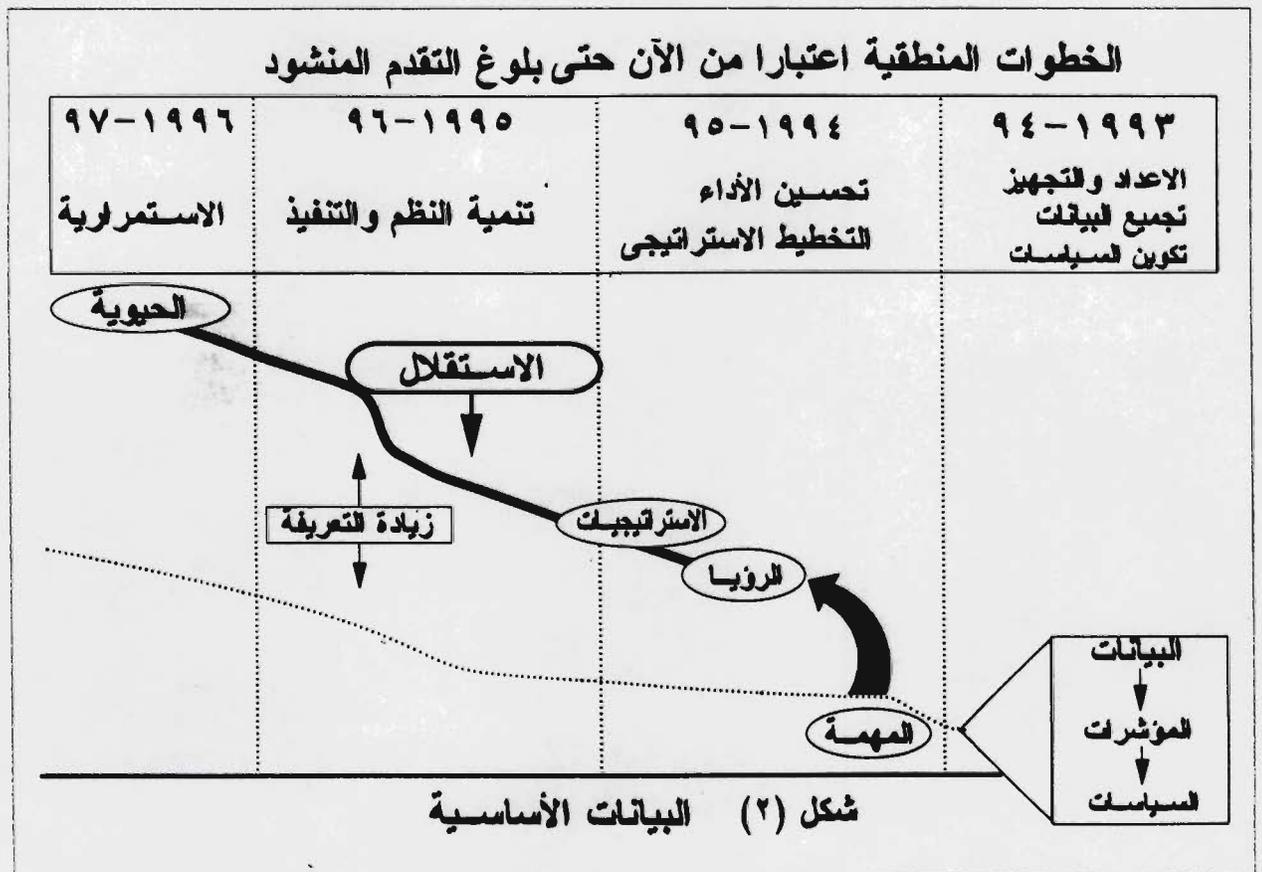
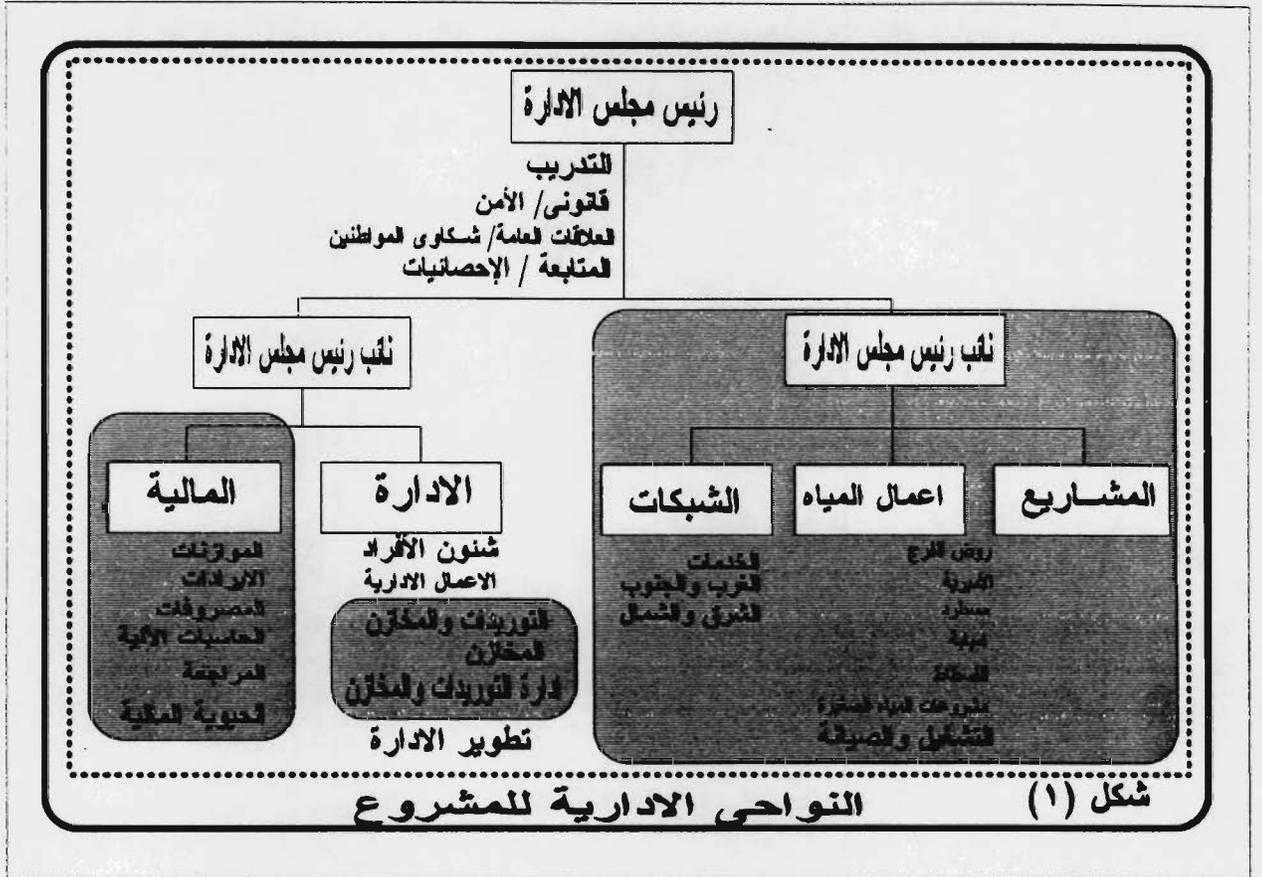
التدريب لتحقيق النتائج: ستركز جهود تدريب الادارة وجهود مقاولي الباطن للتنمية التنظيمية
وطاقم مشروع المعاونة في تطوير الادارة والتدريب والنظم علي تنمية قدرات السادة شاغلي
الوظائف العليا بالهيئة العامة لمرفق مياه القاهرة الكبرى ليقودوا الهيئة الي مستوى أداء جديد.

التفكير الاستراتيجي / تطوير الاستراتيجية:
سيتم تعريف طاقم الادارة بالهيئة العامة لمرفق مياه القاهرة الكبرى باسلوب التفكير
والتخطيط الاستراتيجي عن طريق التدريب والخبراء لمتخصصين والحلقات الدراسية
والندوات ومن خلال الاليات الاخرى التي ستشمل، بوجه خاص، حلقة دراسية للهيئات
الخارجية التي تؤثر وتفيد من قدرة الهيئة علي تحقيق أهدافها.

كما ستواصل البرامج الخمس لمشروع المعاونة في تطوير الادارة والتدريب والنظم كافة
الانشطة والاولويات الاخرى علي اساس الاحتياجات والفرص المحددة الخاصة بكل برنامج،
وقد تم شرح ذلك في الجزء الثاني من التقرير.

التغيير الاشهر +/-	مستوى الجهودات		المسئولون	البرنامج
	الفعلى	المقدر		
٠	١٢	١٢	١	مدير المشروع
١٦-	٤٧	٦٣	٨	الحيوية المالية
٢٠-	٣٧	٥٧	٦	تطوير الادارة
٢٨-	٢٨	٥٦	١٠	التشغيل والصيانة
٣	٢٧	٢٤	٤	المخازن والمشتريات
١٣-	٣٢	٤٥	٥	النواحى الادارية للمشروع
٧٤-	١٨٣	٢٥٧	٣٤	اجمالى

جدول (١)



اختصارات

AVGOSD	الهيئة العامة للصرف الصحى بالاسكندرية
BVI	بلاك أند فيتش الدولية
C/GOSD	الهيئة العامة للصرف الصحى للقاهرة
CSP	خطة أنظمة الكمبيوتر
FV	الاصلاح المالى (الحيوية المالية)
GOE	حكومة جمهورية مصر العربية
GOGCWS	الهيئة العامة لمرفق مياه القاهرة
ISC	استشارى المساندة الادارية
LAN	شبكة المنطقة المحلية
LE	الجنيه المصرى
MD	التنمية الادارية
MTSS	مشروع المعاونة فى تطوير الادارة والتدريب والنظم
MM&P	ادارة المواد والمشتريات
PIU	وحدة تنفيذ المشروع
PM&A	ادارة المشروع
TSOM	الدعم الفنى للتشغيل والصيانة
USAID	الوكالة الأمريكية للتنمية الدولية
VUP	خطة استخدام السيارات
WASH	مشروع المياه والصرف الصحى من أجل الصحة

Management Training, and Systems Strengthening (MTSS) Project Overview

Project Number: USAID Project Number 263-0193

Duration: 4 Years (from April 1993 to March 1997)

Total Project Cost: US \$15.7 million

Source of Funds: USAID Grant

Implementing Agency: The General organization for Greater Cairo Water Supply

Beneficiaries: 15 million residents in The GOGCWS service area of Cairo Governorate and portions of Giza and Qalubia Governorates

Project Objectives: To assist GOGCWS achieve financial viability and managerial autonomy

Project Description: Five Programs:

1. Financial Viability (FV)
2. Management Development (MD)
3. Technical Support for Operation & Maintenance (TSOM)
4. Materials Management and Procurement (MMP)
5. Project Management and Administration (PMA)

Project Phases and Tasks:

PHASE	DATES	TASKS
1	July 1993 to 30 June 1994	1. Mobilization 2. Baseline Data Collection 3. Policy Formulation
2	1 July 1994 to 30 June 1995	4. Performance Monitoring & Management 5. Strategic Planning
3	1 July 1995 to 30 September 1996	6. Systems Development & Implementation
4	1 October 1996 to 31 March 1997	7. Sustainability Planning

Project Consultants: Black & Veatch International with subcontractors Montgomery Watson, National Education International, Sabbour Associates, and Wardani Group

Section 1: Executive Summary

This is the first Annual Progress Report (APR-1) submitted by Black & Veatch International and its associated subcontractors (BVI) for the Management, Training & Systems Strengthening (MTSS) project (USAID Project No. 263-0193). APR-1 covers the period 1 July 1993 - 30 June 1994: Phase 1 of the MTSS project which consists of four phases over a 45 month period, ending on 31 March 1997. The report is comprised of four sections

Section 1, the Executive Summary, includes an overview of project and program-level achievements; a discussion of concerns and constraints encountered; and, the identification of anticipated priorities and plans for Phase 2 (a 12 month period which begins on 1 July 1994). Section 2 is a more detailed description of each program's Phase 1 accomplishments relative to the approved MTSS work plan as well as each program's priorities for Phase 2. Section 3 describes the major conclusions reached during Phase 1 about both the strengths and weaknesses of the GOGCWS as well as the external constraints which have an impact on its performance. A summary of fourth quarter (1 April 1994 - 30 June 1994) activities is provided in Section 4.

Phase 1 of the MTSS project consisted of three sequential tasks:

- Task 1 Mobilization of Personnel
- Task 2 Baseline Data Collection
- Task 3 Policy Formulation

Each of the five MTSS programs followed this project implementation approach. By establishing a consistent framework for project implementation, it was anticipated that each program would complete their staffing and data collection and be ready to develop policies in the fourth quarter of the project. These policies then would be interwoven into a single, comprehensive policy framework for approval and implementation by the GOGCWS, starting on 1 July 1994. In fact, this schedule proved to be too optimistic. There were some delays in staff mobilization; data was often not available and/or required a great deal of time to assemble and verify. Consequently, although the Policy Formulation task has been initiated by some programs, many of the policies needed for a comprehensive GOGCWS policy framework have not yet been identified by the MTSS staff and their counterparts.

Despite this slippage in the overall project schedule, Phase 1 of the MTSS project was a great success. The foundation for future progress toward the objectives of financial viability and managerial autonomy is in place. For an institutional support project in a developing country the MTSS project has accomplished a great deal in a relatively short time. There is still a long road ahead, but the distance travelled to date is impressive.

Mobilization of Personnel

Twenty seven (27) full time professional staff have been recruited and appointed. There are twelve (12) expatriate advisors and fifteen (15) Egyptian experts on a multi-disciplinary MTSS staff with an exceptional breadth of knowledge and experience. It may have

taken longer than anticipated, but the BVI staff complement which is now in place at the beginning of Phase 2 is talented and motivated.

Still, it is a matter of concern to both the client and BVI that the overall mobilization rate was 71%. Table 1.0 indicates that 183 professional person months were mobilized compared to 257 professional person months authorized in the MTSS work plan. The mobilization rate for expatriate staff was 76%; the rate for Egyptian professionals was 66%. Compared to the three previous quarters, however, the mobilization rate for the fourth quarter registered a significant increase which augurs well for effective implementation in the coming years.

Table 1.0
Mobilization Rate for the MTSS Project

Program	Authorized Positions	Level of Effort		Change (+ / - months)
		Planned	Actual	
Team Leader	1	12	12	0
Financial Viability	8	63	47	-16
Management Development	6	57	37	-20
Technical Support for Operations & Maintenance	10	56	28	-28
Project Management & Administration	5	45	32	-13
Totals	34	257	183	-74

As the following section indicates, despite the reduced level of effort, each of the five programs still achieved significant progress. A majority of the expected Phase 1 outputs have been delivered. Some programs are behind schedule and will need to concentrate their resources in order to "catch up" with the original schedule by 1 October 1994. Additional level of effort will be needed in some program areas.

Accomplishments

At the project level (i.e., the contractual/institutional level of the BVI-GOGCWS relationship) there have been several significant accomplishments:

1. A strong working relationship was forged between the Project Implementation Unit (PIU), the GOGCWS Project Manager and BVI as a result of the joint venture partnership established in the revised MTSS work plan. Eighteen BVI-GOGCWS-USAID coordination meetings also helped to strengthen relations and promote project progress.
2. The phased MTSS work plan has worked extremely well as a project management and program coordination tool. It provided the client with a means of oversight without imposing rigid controls on contractor management.

- The program structure, which was designed to “mirror” the organizational structure of the GOGCWS (see Figure 1), enabled the MTSS project to make progress in some program areas (e.g., finance and materials management) while other programs (e.g., operations & maintenance) were lagging behind.

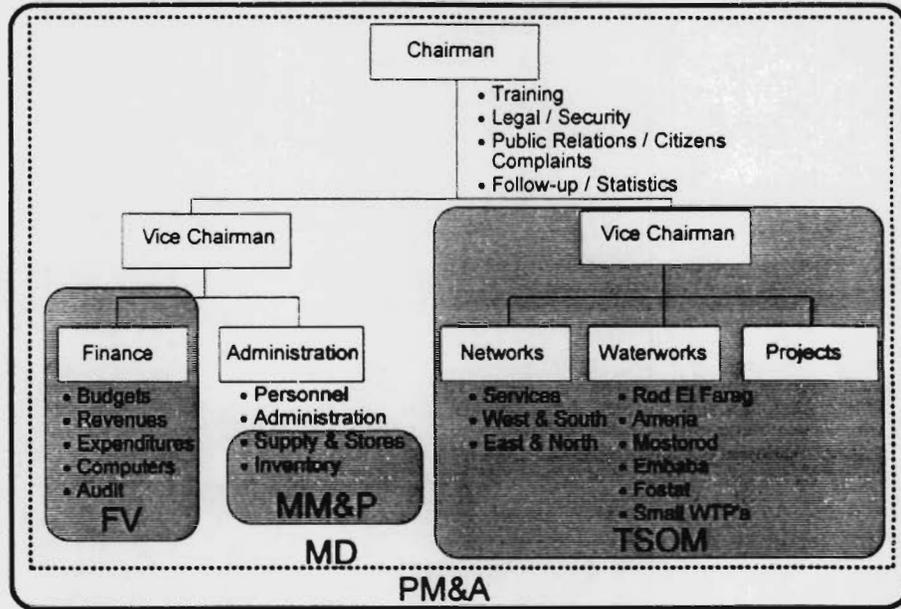


Figure 1 MTSS Project Organization

- The project design decision to involve GOGCWS counterparts in all aspects of data collection and policy formulation activity, has a) helped to spread the “message” of the MTSS project in a very effective and sustainable manner and b) has reinforced the co-responsibility aspect of the project, by which the contractor works with - not for - the organization.
- The introduction of a quarterly “Program Review Week” has provided an opportunity for progress monitoring and performance assessment. It has proven to be an effective project management tool.
- The MTSS project commitment to quantitative approaches to management and decision making has started to attract advocates within the organization, e.g., the Chairman has endorsed the use of performance based management reporting for the 1994-95 fiscal year.

In addition to these project level accomplishments, each of the five program achieved success. A brief listing of these achievements follows; a detailed description of the Phase 1 accomplishments of each program is contained in Section 2.

Financial Viability

The major accomplishments of the FV program during Phase 1 of the MTSS project were:

- Fixed assets inventoried

- Financial system flow-charted and analyzed
- *Assessment of Financial Conditions* report
- Financial planning computer model developed

Management Development

The major accomplishments of the MD program during Phase 1 of the MTSS project were:

- *Management Survey* report
- Management seminars conducted

Technical Support for Operations & Maintenance

The major accomplishments of the TSOM program during Phase 1 of the MTSS project were:

- Facilities inventoried
- *Baseline Data report* (draft)

Materials Management and Procurement

The major accomplishments of the MMP program during Phase 1 of the MTSS project were:

- Inventory system at Rod El Farag evaluated
- *Inventory Management Structure & Procedures* report
- Warehouse and stores facilities inventoried

Project Management & Administration

The major accomplishments of the PM&A program during Phase 1 of the MTSS project were:

- Offices set-up at Ramses and Rod El Farag
- Computer system (local area network) established
- Financial records and systems maintained

Concerns and Constraints

Phase 1 of the MTSS project has created: 1) a broad consensus among the GOGCWS' top managers of the need for financial viability and managerial autonomy; 2) a commitment by GOGCWS leaders to improve performance in the areas of management, finance, technical operations, use of technology, materials management, etc.; but, 3) no tangible evidence, yet, that GOGCWS management is aware of and accepts the magnitude of the situation and/or is aware of the fundamental changes which appear to be needed to achieve results and sustain them over time.

Despite this last point, which will be addressed at every opportunity, a very favorable foundation for project success exists. However, there are a few concerns - and several constraints - which could negatively affect the project. They are:

- The GOGCWS is receiving mixed messages from the Government of Egypt and from USAID concerning the extent to which they should commit themselves to the difficult tasks of "financial viability" and "managerial autonomy". The GOE appears to have adopted a policy of no utility price increases; USAID seems to be advocating cost recovery but still wants to preserve its options for additional capital projects.
- There is not a shared view between the contractor and the client about the magnitude of the future financial crisis which the GOGCWS faces....or the urgency of taking action now to mitigate its impact.
- One of the fundamental weaknesses of the GOGCWS is its lack of reliable information. Accurate data (including maps) is a precondition to much of the diagnostic work required for the policy implementation, strategic planning and performance improvement efforts planned by the contractor.
- Possible changes in GOGCWS leadership positions could affect project pacing and priorities.
- The MTSS project staff will be located at two offices from July, 1994 (1 at Ramses Street and 1 at Rod El Farag). This will be a significant communication and management challenge for the contractor and the client.
- The lack of adequate transportation for the MTSS project staff has negatively affected mobilization of personnel, productivity of key staff, field work and data collection. This situation must be addressed on an urgent basis and an immediate solution found or project performance will be jeopardized.

Dealing with these concerns and constraints is the shared responsibility of the client and the contractor, with support and assistance in certain key areas from USAID.

Priority Activities and Plans for Phase 2

To capitalize on the progress made while addressing the issue of management awareness and acceptance of the need to change, each of the five MTSS programs has identified the priority actions which will be undertaken during Phase 2 of the MTSS project.

As Figure 2 indicates Phase 2 is a critical period in the overall project. Not only will performance improvement initiatives be taken to improve the GOGCWS (such as "Micro-computers for Management", policy formulation/implementation, cost reduction, team building, commodity procurement, training, etc), but also by means of: 1) a long term strategic planning exercise, 2) negotiations with key national agencies and the Governorate concerning de facto managerial autonomy and 3) changes in the financing and legal basis for the GOGCWS, it is hoped that the MTSS project can help move the

organization to a higher plateau and extend its technical competence to the areas of finance, management and consumer relations.

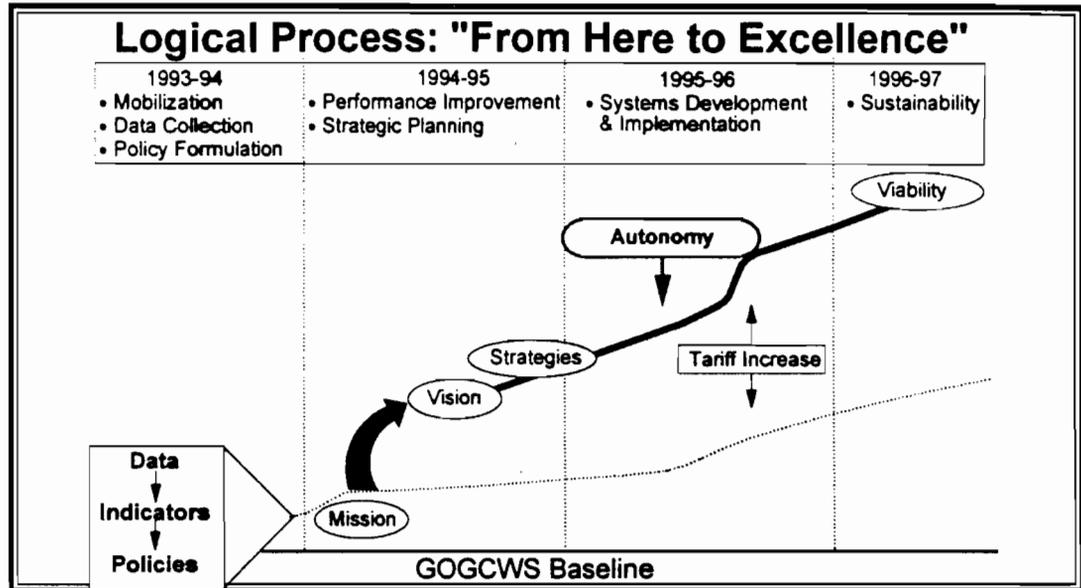


Figure 2 From Here to Excellence

The seven major themes for Phase 2, reflected in the program descriptions, are:

- Performance Improvement/Commodity Procurement
- Quantitative Monitoring, Measurement & Reporting
- Cost Reduction
- Mapping, Data & Urban Research Statistics
- Formulation and Implementation of Key Policies
- Training for Results
- Strategic Thinking/Strategy Development

Each of these is discussed below:

Performance Improvement/Commodity Procurement - during Phase 2 the MTSS project will identify, and assist the GOGCWS to procure and make operational, specific commodities which will improve performance. Approximately \$12 million in equipment and other commodities is available to improve GOGCWS performance.

Quantitative Monitoring, Measurement & Reporting - through the selective placement of computers, reports will be produced for top management under the Micro-computers for Management program. This will reinforce the Performance Agreement between the GOGCWS and BVI which will be negotiated at the beginning of Phase 2.

Cost Reduction - both the 1994-95 expenditure program and the 1995-96 budgeting exercise of the GOGCWS will be the targets for a major effort to control and, hopefully, cut operating costs.

Mapping, Data and Urban Research Statistics - by acquiring the necessary capacity (e.g., computers, maps, trained personnel) and retaining staff to collect and analyze reliable data, the MTSS project will assist the GOGCWS to improve their planning and decision making capacity.

Formulation and Implementation of Key Policies - policies in the following seven categories will be developed, discussed, approved and implemented during Phase 2: social, financial, institutional, technical, personal, environmental and informational. Approved policies will be reflected in the 1995-96 GOGCWS budget.

Training for Results - management training and organizational development subcontractors, as well as MTSS staff, will concentrate on developing the capacity of top managers to lead the GOGCWS to a new performance plateau.

Strategic Thinking/Strategy Development - through training, staff specialists, workshops, seminars and other mechanisms - including specifically a workshop for external agencies which influence and constrain the ability of the GOGCWS to achieve its objectives - strategic thinking and planning will be introduced to GOGCWS management.

Other activities and priorities will also be pursued by the five MTSS programs, based on program specific needs and opportunities. These are discussed in Section 2.

2.1 Phase 1 Summary of the Financial Viability Program

2.1.1 Mobilization

The Financial Viability (FV) program mobilized 3 expatriate and 4 Egyptian professional staff during Phase 1. This represented 47 person months of professional staff time, 75% of the total authorized person months. Table 2.1.1 below summarizes this level of effort.

Table 2.1.1
Mobilization Rate for the Financial Viability Program

POSITION	INCUMBENT	LEVEL OF EFFORT		CHANGE (* / - Months)
		Planned	Actual	
EXPATRIATE				
Program Manager	Peggy Howe	9	9	0
Rate Specialist	Mike Dutton	9	3	-6
Accounting System Specialist	Bill Steekley	6	2	-4
Subtotal		24	14	-10
EGYPTIAN				
Deputy Manager	Mahmoud Bakr	12	11	-1
Financial Analyst	Mahmoud Abou Raya	9	10	1
Financial Analyst	Faiz Khamis	6	7	1
Financial Training Coordinator	Hassan Hosny Mohamed	6	5	-1
Financial System Analyst	unfilled	6	0	-6
Subtotal		39	33	-6
Total		63	47	-16

Counterparts

In addition, 19 counterparts representing the major finance functions of the GOGCWS have worked closely with the FV team of professional consultants to accomplish the Phase I outputs.

2.1.2 Baseline Data Collection

Key Outputs

The following achievements, corresponding to key outputs of the work plan, were planned and accomplished by the FV program during Phase I of the project:

- Fixed Assets Inventoried
- Service Areas Defined
- Financial Systems Documented
- Financial Audit Published
- Macro-Level Finance Policies Defined
- GOGCWS Finance Policies Defined
- Financial Projections Completed
- Performance Contract Signed

Assessment of Financial Conditions

The *Assessment of Financial Conditions 1990-1991 through 1992-1993* financial report reviewed managerial and financial aspects of the GOGCWS. Data used in the analysis was provided by the GOGCWS with extensive input from the financial counterparts. Because the information and analyses included in the financial report was, and will be, used as building blocks for the policy formulation and performance planning and modeling segments of the FV program, verification of historical data was an important and time-consuming aspect of the assessment.

Historical Financial Condition

Each year the GOGCWS establishes a budget for the operation and maintenance of the water utility. Throughout the year expenses are incurred and recorded. At the end of each fiscal year a final accounts report is generated, reflecting revenues billed and expenditures paid by the GOGCWS. The final accounts report provides a picture of the financial position of the water utility at a single point in time. However, in order to analyze the actual financial viability of GOGCWS, a cash flow analysis, consisting of a three year study period, of the utility's revenues and expenditures was developed.

The critical financial condition of GOGCWS is illustrated in Figure 2.1.1. Current revenues and exchanges are inadequate to fund current expenses, let alone pay for capital related costs such as interest and settlement of long term loans. In fiscal year 1992-1993, current expenses exceeded cash revenues by approximately L.E. 61 million.

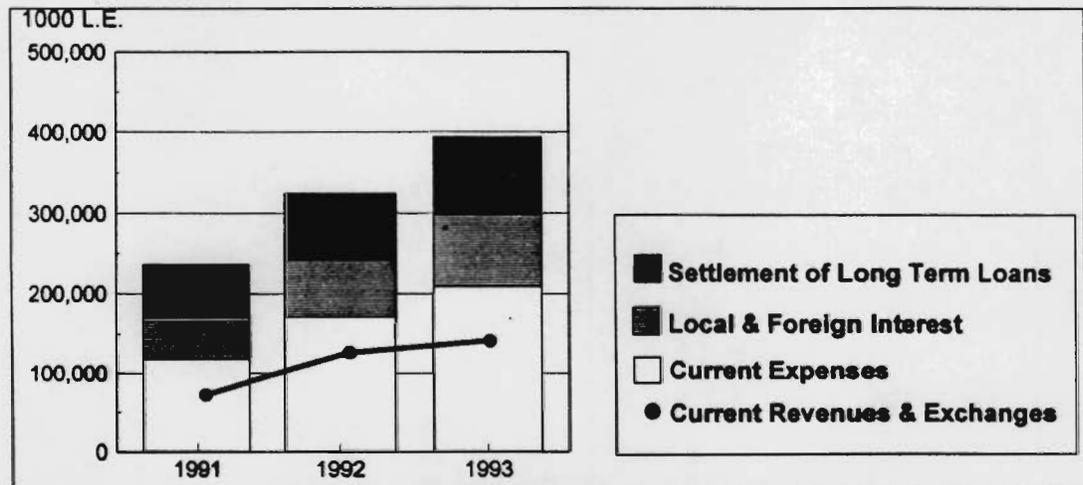


Figure 2.1.1 Historical Financial Condition

While the cash flow shows the overall cash position of GOGCWS's current operations, a comparison of the unit cost with unit revenue will illustrate the impact of costs as they relate to the tariff. For comparison purposes, expenditures and revenues were divided by billable units as opposed to collected units. For the 1992-1993 fiscal year, the unit revenue from production billed closely parallels the P.T. 13 tariff for the household customer. In that same fiscal year, the unit cost for current expenditures totaled P.T. 20.7 per cubic meter. Interest and principal payments added an additional P.T. 9.0 and P.T. 9.6, respectively, for a total cubic meter cost of P.T. 39.3.

Financial Projection

Using a financial planning computer model and input from the financial counterparts, financial projections were developed for fiscal years 1993-1994 through 1998-1999. Assumptions for customer growth, inflation, and percent collectibles reflected historical trends modified to incorporate current operating conditions. Additional revenue and corresponding expenditures associated with system expansion were not incorporated into the projections as the financing for the related capital investment has not been confirmed. Forecasts of revenue under existing tariffs reflected an annual growth rate of 3.2 percent while expenditures increased approximately 12 percent per year. As shown in Figure 2.2.2, comparisons of revenues and expenditures indicate a forecasted annual deficit of L.E. 279 million in 1999. Over the six year period, tariffs would have to increase by 220 percent or 26.2 percent each year between 1994-1995 and 1998-1999 to eliminate this projected deficit.

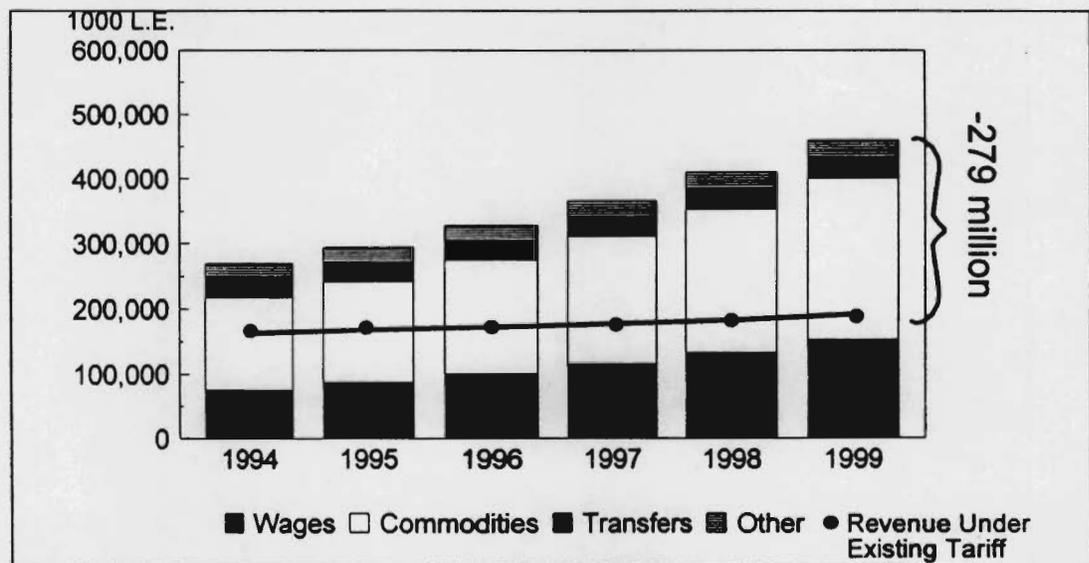


Figure 2.2.2 Financial Projection

2.1.3 Policy Formulation

Policies are the fundamental principles and standards which The GOGCWS would use to guide decision making and corresponding actions. The FV program has identified the following macro-level financial policies which would empower GOGCWS managers to move towards a more financially viable organization:

- Water Tariffs Based on Cost of Service
- Financial Assistance Provided to Qualifying Low-Income Consumers
- Financing of Existing Capital Related Expenses
- Capital Financing for Expansion
- Meter Installation
- Customer Classification of Multi-Use Buildings
- Costs to be Recovered by Tariffs
- Disconnect Policy
- Separate Operating and Capital Budgeting Procedures

- **Balanced Budgets**
- **Controlled Spending**

Tracking the move towards financial viability will be accomplished with the following measurable and objective performance indicators:

- Operating Profits (losses) / Total Revenues
- Operating Revenues / Operating Expenses
- Revenue Collected / Revenue Billed
- Water Production Billed / Water Produced
- Arrears Collected / Total Arrears
- Actual / Budgeted Operating Expenses
- Revenue / Employee
- Non-Household Connections / Total Connections
- Water Consumed m³ / Government Accounts

2.1.4 Priority Activities and Plans for Phase 2

Financial Performance Improvement

Verification of the historical financial data and a forecast of future financial conditions, provide the basis for developing a plan of action to improve financial performance. A four step plan has been identified for implementation in Phase 2 of the project:

- (1) Develop a cost reduction plan.
- (2) Identify and adopt performance indicators to track financial status.
- (3) Develop financial policies for adoption and implementation which would empower GOGCWS managers to make the changes needed to reduce cost and meet performance indicator targets.
- (4) Establish long range financial planning with the aid of a financial planning computer model.

Cost Reduction Plan

Financial forecasts indicate that not only will substantial increases in tariffs be required but **changes in administrative and operational procedures and policies** also must be adopted and implemented. The current political climate suggests any increase in tariffs will not be approved without sound financial justification. Justification for a proposed budget and the corresponding tariff adjustment must include a reliable history of expenditures combined with a cost reduction plan. The cost reduction plan will illustrate GOGCWS's commitment to operating an efficient organization.

In establishing the initial cost reduction plan, the operating cash requirements of the fiscal year 1992-1993 final accounts were studied to determine in what areas potential cost savings could be realized. As shown in Figure 2.1.3, current expenses can be subdivided into

six major categories. Three areas where savings would have a significant impact on total costs are wages, power and chemicals.

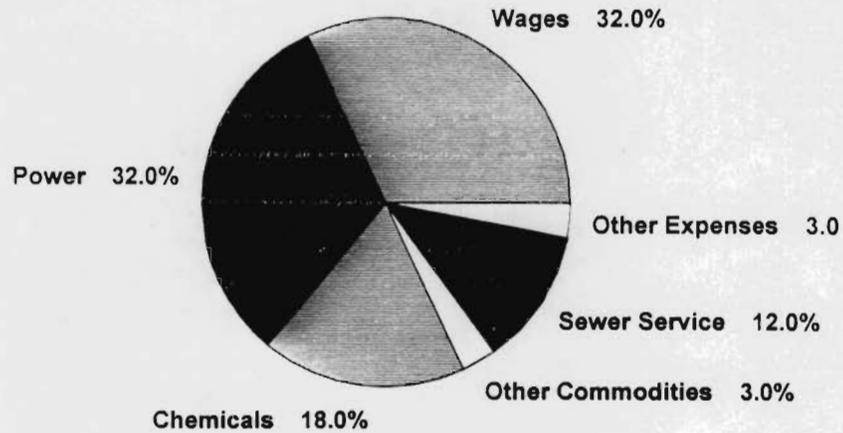


Figure 2.1.3 Allocation of Costs

To minimize the impact on existing employees, costs associated with wages can be reduced using one of two techniques: a hiring freeze or a budget cap. Power costs, the bulk of which are associated with the purchase of electricity, can be decreased with operational (power consumption at the plants and pump stations) and administrative (electric tariff structure) changes. More effective use and purchase of chemicals could reduce current chemical expenses.

Performance Indicators

Tracking the impact of the cost reduction plan, financial training, changes in operational procedures, and related recommendations will be accomplished with objective and measurable financial viability performance indicators. Appropriate indicators have been identified, discussed and approved by the team leader, PIU and FV counterparts. For each proposed indicator, a ratio, trend, frequency, and target was identified. In addition, historical indicators, based on year end figures for 1990-1991 through 1992-1993, provided the base for determining the 1994-1995 performance indicator benchmarks.

Financial Policies

Policies are the fundamental principles and standards which The GOGCWS would use to guide decision making and corresponding actions. The FV program has identified eleven macro-level financial policies which would empower GOGCWS managers to make the changes needed to reduce costs and meet performance indicator targets. The policies deal with social, institutional, and financial needs of The GOGCWS. Specific topics addressed include .but are not limited to, water pricing, capital financing, customer classification and budgeting procedures.

Financial Planning Computer Model

Historically GOGCWS has functioned year-to-year. Each year a budget is adopted and implemented. At the end of the year final accounts are prepared. The impact of the past years' financial performance are not incorporated in the upcoming year budget. To achieve sustainable improvements in financial performance, The GOGCWS must begin multi-year financial planning. To assist The GOGCWS in long range planning, a financial planning computer model was developed. The model is PC based using Microsoft Excel software as the framework for the interlocking spreadsheet files. A user-friendly menu-driven format allows the user to make cash flow projections with corresponding unit costs over a six year forecast period. The model has been demonstrated to the PIU, the FV counterparts and USAID.

In order to implement a financial performance improvement plan, the following priority tasks will be undertaken in Phase 2 by the FV program team:

- Assist GOGCWS staff in developing a credible 1995-1996 budget for presentation to the Ministry of Finance. The development of a reliable historical expenditure pattern, the implementation of the cost reduction plan, and the use of the financial planning model will provide the basis for marketing the proposed budget to MOF.
- Develop and implement a computerized tracking system for performance indicators.
- Assist in the development, adoption, and implementation of financial policies.

FINANCIAL VIABILITY : SCHEDULE OF PROGRAM OUTPUTS BY QUARTER

KEY OUTPUTS	YEAR 1				YEAR 2				YEAR 3				YEAR 4		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
1. Mobilization - Program outline approved	■														
2. Baseline Data - Financial Audit Completed - Fixed Assest Inventoried - Service Areas Defined - Systems Documented - Financial Projections Completed		■	■												
3. Policy Formulation - Macro-Level Finance Policies Defined - GOGCWS Finance Policies Defined - Performance Contract - Alternative Revenues Identified - Policy Tracking System Established - Reporting System Implemented	■	■	■	■			•				•				•
4. Performance Planning/Model Programs - Annual Financial Framework Defined - Computerized Financial Models Developed - Annual Cost Reduction Plan Developed - Commercial Systems Defined - Twinning Standards & Purpose - Design ESL program (MD)			■	■	•	•	•	•			•				•
5. Plan Management Monitoring - Systems & Procedures Defined - Management Monitoring Systems Computerized - Financial Performance Reports Issued					•	•	•	•	•	•	•	•	•	•	•
6. Strategic Planning - Strategic Planning Workshop Conducted - Strategic Plan Promulgated - Plan Monitoring Systems Defined - Plan Monitoring Reports Issued						•	•		•		•				•
7. System Development & Implementation - Financial Systems Regulations Defined - Integration Plan Prepared - Specifications Prepared; REF Issued - Vendor Selected - System Delivered - Test Completed - Intial Training Completed - System Operating (1998/99 fiscal year) (post MTSS)					•	•	•		•	•	•	•	•	•	•
8. Substantiality Planning - Plan Prepared - Final Financial Report Issued														•	•

2.2 Phase 1 Summary of the Management Development Program

2.2.1 Mobilization of Personnel

A major highlight of the Management Development (MD) program first year activities was the recruitment, interviewing and selection of a highly qualified team of management development experts and specialists. The MD program mobilized two expatriate and three Egyptians professional staff during Phase 1. This represents 37 person months of professional staff time, 65% of the professional staff authorized for Phase 1. Table 2.2.1 summarizes this level of effort.

Table 2.2.1
Mobilization Rate for the Management Development Program

POSITION	INCUMBENT	LEVEL OF EFFORT		CHANGE
		Planned	Actual	(+ / - Months)
EXPATRIATE				
Program Manager	Vince Niemeier	12	12	0
Training Planning Specialist	Howard Sokoff	12	10	-2
Subtotal		24	22	-2
EGYPTIAN				
Deputy Manager	Hussein Talaat	12	12	0
Organization Development Expert	Farouk El Sheikh	9	1	-8
Personnel Specialist	Muftah Galal	6	2	-4
Training Systems Specialist	Mostafa Shoukry	6	0	-6
Subtotal		33	15	-18
Total		57	37	-20

Counterparts

Eleven counterparts representing the administrative, management, training and personnel functions of the GOGCWS have worked closely with the MD program to complete the tasks described below. One of the accomplishments of the MD program was securing the appointment of an Acting General Director of The GOGCWS Training Department.

2.2.2 Baseline Data Collection

Key Outputs

The MD program targeted the following outputs to be accomplished during Phase 1:

- Review the GOGCWS Organizational Structure (Tanzeem).
- Review Laws & Decrees which established The GOGCWS
- Review James Montgomery Consulting Engineers and Black and Veatch International Reports concerning The GOGCWS
- Draft Decree for Reorganization of The GOGCWS
- Institutional Audit

The MD program reviewed the GOGCWS's organization structure (tanzeem) and produced a computer based organization chart which was distributed to the MTSS program managers and their staffs. This valuable resource has been used frequently by MTSS and GOGCWS staff during baseline data collection.

A review of the GOGCWS decree was completed. P.D 1638 of 1968 provided the GOGCWS with a broad mandate to develop the policies and recommend the management procedures needed to provide water to Greater Cairo. An in-depth assessment of the legal foundation of the GOGCWS will be completed after the legal/institutional assessment component of the institutional audit has been completed. A draft decree for reorganization of GOGCWS was postponed to Phase 2 of the MTSS work plan in order to reflect the policies and strategies developed in phase 2.

A comprehensive review of past studies and reports concerning The GOGCWS was completed by the MD program. Although recommendations and findings of these reports were well thought out and presented, few were implemented by The GOGCWS. As an alternative, the MTSS project is recommending a new "inside out" approach. Under the inside out approach to organization development, key GOGCWS managers are provided the information, techniques and goals needed to design and implement plans, policies and strategies to improve performance.

An Institutional Audit was completed with the exception of a review of applicable GOE agencies having jurisdiction over GOGCWS. This legal and institutional review is scheduled to be completed during Quarter 1 of Phase 2.

Management Survey and Seminar

A major highlight of Phase 1 was the design, development, implementation, and presentation of the findings of the Management Survey to the GOGCWS Steering Committee and senior and mid-level managers at a Management Survey Seminar held on 14 June 1994.

The primary objective of the management survey questionnaires was to obtain specific knowledge, skills and attitudinal information to use in the design of the MD program and Modules of Instruction (MOI) planned for implementation during Phase 2.

English as a Second Language (ESL) Program

The MD program assisted The GOGCWS to identify the English language needs of the organization and to investigate options for providing ESL instruction. MTSS facilitated the coordination of ESL screening and placement among the GOGCWS, American University in Cairo (AUC) and USAID. This year over 100 GOGCWS personnel were identified for ESL training and 14 are currently enrolled at The AUC.

Training Policy

The MD team worked closely with the Acting General Director of the GOGCWS Training Department to formulate a draft training policy for the organization. This draft policy is being used as a model for the first policy formulation focus group. Approval of this

policy will lead to the development of a training system and organization within the GOGCWS.

MD Program Model

A model of the general approach which the MD program will follow is depicted in Figure 2.1.2, below.

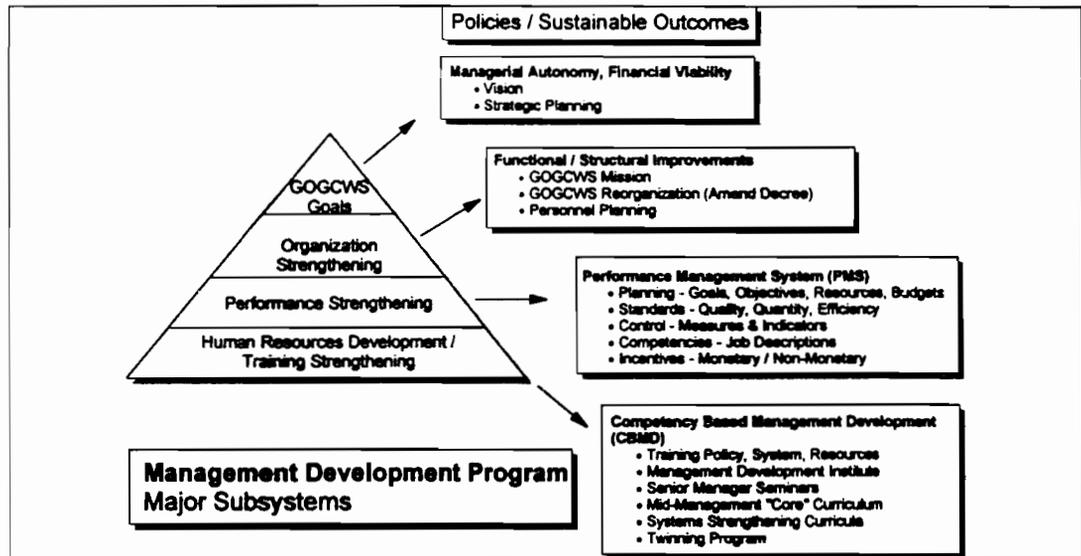


Figure 2.1.2

2.3.1 Policy Formulation

The MD program identified three performance indicators during the first year of the project to measure performance in the areas of GOGCWS management training and labor force productivity. The indicators recommended by the MD program are:

- Management Training Courses Developed
- Management Trainees Actual/Management Trainees Planned
- Revenue/Employee

The MD program will assist The GOGCWS in the formulation of the following policies:

- Policy for Policy Formulation
- Training (Management, Administration, Professional, Technical)
- Educational Travel
- GOGCWS Organizational Structure
- Top Management Coordination and Decision Making
- Configuration of the GOGCWS Board of Directors
- Empowerment, Decentralization and Delegation of Authority
- Performance Management and Incentives
- Manpower Planning Based on Revenue per Employee
- Retraining, Recruitment, Hiring, Promotion, Retirement

2.2.4 Priority Activities and Plans for Phase 2

The major tasks to be accomplished during Phase 2 include the following:

- Develop Legal/Institutional Report / Conduct Workshop
- Complete Policy Formulation Module
- Institutionalize GOGCWS Policy Making Process

MANAGEMENT DEVELOPMENT: SCHEDULE OF PROGRAM OUTPUTS BY QUARTER

KEY OUTPUTS	YEAR 1				YEAR 2				YEAR 3				YEAR 4		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
1. Mobilization - Program outline approved	•														
2. Baseline Data - Review organizational structure (Tanzeem) - Review laws/decrees to establish GOGCWS - Review JMM & BVI-ATK reports - Draft Decree for reorganization of GOGCWS - Institutional audit report completed	•														
3. Policy Formulation - Specify criteria to select counterparts - Select MD counterparts - Complete HRD policy statement (draft)	•														
4. Performance Planning/Model Programs - Mission statements completed - Develop functional organizational structure - Update job descriptions (JMM) - Develop career paths for job groups - Identify job requirements (MD) - Perform job task analysis (MD) - Develop job performance measures/(MD) - Design ESL program (MD) - Twinning program of study report (MD) - Design training of trainers (TOT) program - Develop training CTR specification (interim) - Compile training CTR equipment list (interim) - Define TMIS requirements - Manpower development program report (Training Plan) - Annual performance review			•	•											
5. Strategic Planning (SP) - Coordinate MIS inputs - Conduct SP workshop/seminar - Intergovernmental coordination of SP - Complete strategic plan for GOGCWS	•	•	•	•	•	•	•	•							
6. Systems Development and Implementation - Select vendor (H&S) for TMIS (Prototype) - Develop MD courses - Implement TOT program - Implement MD courses - Implement ESL program - Implement twinning program of study - Training evaluation reports - TMIS prototype implementation (H&S)			•	•	•	•	•	•	•	•	•	•	•	•	•
7. Sustainability Planning - Action plan report															•

2.3 Phase 1 Summary Of The Technical Support for Operation and Maintenance Program

2.3.1 Mobilization

Although the MTSS Project began 1 July 1993, the first Technical Support for Operation and Maintenance Program (TSOM) staff member was mobilized on 12 September 1993. The Program Manager joined the project on 9 January 1994; the Deputy Program Manager on 3 April 1994. During Phase I the TSOM program mobilized a total of two expatriate and four Egyptian professional staff. This represented 28 person months of professional staff time, 50% of the total authorized person months in the TSOM work plan. Table 2.3.1 below summarizes this level of effort.

Table 2.3.1
Mobilization Rate for the TSOM Program

POSITION	INCUMBENT	LEVEL OF EFFORT		CHANGE (+ / - Months)
		Planned	Actual	
EXPATRIATE				
Program Manager	Don Houser	11	5.7	-5.3
Utility Operations Specialist	vacant	9	0	-9
Water Conservation Specialist	vacant	6	0	-6
Water Quality Specialist	Sher Singh	0	5.5	5.5
Operations & Maintenance Training Specialist	vacant	6	0	-6
Subtotal		32	11.2	-20.8
EGYPTIAN				
Deputy Manager	Kamal El-Shansury	6	2.9	-3.1
Operations Management Specialist	Ahmed Allam	6	9.6	3.6
Water Works Engineer	Ali Fouad	6	2.4	-3.6
Operations & Maintenance Specialist	vacant	6	0	-6
Operations Engineer	Ahmed Hamdy	0	1.9	1.9
Subtotal		24	16.8	-7.2
Total		56	28	-28

Counterparts

The GOGCWS Chairman nominated 19 counterparts for the TSOM program. These counterparts represented the Waterworks, Networks and Projects Departments of the GOGCWS. They have been the source of most of the data collected during Phase 1.

2.3.2 Baseline Data Collection

During the first year of the MTSS Project, TSOM program staff collected data on GOGCWS waterworks and networks facilities, including size; location; equipment; chemical and electrical usage; pipeline breaks, etc. Specific outputs, as listed in the MTSS Work Plan, included:

- Water Audit
- System Map of Water Works and Network Maintenance Center locations
- System Statistics

A Baseline Data Report was prepared by the end of Phase 1. It summarizes and analyzes data collected regarding GOGCWS facilities (location, production, maintenance, water quality) and organization. Among the major findings of the report are the following:

1. It is currently not possible to accurately measure, monitor, and control water treatment processes due to the lack of operating meters and scales at the waterworks facilities. As shown in the following table, only 43% of the water produced by GOGCWS is accurately measured.

Table 2.3.2
Status Of Meters At Waterworks Facilities

WATER WORKS FACILITY	1992/93 PRODUCTION (m ³ /YEAR)	EFFLUENT METER		SUBTOTAL (m ³ /year)	SUBTOTAL (%)
		present	operational		
Rod El Farag	279,489,400	Y	Y	533,209,300	43%
Fostat	121,516,100	Y	Y		
Embaba	113,203,100	Y	Y		
El Marg	19,000,700	Y	Y		
Mostorod	278,216,450	Y	N	589,062,770	47%
Ameryia	118,083,030	Y	N		
Gezirhet El Dahab	104,353,800	Y	N		
Roda	52,930,830	Y	N		
Tebeen	35,478,660	Y	N		
Giza	48,782,600	N	N		
Helwan	28,715,560	N	N		
Kafr El Elw	27,778,920	N	N	128,872,370	10%
Maadi	20,867,000	N	N		
Shobra El Kheima	2,537,900	N	N		
Toura El Asmant (out of service)	190,390	N	N		
Total	1,251,144,440				

2. Personnel from the Networks Central Department are so busy repairing pipeline breaks and service connections, they seem to have insufficient time to spend on preventive maintenance activities. Figure 2.3.1 shows the total pipe repairs reported for 1992/93 for each Networks Maintenance Center.

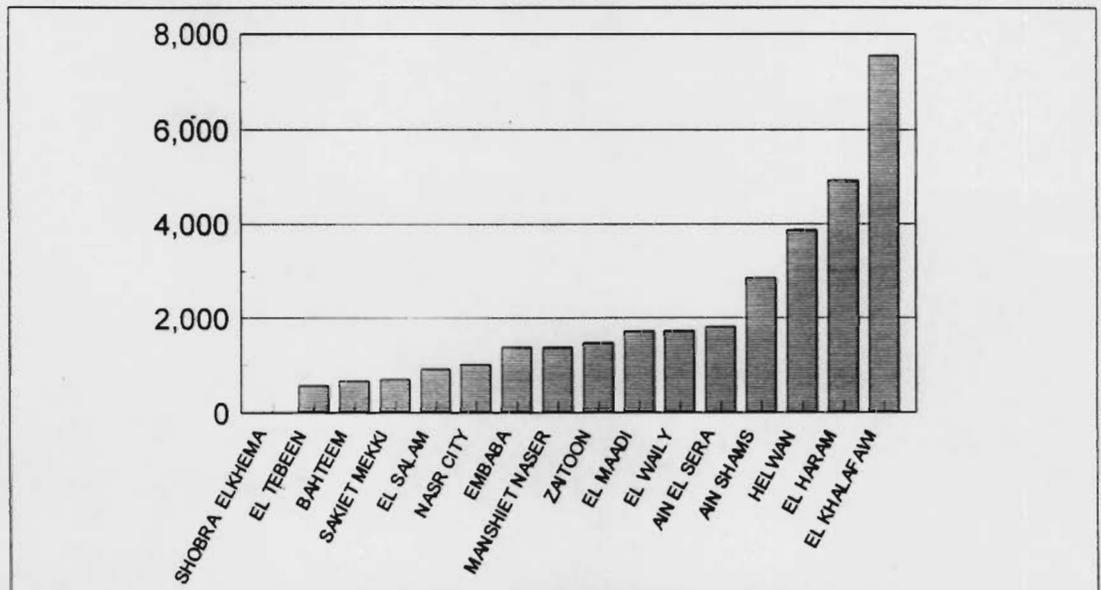


Figure 2.3.1 Pipe Repairs per Maintenance Center

3. The GOGCWS has limited control over the type of equipment and treatment processes funded by foreign loans and grants. Equipment from many different countries complicates maintenance management. Table 2.3.3 lists the country of origin for major equipment at the 16 GOGCWS waterworks stations (treatment plants and well fields). The GOGCWS should consider either consolidating equipment at its waterworks facilities or implementing a flexible standard which will balance the interests of the donors with those of the organization.

Table 2.3.3
Country of Origin for Major Equipment

Water Works	Design Capacity 1000 m ³ /day	Source of Equipment								Total
		Czechoslovakia	Egypt	England	France	Germany	Japan	USA	other	
TOURA EL ASMANT	not in service									
SHOBRA EL KHEMA	under construction				X					1
MAADI	70	X		X		X		X		4
KAFR EL ELW	80			X	X					2
HELWAN	120	X				X				2
TEBEEN	100	X								1
EL GIZA	120		X	X		X	X			4
EL RODA	110	X								1
GEZERT EL DAHAB	215	X	X				X			3
EMBABA	300				X				Austria	2
AMERYIA	420	X	X				P		Austria	4
FOSTAT	600				X					1
ROD EL FARAG	750	X		X	X			X		4
MOSTOROD	835				X	X				2
Well Fields										
BAHTEEM	15					X		X		2
EL REMAIA	55					X		X		2
JOLLIE VILLE	20					X		X		2
EL MARG	120					X		X		2
Total	3930	7	3	4	6	6	3	6	2	

Additional data collection, systems documentation, and process analysis work will be undertaken during Phase 2. More detailed maps will be available at that time to enable the TSOM program to fully analyze the management implications of the current physical layout of the facilities.

2.3.3 Policy Formulation

TSOM staff proposed performance indicators (PI) to be used by top management to monitor operations and maintenance. Several of these were included in the list of PI's the GOGCWS Chairman has endorsed as the basis for performance improvement. Following are those PI's with one or more terms (in *italics*) related to the TSOM Program:

- Water Production Billed/*Water Produced*
- *Preventive Maintenance Work Orders (Networks)*
- *Non-Household Connections*/Total Connections
- *Working Meters*/Total Accounts
- *Water Consumed (m³)*/Government Accounts

The TSOM Program has identified the following key policy areas which would assist the GOGCWS to move closer to the financial viability and managerial autonomy objectives it has endorsed. The candidate policy areas are derived from an analysis of the baseline data.

- electricity consumption
- management/decentralization
- empowerment of plant managers
- delegation to middle managers
- percent water loss
- plant productivity
- meter utilization
- control of system growth
- standards of design and construction

With the exception of "control of system growth", these recommended policy areas are internal, i.e., requiring only the approval of the GOGCWS Board of Directors and Governor. TSOM staff has developed basic concepts for each specific policy. The next step is to organize and conduct a review in accordance with The MTSS project's policy formulation process.

2.3.4. Priority Activities and Plans for Phase 2

During Phase 2 the TSOM program will devote its major efforts toward assisting GOGCWS improve network effectiveness by upgrading the quality of repairs. This can increase the quantity of water The GOGCWS delivers to its customers without increasing water production. TSOM program staff will also work with The GOGCWS waterworks managers to decrease operating costs by reducing chemical consumption and electrical power usage. Although these efforts can increase revenues through decrease costs, they will not be enough to enable GOGCWS to achieve financial viability without changes to the tariff schedule.

Specifically, TSOM staff will continue to work with the designated GOGCWS personnel to accomplish the following during Phase 2:

Waterworks Plant Managers

- Improve record keeping of chemical usage and electric consumption
- Repair and calibrate source and production water meters
- Perform preventive maintenance activities

Networks Maintenance Center Chiefs

- Conduct a pipeline break survey
- Provide training on pipeline break repair procedures
- Implement a valve exercise program

Projects Department Engineers

- Develop design guidelines for new facilities
- Complete cost/benefit study of power factor improvements
- Develop general specifications for pipeline construction

Central Department Managers for Waterworks and Networks

- Review staffing levels at individual facilities and recommend adjustments
- Determine equipment needs for possible funding by USAID
- Conduct policy formulation workshop

Additionally, in accordance with the MTSS Work Plan, during the first quarter of Phase 2 the TSOM Program will develop outlines for a Certification Program for GOGCWS Technical staff and for a public education program.

TECHNICAL SUPPORT FOR O & M: SCHEDULE OF PROGRAM OUTPUTS

KEY OUTPUTS	YEAR 1				YEAR 2				YEAR 3				YEAR 4		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
1. Mobilization -Personnel -MTSS Project staff -GOGCWS counterparts - Program Outline Approved		•	•	•											
2. Baseline Data - Water Audit completed - System Map-Statistics Completed - Policies Documented - Historical Budgets reviewed Bab 1 & Bab 2) - Evaluate Metering Policy-cost/benefit estimated - Evaluate Water Conservation			•	•											
3. Policy Formulation - Identify policies - GOGCWS policies defined and agreed to - Performance Agreed to: . % water loss . plant productivity . reduce illegal connections . meter Revisions - Public Education Program - System Expansion Feasibility Development - Develop O & M certification program		•	•	•											
4. Performance Management & Monitoring - Annual Budget Defined - Develop Computerized Statistical Data Systems - Performance Evaluation - Monitoring Reports - Task 3 - Twinning Standards & Purpose															
5. Strategic Planning - Strategic planning Workshop - Strategic Plan Presented - Plan Monitoring System - Monitoring Reports															
6. System Development & Implementation - Evaluate Requirements for Systems -Task 4 - Identify & Specify Software Hardware - Vendor Selected - System Delivery - Tests Completed - Work Order System Operating															
7. Sustainability Planning - Action Plan - Final Report															

2.4 Phase I Summary of The Materials Management and Procurement Program

2.4.1 Mobilization

The Materials Management and Procurement Program (MMP) members were assembled and began full operation in December 1993. This program was rescheduled to begin approximately 6 months early in order to be in phase with the other MTSS programs.

The MMP program mobilized one expatriate and two Egyptian professional staff during Phase I. This represented 27 person months of professional staff time, 112 % of the total authorized person months. Table 2.3.1 below summarizes this level of effort.

Table 2.3.1
Mobilization Rate for the Materials Management & Procurement Program

POSITION	INCUMBENT	LEVEL OF EFFORT		CHANGE (+ / - Months)
		Planned	Actual	
EXPATRIATE				
Program Manager	Buck Osteen	3	7	4
	Subtotal	3	7	4
EGYPTIAN				
Deputy Manager	M. H. Wardany	12	12	0
Inventory Systems Specialist	Ismail	9	8	-1
	Subtotal	21	20	-1
	Total	24	27	3

2.4.2 Baseline Data Collection

According to the approved MTSS work plan, the MMP program was expected to prepare the following outputs:

- Provide Quantities and Values for Inventory
- Review Current Policies and Procedures
- Evaluate Upgraded Rod El Farag Systems

Baseline data was gathered from many sources including GOGCWS counterparts and personnel, previous reports, and site visits to all the stores. After the collection of this information, a formulation of the condition of the GOGCWS inventory/stores system was developed.

The data collection revealed many positive aspects of the existing GOGCWS inventory/stores system which include, but is not limited to the following:

- Parts are issued in a timely and expedient manner.
- Generally, the inventory/procurement procedures provide good support to the GOGCWS organization.
- Only one water treatment plant (wtp) had a major piece of equipment inoperable due to the lack of proper spare parts.

The data also revealed that GOGCWS should focus on the following main items for upgrading the inventory/stores system:

- The issue of scrap/stagnant disposal should be addressed effectively.
- Use of proper storage techniques would prolong the life of parts in long term storage.
- A master inventory of all the spare parts should be established.
- There should be one committee or group responsible for naming and coding parts and inventory.

2.4.3 Policy Formulation

To emphasize the importance of GOGCWS making decisions based upon accurate data; the MTSS program has recommended that sixteen specific parameters or indicators be measured and reported to the Chairman on a regular basis during 1994-1995 fiscal year. The indicators chosen for the inventory/stores department are:

- Scrap/Stagnant stock sold or recycled
- Inventory items coded and computerized (at two WTPs)

The MMP staff will support GOGCWS personnel in producing and reporting the required indicator information. However, the ultimate burden for producing this information lies with GOGCWS.

To assist GOGCWS in maintaining continued improvement for its inventory/stores system, the following policies were proposed for consideration by the organization:

Materials Management:

- Master Inventory
- Proper Storage
- Foreign Equipment Standardization

Scrap/Stagnant Stock:

- Scrap/Stagnant Stock Disposal

Procurement:

- Improvement of Procurement Process

General:

- Stores' Personnel Compensation

In general, the cooperation and information provided by GOGCWS staff has been excellent. However, a pilot inventory project initiated at Rod El Farag WTP was delayed because the Rod El Farag staff felt that the compilation of Arabic stock item names was beyond their scope of work. They requested additional compensation for completing this assignment.

2.4.4 - Priorities and Plans for Phase 2

Future work of the MMP program will focus on assisting The GOGCWS to develop a master inventory, optimizing the procurement cycle and more effectively sell or recycle scrap and stagnant stock.

Listed below are additional items to be accomplished by the MMP staff during Phase 2:

- Monitor and assist GOGCWS with initiation of work on the performance indicators.
Verify that monthly progress reports are submitted to the Chairman.
- Provide twinning standards and describe program purpose.
- Conduct a strategic planning workshop for inventory/procurement management.
- Define requirements for a computerized MMP program.
- Continue inventory computer training.
- Prepare a strategic training plan.
- Procure lifting and handling equipment.
- Procure computer hardware and software for the Stores' Department.
- Install and initiate use of computer hardware and software.
- Prepare action plan.
- Prepare training report.
- Prepare final report.

MATERIALS MANAGEMENT & PROCUREMENT: SCHEDULE OF PROGRAM

KEY OUTPUTS	YEAR 1				YEAR 2				YEAR 3				YEAR 4		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
1. Mobilization - Program Outline Approved		♦													
2. Baseline Data - Inventory Quantities & Values - Review Current Policies & Procedures - Evaluate Upgraded Rod El Farag Systems			♦												
3. Policy Formulation - Identify Key Policies - Policies Defined & Agreed to - Performance Agreed To: . Value of Stock/Annual Demand . Supplies Budget vs. Total Budget - Procedures to Meet Policies Instituted				♦											
4. Performance Management & Monitoring - Annual Budget Defined - Develop Systems - Performance Evaluation - Monitoring Reports - Task 3 - Twinning Standards & Purpose						♦									
5. Strategic Planning - Strategic Planning Workshop - Strategic Plan Presented - Plan Monitoring System - Monitoring Reports					♦										
6. System Development & Implementation - Evaluate Requirements for Systems -Task 4 - Identify System - Task 4 - Vendor Selected - System Delivery - Tests Completed - Operating System						♦									
7. Sustainability Planning - Action Plan Report - Final Statistical Report															♦

2.5 Phase 1 Summary Of The Project Management and Administration Program

2.5.1 Mobilization & Project Support

A total of 3 expatriate specialist positions were filled and mobilized during phase 1. Additionally, an Egyptian Deputy Program Manager was appointed. Table 2.5., below summarizes this information.

Table 2.5.1
Mobilization Rate for the PM&A Program

POSITION	INCUMBENT	LEVEL OF EFFORT		CHANGE (* / - Months)
		Planned	Actual	
EXPATRIATE				
Program Manager	Robert Kirkman	5.5	5.5	0
Program Manager (acting)	Sher Singh	6.5	6.5	0
Publications & Reports Advisor	Kevin Haupt	10	7.5	-2.5
Computer Support Specialist	Greg Hecht	9	10.25	1.25
Subtotal		31	29.75	-1.25
EGYPTIAN				
Deputy Manager	Mohamed Zawawy	6	2	-4
Systems Design Specialist	vacant	8	0	-8
Subtotal		14	2	-12
Total		45	31.75	-13.25

The Phase 1 mobilization rate was 71%, the results of 31.75 person months of actual professional staff level of effort compared to the 45 months authorized in the work plan. Currently there is one staff position remaining to be filled. This position is specific to the microcomputers for management function.

Counterparts

Due to the nature of the PM&A program, counterpart contact activity for the first year was limited. However, a close relationship with the GOGCWS computer department was established. This relationship resulted in one of the MTSS project's first capital purchases for The GOGCWS.

Project Support

The PM&A group provided mobilization assistance for all project expatriates. This assistance included coordinating the shipping, certifications, clearances, moving, personal transportation, and other activities associated with the relocation of more than ten temporary and permanent expatriate staff and their families.

Other project support activities include the development of physical inventories, and tracking of all assets purchased for the project, including computers, office equipment, furnishings, and library materials. These inventories are currently in place and will be maintained over the life of the project.

Project Accounting

Systems and procedures for project accounting and reporting were implemented and improved during Phase 1. This included setting up local bank accounts, and instituting policies for the disbursement of petty cash funds to comply with the MTSS policies and contractual requirements.

Reports are now available on demand for any particular category of expenditure or individual expenditure item. Summary reports relating to invoice status and project expenditures are generated on a monthly and quarterly basis.

Office Setup

Two major project facilities were renovated and equipped during Phase 1. One (Ramses Street) is operational, and the other (Rod El Farag) is substantially complete. Both these facilities will be turned over to The GOGCWS at project completion, along with the computers, equipment, and library materials that they house.

Systems Implementation

To support the project work effort the PM&A installed an 18 node local area network (LAN), including a variety of peripheral hardware and application software.

Additionally, the PM&A program helped the GOGCWS expand its existing data processing system. The PM&A group supervised implementation of hardware & software additions to the GOGCWS VAX computer. The successful completion of these improvements has allowed the GOGCWS Data Processing Center to add personnel records, warehouse inventory, and customer billing information to its current operations. This upgrade will also make operational seventeen previously inoperable computer terminals .

Systems requirements for data collection of GOGCWS performance information were defined in Phase 1. Although the actual procurement of this equipment will not take place until the beginning of Phase 2, most of the work effort including flow charting the data flow has been completed. Actual procurement of the equipment is pending the allocation of funds by USAID.

Training

The focus for training has been on software applications specific to the MTSS Project work effort. To assist with the smooth implementation of the MTSS LAN, training was provided to members of the MTSS project staff including the PIU.

2.5.2 Baseline Data Collection

Major accomplishments for Phase 1 included developing the Microcomputers for Management requirements specific to each of the programs. This included identification of existing MTSS data sources, the data tools available for collecting information from these sources and development of a data collection plan. (see figure 2.5.1) The basic data collec-

tion plan addresses performance monitoring requirement and policy formulation for the GOGCWS. (see figure 2.5.2)

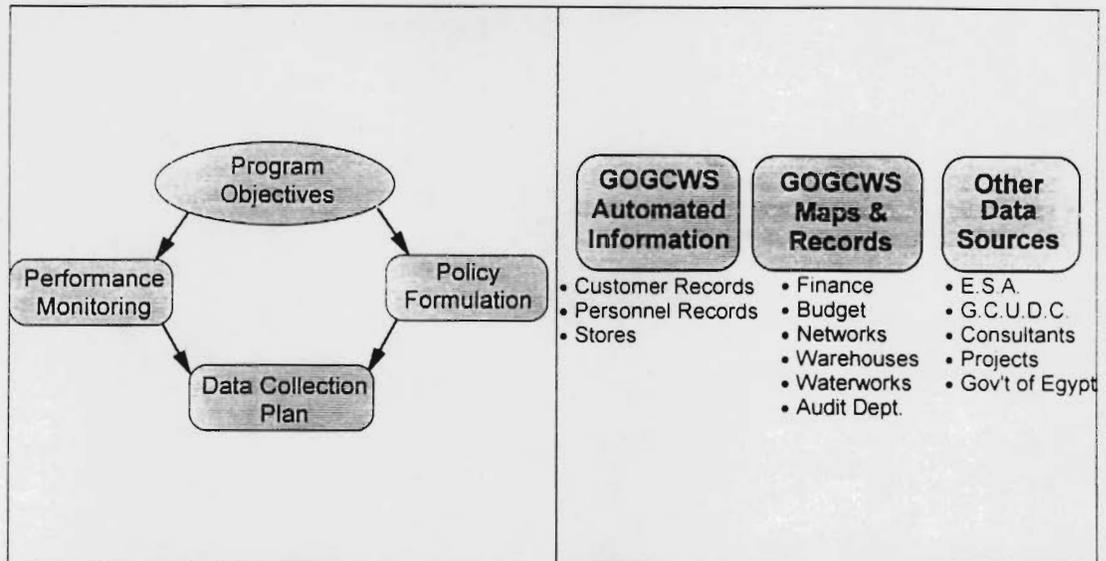


Figure 2.5.1 Systems Implementation

Figure 2.5.2 Existing Data Resources

Actual procurement of the hardware and software, database design, training, and systems implementation will commence in the first quarter of Phase 2.

2.5.3 Priorities and Plans for Phase 2

The PM&A program has substantially expanded and re-directed its scope over the past six months. The revised Phase 2 work plan reflects the following priorities:

1. Implementation of the MFM program by:
 - defining the HW/SW requirements and procuring and installing HW/SW at appropriate locations.
 - providing training, technical support and follow-up
 - expanding the MFM program to cover a growing list of Phase 2 performance indicators
2. Developing an urban data/mapping resource for the MTSS project and extending this capacity into the GOGCWS by the end of Phase 2.
3. Streamlining the invoice processing system through discussions, negotiations and administrative support. Both the GOGCWS and USAID will be involved in this effort.
4. Coordinating the overall MTSS commodity/procurement program and establishing systems and procedures for both in-country and overseas procurement.

5. Supporting the administration of the MTSS project, especially by assuring effective project operations at both the GOGCWS Headquarters and Rod El Farag locations.

PROJECT MANAGEMENT & ADMINISTRATION: SCHEDULE OF OUTPUTS BY QUARTER

KEY OUTPUTS	YEAR 1				YEAR 2				YEAR 3				YEAR 4		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
1. Mobilization/Administration															
- Office setup	•	•		•	•										
- Revised Program Workplan		•	•												
- Personnel															
- MTSS Project staff	•	•	•	•											
- GOGCWS counterparts	•	•	•												
- Reports (quarterly/annual)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
- Equipment Inventory			•	•	•	•	•	•	•	•	•	•	•	•	•
2. Baseline Data Collection															
- List of Reports & Library Setup		•	•			•				•				•	
- Project Budget		•	•			•				•				•	
- GOGCWS Computerization Survey			•												
- GOGCWS Base Map Identified			•	•											
3. Policy Formulation															
- Performance Tracking Reports (Microcomputers for Management)			•	•	•	•	•	•	•	•	•	•	•	•	•
4. Performance Management & Monitoring															
- Microcomputers Software		•	•			•				•				•	
- Graphics in External Reports		•	•	•	•	•	•	•	•	•	•	•	•	•	•
- Management by Objectives Policies			•	•	•										
- GOGCWS Employee Recognition						•				•				•	
- CAD Hardware/Software Setup				•	•	•									
5. Strategic Planning															
- Report 1996-2000											•				
6. System Development & Implementation															
- Train Computer System Operators				•			•				•				
7. Sustainability Planning															
- Action Plan Report											•				
- Final Statistical Report															•

Section 3: Conclusions and Recommendations

Each Quarterly Progress Report (QPR) submitted this year (i.e., QPR-1, QPR-2, QPR-3) included conclusions about the GOGCWS's capacity and then recommended specific actions to address the issues identified in the conclusions. No attempt was made to categorize or prioritize the list of conclusions or recommendations.

In this APR-1, we have categorized the previous conclusions, and several additional ones reached this quarter, as either strengths, weaknesses, opportunities or threats. The strengths and weaknesses apply to the internal organization of the GOGCWS: opportunities and threats relate to the external pressures which may have an impact on the capacity of the GOGCWS to function as an independent entity. For each category a list of recommended actions is provided.

3.1 Strengths

The conclusions reached about the strengths of the organization are listed below (according to the consecutive numbering sequence which the MTSS project is using as a continuous reference point).

1. Top management is committed to success and wants to see outputs and results. (QPR-1)
4. Computerization at GOGCWS has excellent potential to contribute to policy reform and improve GOGCWS management (QPR-1).
7. GOGCWS managers are receptive to change and eager to be provided with the authority and responsibility needed to contribute to strengthening the institution and improving its performance (QPR-3).
10. The GOGCWS can pursue financial viability through expenditure control, cost reduction, better utilization of resources and disposal of scrap and stagnant materials not only by tariff increases. (QPR-3)
11. The MTSS project Steering Committee and the GOGCWS Board of Directors provide the framework for building a management team at the GOGCWS. (APR-1)

To capitalize on the strengths of the organization the MTSS project recommended, and is implementing, the following:

- developed quantitative performance measures to enable management to objectively define results and take appropriate and timely action to improve non-performance;
- acquired computer equipment to upgrade The GOGCWS central computer and accelerated the "Microcomputers for Management" program design to enable the organization to analyze and report performance information under the terms of a Performance Agreement between The GOGCWS and BVI;

- conducted a policy formulation seminar and then obtained the commitment of top management to a policy approval process which will be implemented in Phase 2;
- initiated cost reduction planning activities for Phase 2 of the MTSS project and will assist the GOGCWS to control its costs and maximize the impact of the resources it has been provided; and,
- hired Coverdale Organization, Inc. to provide team building training in Phase 2 for the GOGCWS Steering Committee and the Board of Directors.

3.2 Weaknesses

Conclusions about the weaknesses of the GOGCWS include the following:

2. There is not yet a shared understanding of the meaning and implications of the terms, "managerial autonomy" and "financial viability": the MTSS project objectives. (QPR-1)
5. Much of the data maintained by the GOGCWS is inaccurate, inconsistent and, therefore, unreliable as a base for policy and strategy formulation. (QPR-2)
12. Many management and supervisory personnel have not had exposure to basic management principles and ideas. (APR-1)
13. There does not appear to be any long range planning or implied strategy for the organization. The GOGCWS does not understand its own value and importance. (APR-1)

To counter the weaknesses of the GOGCWS, the MTSS project took a number of initiatives. Some are still in the conceptual stage, some in planning, others are moving ahead and will be major elements of the Phase 2 strategy. They include:

- defining and then reinforcing, again and again, standard meanings for the terms ***financial viability***: "the ability of The GOGCWS to raise the revenues needed to cover recurrent costs" and ***managerial autonomy***: "the right to decide how, where, when and on what terms to offer services, after consultation with, but not under the control of outside agencies; and the right to determine how to utilize resources to achieve the maximum benefit";
- improving both the data required for sound management (including base maps of the service area) and the means of the GOGCWS to capture and report data by helping to define the requirements for computerization and then procuring during Phase 2 equipment for this purpose
- hiring Titus-Austin, Inc. to provide management training courses closely tied to performance improvement and policy reform at the new GOGCWS/MTSS training center at Rod El Farag which will open in July, 1994; and,

- providing for training in strategic planning and appointing a competent strategic planner with international experience to work with top management during Phase 2.

3.3 Opportunities

The external conditions or factors which the GOGCWS may be able to use to their advantage are:

3. Coordination and information-exchanges among urban water utilities appear to be very limited and not focused on policy. (QPR-1)
8. Cost recovery for operations and maintenance is attainable by the GOGCWS, but capital cost recovery is beyond the organization's capability. (QPR-3)
14. Public policy dialogues about water quality and water conservation - and the several projects which are advancing these objectives - could enable the GOGCWS to increase public awareness of the organization's contribution to economic development and the quality of urban life. (APR-1)

These opportunities in the external environment - either as a result of structural reforms, for example, or because of perceived changes in consumer awareness - were responded to by the MTSS project as follows:

- attempted to convene a Water Producers Conference by collecting comparative data about each of the 12 major water producers in Egypt. In Phase 1 this activity was not successful due both to lack of data and inadequate staff resources to allocate to this task. In Phase 2, as part of the urban data collection and statistical research activity, it is hoped that this effort at sector coordination can be achieved;
- policies concerning financing of capital facilities and the identification of alternative sources of revenue for capital financing are being developed in Phase 2. Communicating the message (among many) to the Governorate and outside agencies will be carried out under the subcontract with Coverdale Organization, Inc. through a series of quarterly workshops to be initiated in Quarter of Phase 2;
- coordination with other water related projects will be carried out in Phase 2 in order to maximize the public awareness of the services (and cost of services) provided by the GOGCWS

3.4 Threats

The external factors which threaten the viability and autonomy of The GOGCWS include the following:

6. The external boundaries of the organization's service area need to be redefined and policies and procedures need to be developed to regulate and manage growth within the service area. (QPR-2)

9. The primary technical problem of the GOGCWS - one that threatens the integrity of the entire system and which the organization must address as a precondition to financial viability - is the age and condition of the existing transmission network. Providing new or additional treatment capacity should be secondary to this objective. (QPR-3)

15. The organization structure, staffing and systems are not only highly fragmented and bureaucratic but the power to modernize and streamline the organization is in the hands of external agencies. (APR-1)

Dealing with the threats facing the organization is often very difficult. When equipment or other commodities can help to address the threat, the MTSS project can provide direct assistance. In many other instances the MTSS project can only provide support. The following recommended actions are being tried to promote change:

- retained Coverdale Organization, Inc. to convene workshops for outside agencies which affect the GOGCWS, including the Governorate (and perhaps Popular Council members) and the Ministry of Finance. Specific issues will include a package of key concerns including the service area boundary, capital financing alternatives and cost recovery;

- develop “no growth” policies and then define the requirements for equipment to be procured - and procure equipment - to help measure and monitor flows, repair main breaks, map system characteristics and other equipment to help concentrate attention on the networks rather than on new construction;

- the specific constraints imposed by external agencies on GOGCWS (relative to attaining the objectives of financial viability and managerial autonomy) will be defined in Phase 2 and then a new legal base will be developed as part of the strategic planning exercise.

8. Disconnect Policy. Water service will be disconnected from any customer who has unpaid bills for two consecutive billing periods.

9. Separate Operating and Capital Budgeting Procedures. Current operations and capital expenditures shall be budgeted and monitored independent of one another.

10. Balanced Budgets. Adoption of an operating budget shall include adoption of a tariff schedule adequate to support proposed expenditures.

11. Controlled Spending. Expenditures in excess of budgeted amounts are not permitted without a corresponding approval of funding for such excesses.

Twinning Standards and Purpose

The purpose of the proposed participatory training (twinning) is to expose participants to skills and knowledge not available within their own organization. A prerequisite for each participant is a level of skill and knowledge such that additional training will enhance the abilities of the participant. Based on a review of potential participants skills and knowledge, the FV program recommends that all potential participants complete the Financial Viability orientation training module prior to nomination for the twinning program.

4.2 Management Development Program

Program Purpose

The Management Development (MD) Program will increase the knowledge and skills of GOGCWS' middle and senior level managers to enable them to apply best commercial practices in the operation and control of the utility. The mid-level and senior level managers of Cairo Water will be taught job oriented basic skills (JOBS) addressing specific management competencies. Management competencies will be packaged in modules of instruction. After introduction of management competencies, implementation of learned competencies on the job will be emphasized. At all times, management training will focus on management competencies that are applied on the job. An important aspect of the MD Program is to provide GOGCWS with a commercial attitude and sense of service aimed at providing the best possible water supply to its customers at an affordable cost while minimizing further government subsidies.

Tasks, subtasks and activities during the quarter focused on 1) Egyptian staff mobilization and interviews of U.S. experts; 2) team building and consultation with GOGCWS counterparts; 3) preparation and presentation of the findings of Management Survey at a seminar on 14 June 1994; 4) preparation and presentation of the Policy Formulation seminar on 15 June 1994; 5) completion of the equipment list for the GOGCWS/MTSS training center with purchase requests and price quotes submitted; 6) facilitation of placement testing of approximately 100 GOGCWS employees at the American University Cairo (AUC) for English as a Second Language (ESL) training.

Egyptian staff mobilization was emphasized during the quarter with the positions of Organization Development Expert and Personnel Specialist filled. In addition, a candidate for Training Systems Specialist was identified and will begin work at the GOGCWS/MTSS training center when renovation activities are completed. Recruitment of U.S. experts for the position of Personnel Systems Specialist continued with several candidates being interviewed.

Team building with the GOGCWS training counterpart, Eng. Mahmoud Khalaf, and his training staff focused on coordination of placement testing of GOGCWS candidates for English language training at AUC.

A major highlight of the fourth quarter work effort was the preparation and presentation of two management seminars attended by 77 senior and middle level managers.

Support was provided in the renovation and furnishing of the villa at Rod El Farag Water Treatment Plant as a GOGCWS/MTSS training center by finalizing purchase requisitions for training aids and equipment.

During the quarter over 100 GOGCWS employees were recommended by GOGCWS for English language placement testing at the AUC. Placement testing was accomplished and 14 GOGCWS personnel are now in training at AUC. Subsequent testing and placement will enable additional GOGCWS personnel to upgrade their English language skills.

The specific MD program tasks, subtasks and a summary of activities for the quarter are identified in the following table. Key activities in the fourth quarter are in ***bold italics***.

Table 4.2.1
MD Program Tasks, Subtasks & Summary of Activities

TASKS-SUBTASKS	SUMMARY OF ACTIVITIES
<p>Mobilization</p> <ul style="list-style-type: none"> 1.1 Mobilize staff 1.2 Participate in WASH workshop 1.3 Define data needs 1.4 Prepare MD Program Outline 1.5 Interview potential candidates 	<ul style="list-style-type: none"> - Dr. Niemeyer mobilized & confirmed as MD PM - Managerial autonomy ratified as MTSS priority - Eng. H. Talaat appointed - H. Sokoloff appointed as Training Development Specialist - <i>F. El Sheikh appointed as Organization Development Expert</i> - <i>Dr. Galal appointed as Personnel Specialist</i> - <i>A candidate for the position of Training Systems Specialist was nominated</i>
<p>Baseline Data Collection</p> <ul style="list-style-type: none"> 2.1 Conduct Institutional Audit of GOGCWS 2.2 Review laws/decree and bylaws for establishment of GOGCWS 2.3 Review organizational structure (TANZEEM) as approved by CAO 2.4 Review HRD policy (if any) for: <ul style="list-style-type: none"> - analysis and classification of existing labor force by skill and wage level - labor force projection / needs 2.5 Determine GOGCWS ability to promulgate rules and regulations (hiring, promotion, training, certifications) 2.6 Determine GOGCWS ability to provide incentives (monetary and non-monetary) 2.7 Review top management, personnel and training system 2.8 Review JMM/BVI-ATK reports 	<ul style="list-style-type: none"> - Tanzeem review completed and report prepared - Legal review completed and report prepared - Prior reports reviewed and discussed . Mini report in development - Management Survey completed - Tanzeem input into computer - Personnel policies collected - Draft HRD policy statement developed and revised - Steering Committee briefed on results of Management Survey - HRD Policy ready for presentation to counterparts - Completed courseware specifications for training modules - Developed policy formulation methodology - <i>Prepared & submitted purchase requests for MDI equipment</i> - <i>Training Management Information System preliminary design drafted</i> - <i>ESL testing & training begun at AUC</i>
<p>Policy Formulation</p> <ul style="list-style-type: none"> 3.1 Establish policy requirements for managerial autonomy 3.2 Specify criteria for selection of MD counterparts 3.3 Negotiate specific MD performance targets for the following MD counterparts: <ul style="list-style-type: none"> - Senior level managers - Mid level managers - Twinning exchange program participants 3.4 Establish evaluation guidelines and strategies for determining effectiveness of MD in the job environment 3.5 Review and update job descriptions from JMM reports 3.6 Develop recruiting, selection, placement, performance evaluation and promotion practices 3.7 Develop career paths for each job group 3.8 Develop O & M certification programs 	<ul style="list-style-type: none"> - Counterpart selection criteria drafted - Training counterparts briefed on policy formulation approach / methodology - <i>Management Survey seminar conducted</i> - <i>Policy Formulation seminar conducted</i>

Task 1- Mobilization of Personnel

Long Term Personnel

1. After extensive recruitment, interviewing, and consultation the Organization Development Expert position was filled by Mr. Farouk El Sheikh, former Executive Program Director of the Management Development Program at American University Cairo (AUC). In addition he has worked on policy formulation and organization development matters in Alexandria for a USAID ISC project.
2. Dr. Mofteh Galal was recruited for the Personnel Specialist position and began work on 3 May 1994. Dr Galal is well qualified for the Personnel Specialist position since his doctorate is in personnel administration and he has over twenty five years of related experience with The Central Agency for Organization and Administration (CAOA).
3. A candidate for the Training Systems Specialist position who meets the education and experience requirements has been identified and purposed to the PIU.

Mobilization of the Training Systems Specialist position completes the Egyptian management development team.

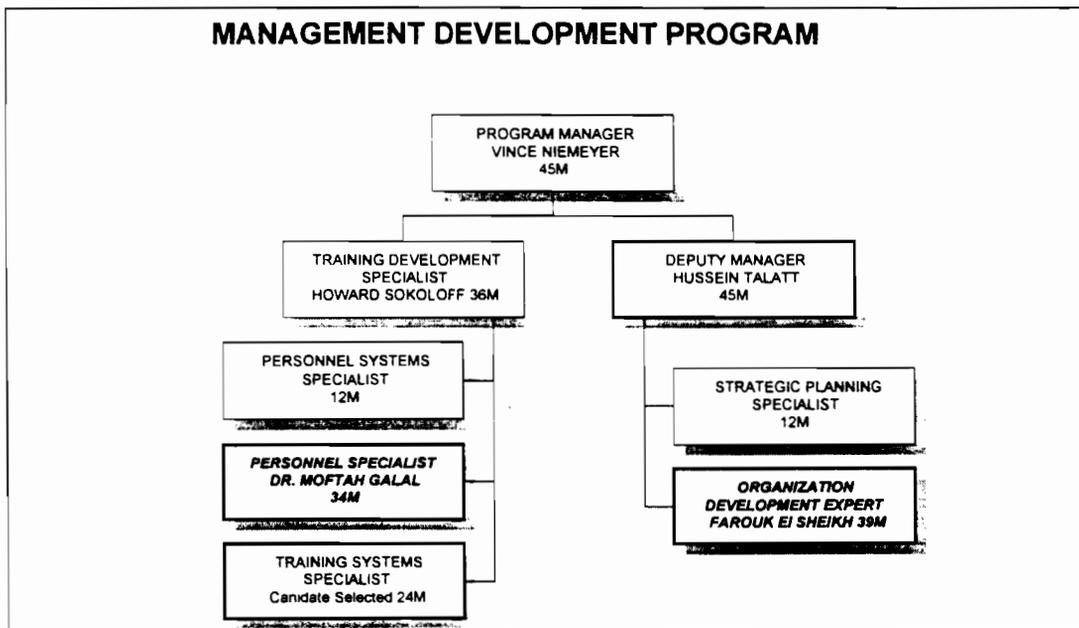


Figure 4.2.1

Counterparts

Counterparts from the GOGCWS Administration Affairs Central Department participated as group leaders in the Management Survey seminar roundtable discussions. Counterparts acted as recorders/reporters of the results from each small group.

Task 2 - Baseline Data Collection

A major component of the baseline data collection task was completion of the Management Survey. This culminated in the design, development and implementation of a Management Survey seminar to present survey findings to senior and mid level managers of GOGCWS. In the third quarter, survey results were presented to the GOGCWS Steering Committee. It was decided that survey findings needed to be presented to an expanded group of GOGCWS managers. Therefore, all participants who completed the survey plus top management were invited to the Management Survey Seminar.

A total of 33 senior and mid level GOGCWS managers attended the seminar. MTSS participants consisted of the five expatriate Program Managers with their respective Egyptian deputies in addition to the Team Leader. USAID representatives also attended.

The objectives of the Management Survey seminar were to have participants be able to:

- Describe the three management development questionnaires
- Describe the significant results of each questionnaire
- Explain how the results of the survey will help improve The GOGCWS
- Identify the major phases required to achieve progress towards managerial autonomy and financial viability

This one day seminar focused on presenting the objectives, description and findings of each of the three questionnaires designed for GOGCWS:

- Knowledge and Skill Survey
- Management Attitudes Survey
- Employee Performance Issues Survey

The results of each questionnaire were presented to the GOGCWS in large group sessions.

Communication during the Management Survey seminar was further facilitated by the hiring of two professional translators. The goal was to provide Egyptian and American participants translation of exactly what was said on a simultaneous basis. The two strategies for improved communication were greatly appreciated by participants and added to the overall success of the seminar.

While morning sessions focused on large group presentations, afternoon sessions were devoted to small group working sessions. Small groups were asked to complete work sheets related to survey results presented earlier in the day. Additionally, they were asked to present the results of their small group discussions to the entire group.

The small group activity was very effective in getting GOGCWS managers actively involved in examining the results of the management survey. Presentation of their analysis

to the entire group was accomplished in a very professional manner with related discussion augmenting the data feedback process. As a final activity participants were asked to complete a seminar evaluation form in order to determine the overall effectiveness of the seminar. Preliminary results indicated that the seminar accomplished its objectives and participants enjoyed attending.

Task 3 - Policy Formulation

A major activity of the fourth quarter work plan was the design, development and presentation of a Policy Formulation seminar. The Policy Formulation seminar was held on 15 June 1994, immediately after the Management Survey Seminar, to have the survey results fresh in the minds of GOGCWS managers as they considered policy requirements.

Simultaneous translation was provided to all participants throughout the one day seminar in English or Arabic.

The objectives of the Policy Formulation seminar were to have participants be able to:

- Define policy and policy formulation
- Identify the major steps involved in the policy formulation process
- Describe the major requirements and challenges of policy implementation
- Explain how policy reform will improve The GOGCWS

Forty five senior and mid level managers from The GOGCWS attended the Policy Formulation seminar. MTSS program managers and their Egyptian deputies also attended along with USAID representatives.

During the seminar the MTSS Project defined policies as:

“Fundamental Principles and Standards which Institutions Use to Guide Their Decisions and Actions.”

Characteristics of good policies were presented and seven policy making categories for the GOGCWS were defined. These seven categories are:

- | | |
|-----------------|-----------------|
| - Social | - Institutional |
| - Financial | - Personnel |
| - Technical | - Environmental |
| - Informational | |

Several example GOGCWS policies were also presented. A policy formulation matrix was given to the participants for use in developing policies for The GOGCWS.

In the afternoon, small group activity emphasized identification of high priority GOGCWS policies. Group reporting was accomplished by GOGCWS participants, utilizing simultaneous translation, which sparked lively discussion.

The final activity of the afternoon was completion of the seminar evaluation form. Participants took the time needed to adequately answer the questions. Results showed that the objectives of the seminar were accomplished and the participants were satisfied with the content presented.

Planned Accomplishments: July - August, 1994

The tasks to be accomplished for Phase 2 Quarter 1 will focus on finalization of a GOGCWS legal / institutional review, Human Resource Development policy formulation, completion of the GOGCWS training plan, and briefings on the objectives of GOGCWS Twinning Program.

4.3 Technical Support for Operation and Maintenance Program

Program Purpose

The Technical Support for Operation & Maintenance (TSOM) program encompasses the financial and managerial dimensions of operations and maintenance (O&M) as well as the conventional technical service delivery aspect of O&M. The program is concerned with planning, budgeting, monitoring, management and financial control of operating costs: efficient and cost-sensitive facility design; decentralized management of facilities; and staff capacity building. The purpose of the TSOM program is to assist The GOGCWS to understand and manage the multiple dimensions of O&M and to help develop the utility's capability to achieve the following objectives:

1. Reduce the amount of non-revenue water.
2. Develop design standards and financial analysis criteria for both new and upgraded water treatment and distribution system facilities.
3. Improve the efficiency and reduce costs of water treatment processes.
4. Improve the O&M and minimize costs of non-water facilities.

Table 4.3.1
Tasks, Subtasks & Summary of Activities

TASKS-SUBTASKS	SUMMARY OF ACTIVITIES
<p>Mobilization of Personnel</p> <ul style="list-style-type: none"> 1.1 Mobilize program manager 1.2 Mobilize utility operations specialist 1.3 Define data needs 1.4 Prepare TSOM program outline 1.5 Define staffing requirements 1.6 Identify counterparts 1.7 Inventory, collect and review past studies 	<ul style="list-style-type: none"> - JMM& BVI-ATK reports assembled - Data collection form designed - Additional counterparts named - Program Manager & Water Quality Specialist mobilized - Program Outline drafted - Deputy Program Manager, Waterworks Engineer & Operations Engineer mobilized - O&M Training Specialist nominated - Utility Operations Specialist proposed
<p>Baseline Data Collection</p> <ul style="list-style-type: none"> 2.1 Conduct water audit 2.2 Prepare detailed system map and facility inventory with production and distribution statistics (last 3 yrs.) 2.3 Define policies, standards, procedures and regulations relative to O&M 2.4 Analyze and report on operations budgets (Bab 1 & Bab 2) 2.5 Evaluate GOGCWS organization and management of O&M activities 2.6 Define quantify and evaluate the current metering approach. Identify alternatives and prepare cost / benefit estimates. 2.7 Quantify non-revenue water and identify conservation and leak detection methods 	<p>Collected data on:</p> <ul style="list-style-type: none"> -electricity & chemical usage for past 3 years -status of meters at the water treatment plants -diameter / length of network system -5 largest wtp's on a monthly basis - Investigated water conservation activities & plans - Investigated portable ultrasonic flow meter - Reviewed Networks Operations procedures - Completed baseline data collection - Published draft Baseline Technical Report - Presented results of Technical Report to Steering Committee

TASKS-SUBTASKS	SUMMARY OF ACTIVITIES
<p>Policy Formulation</p> <p>3.1 Identify technical and O&M policies which will enable GOGCWS to achieve financial viability and managerial autonomy objectives</p> <p>3.2 Recommend physical performance targets such as:</p> <ul style="list-style-type: none"> - % water loss reduction - plant productivity - % reduction in illegal connections - rate of installation of meters for large volume users <p>3.3 Identify standards for plumbing, facility design, domestic and commercial connections which reduce water wastage</p> <p>3.4 Design a public information plan and program</p> <p>3.5 Develop technical and financial feasibility criteria and a review procedure for system expansion</p>	<ul style="list-style-type: none"> - Developed performance indicators for water treatment, distribution, and quality - Identified policy topics - <i>Recommended targets for waterworks & networks performance improvements</i> - <i>Identified plumbing, facility design & construction deficiencies</i> - <i>Identified specific O&M deficiencies & recommended improvements</i>

Task 1 - 1 Mobilization of Personnel

Long Term Personnel

Engineer Kamal El-Shansouri was mobilized on 3 April as the TSOM Deputy Program Manager. Engineer Ali Fouad, the Waterworks Engineer, was mobilized on 17 April and Engineer Ahmed Hamdy, the Operations Engineer, on 10 May 1994.

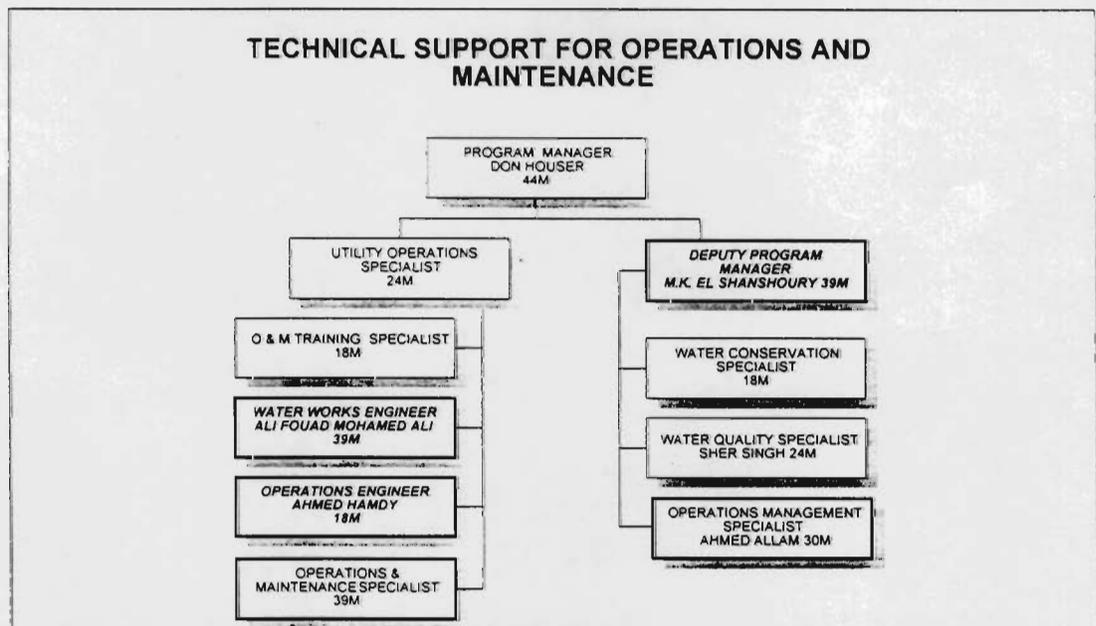


Figure 4.3.1

Recruiting continues for the Egyptian Operations Management Specialist. Numerous resumes have been reviewed and interviews conducted for the remaining unfilled expatriate

positions. A need for a Water Distribution System Engineer has been identified and a description of duties drafted for review and approval by the GOGCWS PIU. If approved, recruiting will begin next month.

Mr. Robert Peter was approved as the Operation & Maintenance Training Specialist and will begin work with the TSOM Program on 17 July 1994. Numerous candidates were interviewed for the position of Utilities Operations Specialist and a candidate has been selected and offered the position.

Counterparts

Individual meetings were held throughout the quarter with Waterworks Central Department and Networks Central Department managers for data collection purposes. A presentation was made to the TSOM counterparts from the Networks Central Department on 8 June to explain data collected; results of data analysis and preliminary findings; and to discuss the next steps.

3.3.2 Baseline Data Collection

Data on waterworks facilities, water quality and on the networks maintenance activities was collected through site visits, personal interviews and meetings with GOGCWS counterparts. Figure 3.3.2 "Networks Repairs per Month for 1992/93" and Figure 3.3.3 "Pipe Repairs by GOGCWS Maintenance Center" illustrate a major problem: so much effort must go into "emergency" (breakdown) maintenance that there is neither time nor resources for preventive maintenance in the networks.

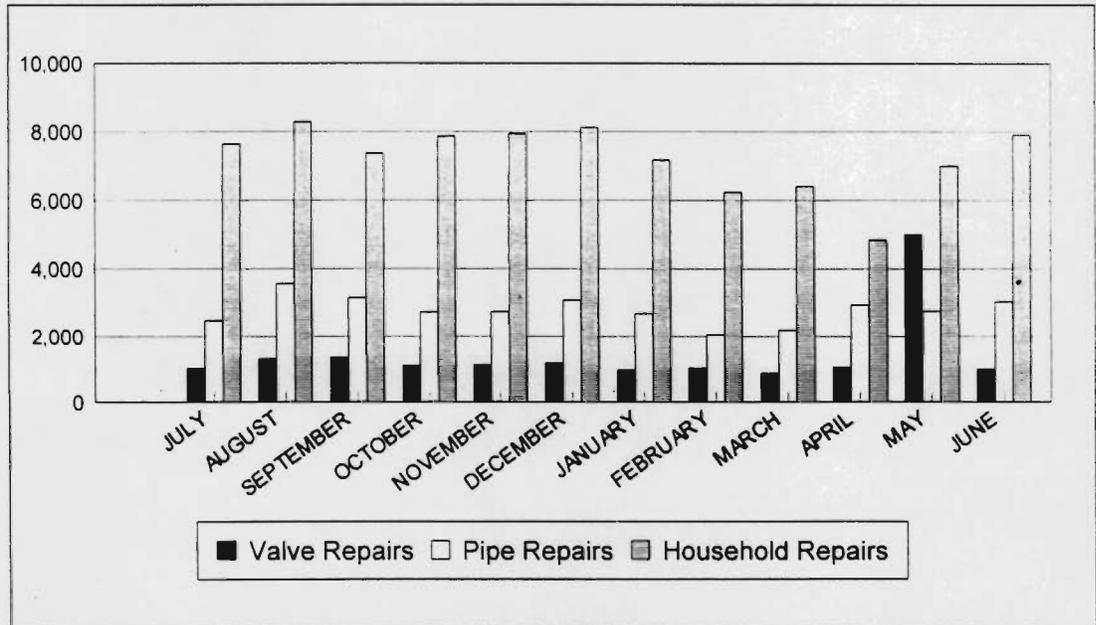


Figure 4.3.2 Network Repairs per Month

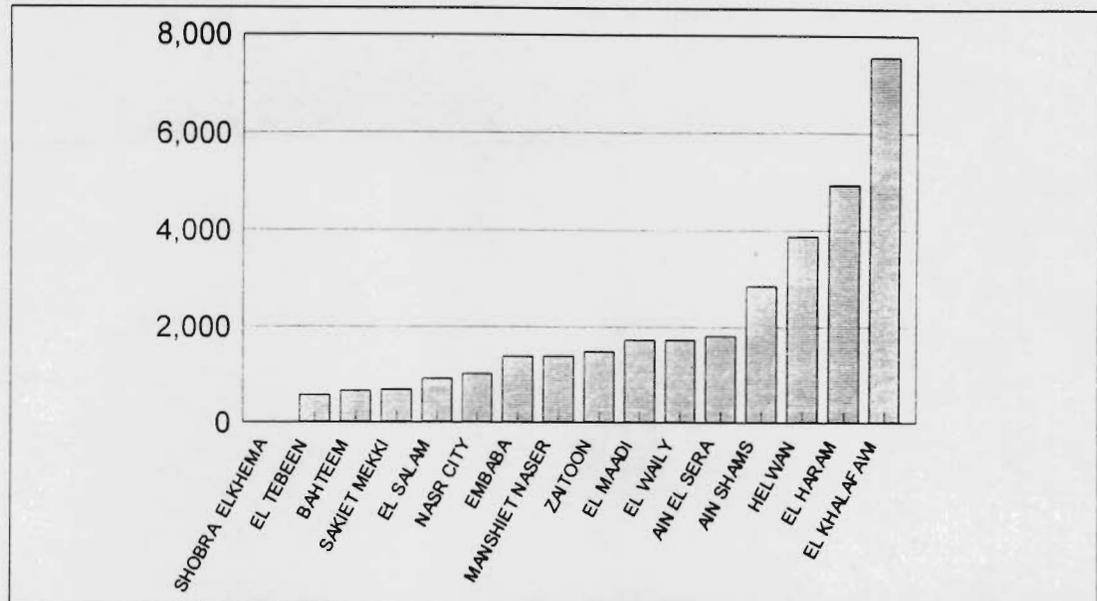


Figure 4.3.3 Pipe Repairs by GOGCWS Maintenance Center

Efforts to have the facility managers monitor water treatment plant performance with respect to chemical consumption and electricity used were not successful. Forms were not completed for April, May or June because the Waterworks Engineer handling this report was not available. The TSOM program believes it is important to collect and analyze this data because these two cost components can be directly influenced by efficiencies achieved as a result of improved performance of operations and maintenance activities. Next quarter we will try to convince GOGCWS to resume this data collection.

In June a retired GOGCWS technician was retained by the MTSS Project to train GOGCWS staff at waterworks facilities to calibrate source and production water meters. Four personnel (one electric technician, one mechanical technician, and two plumbers) of the Embaba Water Treatment Plant were trained to calibrate two source water meters and two filtered water production meters. A portable ultrasonic flowmeter was then used to confirm flows. The results were very successful. Accordingly, it is now planned to retain the technician to provide a similar service for the other water treatment plants. The lack of operating meters is a major difficulty in properly operating the treatment plants and in accurately measuring GOGCWS water production.

At the request of GOGCWS Eng. Mahmoud Abou Khalef, TSOM staff reviewed and commented on the DRAFT *Basic Design Study Report on The Project for Rehabilitation of Ameryia Water Treatment Plant (WTP)*. If approved, the Government of Japan will provide financing for Japanese design and construction companies to perform this work. This project illustrates a major dilemma confronting the GOGCWS, on the one hand is the opportunity to gain a new water treatment plant, on the other hand is the fact that equipment, and perhaps treatment process, will be different from its other plants. Differences in equipment means that the GOGCWS will require specialized training, a separate inventory of repair parts, a dependence on Japanese suppliers, and a requirement for foreign (ie "hard") currencies to procure spare parts. The TSOM Program will assist the GOGCWS to develop facility design guidelines during Phase 2 of the MTSS project.

The Baseline Data Report (draft) was submitted. Similar to other MTSS programs, The TSOM program found that data provided by GOGCWS is often incomplete and sometimes contradictory. Reasons for this include misunderstandings of language, lack of suitable measuring equipment (meters, scales, etc.), and different reporting periods.

A TSOM staff member is investigating improvements to the power factor at GOGCWS Water Treatment Plants and Booster Pumping Stations. The power factor is the ratio of the actual power passing through an electrical circuit to the product of the voltage times the amperage in the circuit.

A power factor of less than 0.9 results in penalty charges by the Cairo Electric Distribution Company (CEDC). In 1992/93 this penalty amounted to LE 5.2 million. On 2 May TSOM staff visited the CEDC Power Distribution Station (66 kV—11kV) at the Zenien Wastewater Treatment Plant and on 19 June the Embaba Wastewater Pump Station to observe the use of capacitors to improve the power factor. TSOM staff will do a feasibility study to retrofit existing GOGCWS facilities. The GOGCWS should insist that all future construction include a requirement for installation of power factor improvement capacitors.

Task 3 - Policy Formulation

The MTSS project is considering public policy aspects of water conservation from the water supplier viewpoint. Concurrently, a new project, The National Community Water Conservation Project (NCWCP), is focusing on community level water conservation activities by individual consumers. The water conservation component of the TSOM program will avoid duplication and conflict with the NCWCP's pilot project in the GOGCWS service area. The expatriate Water Conservation Specialist will prepare a water conservation plan for the GOGCWS and a report recommending improved plumbing fixture standards.

TSOM staff is in the process of drafting policies in the following categories:

- electricity consumption
- management/decentralization
- empowerment of plant managers
- delegation to middle managers
- percent water loss for system components
- water treatment plant productivity
- meter utilization
- system growth
- standards of design and construction

The next step is to organize and conduct a review in accordance with MTSS project policy formulation process.

Planned Accomplishments for July through September 1994:

1. Complete mobilization of TSOM staff.
2. Conduct, with GOGCWS Networks Central Department staff, a pipeline break survey to identify primary causes of breaks.
3. Continue calibration of source and production meters at waterworks facilities.
4. Resume data collection of daily record information from water treatment plants.
5. Continue investigation of methods and feasibility of improving power factors for GOGCWS electric equipment.
6. Work with counterparts to develop programs to achieve the performance standards
7. Increase the computerization of plant operations and network management activities under the Microcomputers for Management program and also through general systems improvements.
8. Move TSOM team to Rod El Farag

4.4 Materials Management & Procurement Program

Program Purpose

The Materials Management and Procurement (MMP) program addresses a critical need at the GOGCWS: the acquisition, control and disposition of supplies and materials in the most efficient and cost effective manner. An effective materials management program can improve revenue generation and also reduce costs, not only for recurrent expenses but for capital items as well. The MMP program will concentrate on financial and management issues related to spare parts and materials for U.S. funded facilities. The lessons learned from this assessment can be extended to other facilities, if GOGCWS endorses and implements the program outputs. The purposes of the MMP program are:

1. Institute inventory controls and stores management procedures for cost effective materials management and inventory controls at each designated location.
2. Establish planning, budgeting, pre-procurement, procurement, shipping, delivery and storage procedures which will support GOGCWS purposes and MTSS project objectives.
3. Introduce modern materials management and inventory control procedures to improve the ability of the GOGCWS to properly maintain and operate its facilities.

The approved MTSS work plan was based on a delayed start for the MMP program. However, during the first quarter it was decided to accelerate the mobilization of program personnel by six months. Accordingly, the program manager was recruited, counterparts were identified and baseline data was collected in the second quarter and intensive efforts leading to actual implementation of improved systems occurred in the third quarter. Table 4.4.1, below, is a summary of work plan tasks and fourth quarter activities.

Table 4.4.1
Tasks, Subtasks & Summary of Activities

TASKS-SUBTASKS	SUMMARY OF ACTIVITIES
Mobilization of Personnel 1.1 Recruit and appoint program manager 1.2 Mobilize deputy program manager 1.3 Participate in workshop 1.4 Prepare MMP program outline 1.5 Define staffing requirements 1.6 Identify counterparts	<ul style="list-style-type: none"> - Eng. Mohamed Hamza Wardany approved as deputy program manager - Program manager recruited and approved - Six counterparts named - Program Manager Osteen mobilized on 5 December - Inventory Spclst H. Ismail mobilized on 1 December - Three additional counterparts named

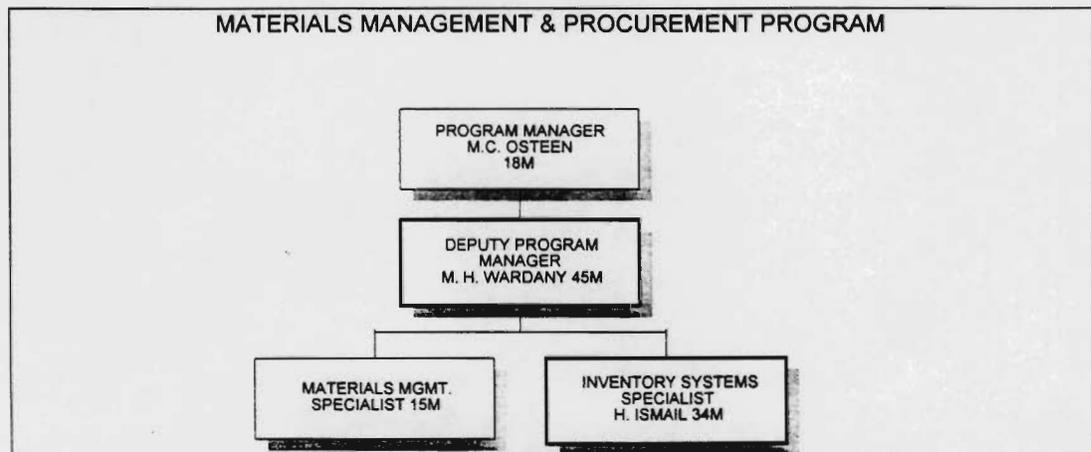
TASKS-SUBTASKS	SUMMARY OF ACTIVITIES
<p>Baseline Data Collection</p> <p>2.1 Review past reports</p> <p>2.2 Conduct a physical inventory of all expendable and non-expendable property</p> <p>2.3 Determine the value of inventories</p> <p>2.4 Review and evaluate policies and procedures for purchasing, materials management, property management and disposition</p> <p>2.5 Evaluate the MMP organization and management structure at GOGCWS</p> <p>2.6 Define and evaluate planning and budgeting procedures for the acquisition of materials</p> <p>2.7 Evaluate pilot stores management programs at Rod el Farag, including the general placement system and stores management procedures</p>	<ul style="list-style-type: none"> - Reports reviewed - Inventory initiated - Reviewed Rod El Farag stock system and inventory - Evaluated pilot stores management program at Rod El Farag - Reports Reviewed - Disposable & non disposable property inventoried and valued - Evaluated Rod El Farag existing system (report) - Evaluated property management/central stores procedures (report) - Evaluated budget levels for materials management - Presented summary of reports to Steering Committee
<p>Policy Formulation</p> <p>3.1 Identify procurement, inventory control & material management policies which will contribute to financial viability and managerial autonomy</p> <p>3.2 Develop specific performance targets for inventory control and materials management such as:</p> <ul style="list-style-type: none"> -value of stock relative to average annual demand -annual supplies budget as % of total budget 	<ul style="list-style-type: none"> - Initiated review of procurement, inventory control and material management policies - Developed performance indicators & targets for inventory control & materials management - Proposed policies for Inventory / Stores Depts. - Prepared recommendations for cost savings - Initiated computer training - Recommended procedures for implementing proposed policies - Completed visits to all stores

Task 1: Mobilization of Personnel

Long Term Personnel

The authorized staff for the MMP program, depicted in Figure 4.4.1, consists of four full time professionals for a total of 112 person months.

The MMP Program staff includes an expatriate Program Manager, an Egyptian Deputy Program Manager, an expatriate Materials Management Specialist and an Egyptian Inventory Systems Specialist. The Program Manager, Deputy Program Manager and the Inventory Systems Specialist have been mobilized. The tasks in the work plan can be accomplished without the assistance of the Materials Management Specialist; consequently, these person months may be moved to another program.



Task 2: Baseline Data Collection

The MMP staff worked closely with all the counterparts assigned to the MMP program. Numerous meetings were held with the counterparts on an individual basis to obtain additional baseline data. The MMP staff continued to meet regularly with the Rod El Farag WTP inventory and stores personnel. This group is anticipated to be an integral part of the MMP program since a major USAID investment has been made at this facility.

Computer inventory training for stores' personnel was initiated in April. This training is directed toward accomplishing inventory computer coding for one of the MMP indicators. This training is held on Saturdays and Tuesdays at the GOGCWS Water Club.

MMP staff continued to visit GOGCWS warehouses and stores and to collect data from the GOGCWS personnel pertaining to materials management, procurement processes and system difficulties. A map showing the approximate location of the GOGCWS stores was compiled and is enclosed as Figure 4.4.2.

The visits to all of GOGCWS's warehouses and stores were finalized and a summary of these visits was compiled in a computer spreadsheet. This data will be very useful to both GOGCWS and MMP as the program continues. A sample of this spreadsheet information is shown in Figure 4.4.3.

Some of the information obtained from interviewing procurement personnel revealed the following:

- The procurement limits for organizational authorization were set more than 10 years ago and should be reviewed and revised on a regular basis.
- Accurate technical specifications are a necessity for obtaining high quality goods in a timely manner through the procurement process.
- The cost of advertising for goods is expensive and the number of procurements should be minimized.
- There should be an emphasis on training replacement personnel for the positions of retiring managers.
- Duplication of procurements is generally caused by having: 1) more than one Arabic name for an item, 2) a partial delivery and 3) an undelivered procurement.

Task 3: Policy Formulation

Met with counterparts to discuss policies which would direct the future of the GOGCWS organization. MMP staff compiled a list of proposed policies pertaining to the materials management and procurement of GOGCWS stock for review by the GOGCWS management. Recommendations concerning the implementation of the proposed policies were also provided.

The proposed policies are:

Materials Management:

- Master Inventory
- Proper Storage
- Foreign Equipment Standardization

Scrap/Stagnant Stock:

- Scrap/Stagnant Stock Disposal

Procurement:

- Improvement of Procurement Process

Training*:

- Computer Inventory
- Inventory Management

General*:

- Stores' Personnel Compensation

* Recommended by MMP but incorporated into other MTSS programs' policies

The two MMP performance indicators: 1) scrap/stagnant inventory sold or recycled and 2) inventory items coded/total inventory items (located at two treatment plants) were finalized this quarter.

In addition to identifying procurement, inventory control and materials management policies which will contribute to the financial viability and managerial autonomy, the MMP staff identified cost and time saving techniques and administrative policy reforms for reducing delays and improving the efficient utilization of stock.

A partial listing of some of the recommendations made for the GOGCWS inventory/stores departments follows:

- Master Inventory Preparation; estimated savings - LE 40,000/yr
- Equipment Standardization; estimated savings - LE 60,000/yr (in 5-8 years)
- Proper Storage; estimated savings - LE 200,000/yr
- Scrap/Stagnant Disposal; estimated savings - LE 25,000,000
- Procurement Process Improvement; estimated savings - LE 100,000 & 1 man-year
- Issue/Procurement Cycle Improvement; estimated savings - 300 man-days
- Upgrade Negotiation Skills; estimated savings - LE 300,000/yr
- Repair Ductile Iron Pipe; estimated savings - LE 3,000,000

Accomplishments for Fourth Quarter:

1. Identified procurement, inventory control and materials management policies which will contribute to financial viability and managerial autonomy.
2. Developed specific performance targets for inventory control and materials management.
3. Identified cost savings techniques and administrative policy reforms to reduce delays and improve the efficient utilization of stock.
4. Initiated computer inventory training for three classes at the GOGCWS.
5. Finalized interviews with GOGCWS personnel at the warehouses / stores and compiled a spreadsheet highlighting important points of these visits.

Planned Activities: July-September 1994

1. Monitor and assist GOGCWS with initiation of work on the performance indicators.
2. Verify that monthly progress reports are submitted to the Chairman.
3. Provide twinning standards and describe program purpose.
4. Define requirements for a computerized MMP program.

**Figure 4.4.2
GOGCWS Warehouses
& Stores**

15 May 1994

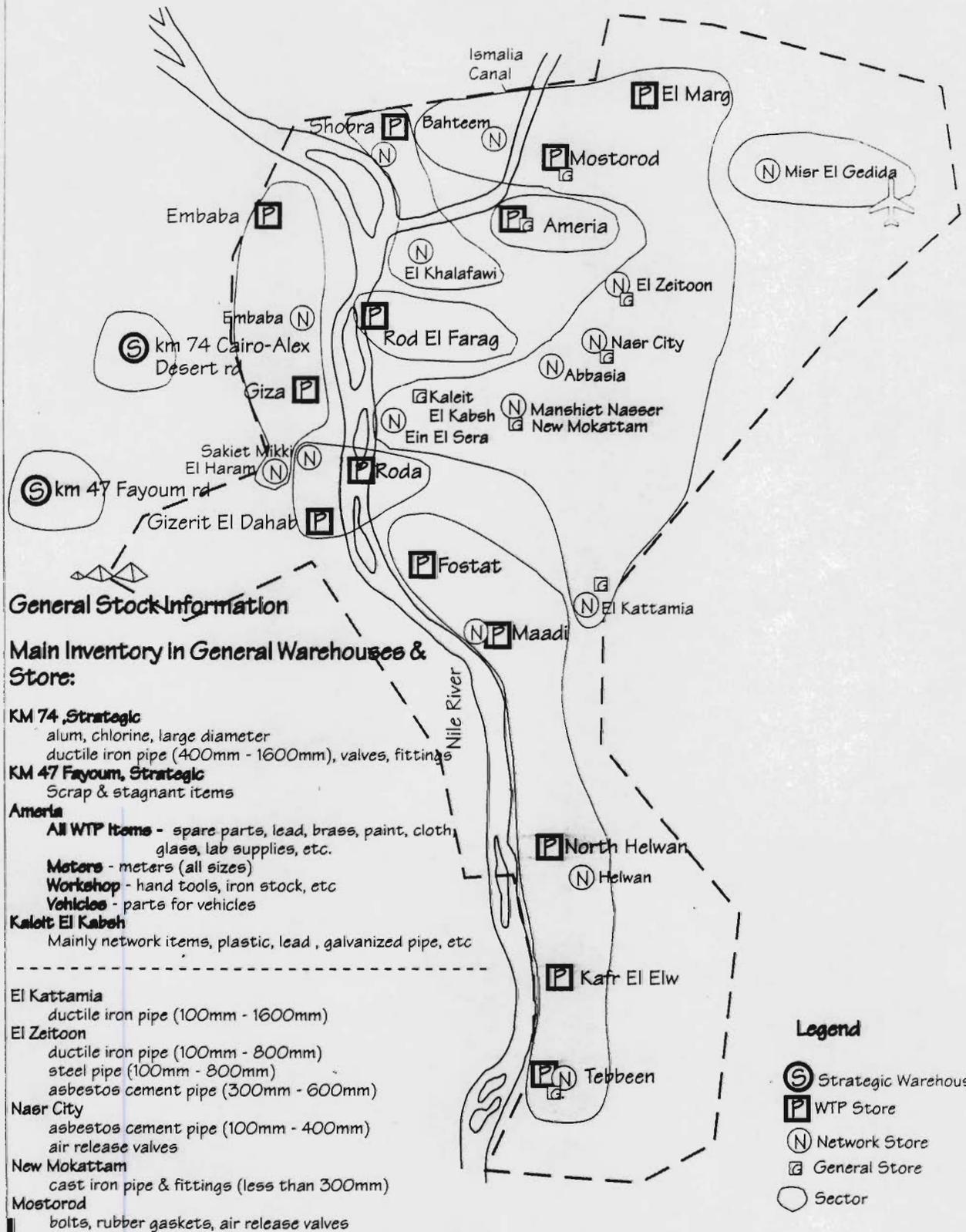


Figure 4 4 3
Site Survey of GOCOWS Warehouses/Stores

Store Type		STRATEGIC		PLANTS																
STORE/DEPOT		Km 74	Km 47 "Scrap"	Medlorod		Rod El Farag		Fostat		Amieria		Embabaha		Gaziret El Dahab		Roda				
S/N	PARAMETER	1/1	1/1	1/3	3/3	1/4	2/4	3/4	4/4	1/2	1/2	2/2	5/5	1/2	1/2	2/2	1/3	2/3	3/3	1/3
1	Type	Strategic	Strategic	WTP	WTP	wip/Old	wip/Misc	wip/New	wip/Misc	WTP	WTP	WTP	WTP	WTP	WTP	WTP	WTP	WTP	WTP	WTP
2	Date	4-Jan-94	12-Jan-94	18-Jan-94	19-Jan-94	12-Dec-93	15-Dec-93	15-Dec-93	15-Dec-93	6-Apr-94	6-Apr-94	6-Apr-94	10-Jan-94	24-Apr-94	17-Apr-94	17-Apr-94	17-Apr-94	17-Apr-94	17-Apr-94	17-Apr-94
3	Main store items	Alum, chlorine, pipe, fittings, Old cars, valves, valves, fittings	Chlorine cylinders, pipe, fittings, Old cars, buses, tires, pies, scrap iron valves	WTP parts, good supply	Butterfly valves, air release valves, cable	Diesel/ electrical parts	General materials, paint, bolts, valves	New spare parts (mainly electrical)	Various old items	Good supply of parts tools, motors, pipe, elec parts	All WTP items, motors valves, diesel elec parts	General WTP parts, valves, bolts, consoles, gate operators	Crates for new WTP expansion, crates of old knife valves, fittings, pipe	Trods, elec parts, fittings, bearings, brass, etc	Pumps, motors, chem feed, elec panels, valves, transformers	Stacked plastic pipe, grease, wood	Motors, elec parts, hoses, iron, tools			
4	Main Storage Location	Outside	Outside	Inside	Outside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	In & Out			
5	Stock organization (Pathways)	OK	OK	Good	Good	Good	Good	Good	Crowded	OK	OK	OK	Needs improve	Good	Good	OK	Slightly crowded	OK	OK	Slightly crowded
6	Lighting	Good	Good	Good	Good	Good	Good	Good	Poor	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
7	Floor	Dirt	Dirt/Conc	Concrete	Concrete	Concrete	Concrete	Concrete	Dirt	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
8	Shelving	None	None	None	None	None	None	None	Wood	Metal	Metal	Metal	Wooden	Metal	Metal	None	Wooden	None	None	None
9	Ventilation	Good	Good	Good	Good	Good	Good	Good	Poor	Good	Good	Good	Poor	Good	Good	Good	Fair	Fair	Bad	Fair
10	Environment	Dusty	Dusty	Good	Dusty	Dusty	Dusty	Dusty	Dusty	OK	OK	Dusty	Dirty	Dusty	Dusty	Dusty	Dusty	Dusty	Dirtywet	Dusty
11	Comments on Storage of items exposed to elements	Valves, pipe, fittings exposed to elements	All items exposed to elements	6 valves outside, cover diesel & elec parts, valves	Valves should be inside, cable ends should be taped	Not all diesel parts are covered	OK	Shatts should be property supported, large control valves not covered	Most items are scrap or stagnant	One impeller shaft not supported	Valves should be covered, cable ends wrapped	Many items on floor, could be on shelves	Consoles, elec parts not covered	Consoles, elec parts not covered	Consoles, elec parts not covered	Consoles, elec parts not covered	OK	OK	OK	OK
12	Items on floor/ground	Yes	Yes	No	Yes	No	No	No	Yes	No	No	OK	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
13	Items outside	Yes	Yes	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
14	Adequate space	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	Approx. No. of parts	2,000	1,000	5,500	(see 1/3)	6,000	2,000	5,000	1,500	5,000	5,000	(see 1/2)	6,000	4,000	(see 1/2)	(see 1/2)	3,500	(see 1/3)	(see 1/3)	5,000
16	Stagnant (approximation)	2%	0%	1%	85%	33%	5%	1%	90%	0%	0%	(see 1/2)	25%	0%	(see 1/2)	(see 1/2)	11%	(see 1/3)	(see 1/3)	20%
17	Scrap	10	500	0	4	10	0	0	150	5	5	(see 1/2)	15	4	(see 1/2)	(see 1/2)	7	(see 1/3)	(see 1/3)	10
18	Hydraulic Hoist			1		1		2												
19	Palat Truck			1		1														
20	Handtruck			1		1														
21	Manual Forklift			1		1														
22	Motorize Forklift			1		1														
23	Motorized bridge crane	1 for CID		2		2														
24	Manual Cart	4	2	3	(see 1/3)	2	2	2	(see 1/4)	2	2	(see 1/2)	2	2	(see 1/2)	(see 1/2)	2	(see 1/3)	(see 1/3)	2
25	Storekeepers	1	1	1	(see 1/3)	1	1	1	(see 1/4)	2	2	(see 1/2)	2	1	(see 1/2)	(see 1/2)	1	(see 1/3)	(see 1/3)	1
26	Clarks	1	1	3	(see 1/3)	4	4	5	(see 1/4)	3	3	(see 1/2)	4	3	(see 1/2)	(see 1/2)	5	(see 1/3)	(see 1/3)	3
27	Laborers	6	2	0%	0%	100%	100%	100%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
28	New coding in books	0%	0%	0%	0%	100%	100%	100%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
29	Using New Coding	100	2/m	100	0/y	2/d	4/d	2/d	0	6/d	6/d	(see 1/2)	10/d	3/d	(see 1/2)	(see 1/2)	8/d	(see 1/3)	(see 1/3)	7/d
30	Stock Issues	7/d	2/d	10/m	1/y	0	10/m	2/m	0	8/m	8/m	(see 1/2)	1/d	4/m	(see 1/2)	(see 1/2)	8/m	(see 1/3)	(see 1/3)	5/m
31	Stock Returns	2/m	0	3/m	4/m	8/m	0	2/m	1/m	2/d	2/d	(see 1/2)	1/d	10/m	(see 1/2)	(see 1/2)	10/m	(see 1/3)	(see 1/3)	10/m
32	Stock Problems	No	Yes	3000	500	350	550	70	1600	1600	700	1000	2000	250	500	600	250	500	600	350
33	Area approx. (square meters)	60	60	17	17	88	88	88	88	5	5	5	32	11	11	11	20	20	20	29
34	WTP Age (approximate)			French	French	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Czech/Aus	Fra	Fra	Fra	Czech	Czech	Czech	Czech
35	Main WTP Equipment Provider			French	French	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Fra/USA	Czech/Aus	Fra	Fra	Fra	Czech	Czech	Czech	Czech
36	WTP Parts/Equip Problem			No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No
37	WTP Parts/Equip Problem			No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No

4.5 Project Management & Administration Program

Program Purpose

The purposes of the PM&A program are: a) administer the MTSS project by providing accounting, record keeping, procurement and other GOGCWS-BVI contract-related services; b) support the other four MTSS programs in the areas of systems design and computerization and with the preparation of reports and publications; and c) assist GOGCWS departments to improve the efficiency of critical, non-computerized administrative systems and procedures. The PM&A program is also responsible for research, logistics and coordination on project level seminars and training workshops.

Table 4.5.1, below, indicates the work plan tasks and subtasks and a summary of activities, fourth quarter activities are *bold italics*.

Table 4.5.1
Tasks, Subtasks and Summary of Activities

TASKS-SUBTASKS	SUMMARY OF ACTIVITIES
<p>Mobilization and Project support</p> <ul style="list-style-type: none"> 1.1 Mobilize Singh 1.2 Establish project procedures 1.3 Prepare office space/acquire equipment 1.4 Participate in USAID/WASH workshop 1.5 Prepare management reports 1.6 Define Staffing requirements 1.7 Identify GOGCWS counterparts 1.8 Develop workplan outline 1.9 Provide Translation services/staff 	<ul style="list-style-type: none"> - Singh Mobilized - Procedures for project bank accounts established and invoice processing - Office renovation completed - Reports prepared - Additional Counterparts named - Translator hired & Administrative Asst. hired - Haupt (Publications & Reports Specialist) mobilized - Additional furniture procured - Set up Local Area Network - Kirkman mobilized - Rod El Farag Renovation Project Initiated - Reports prepared - Procure additional Furniture & Equipment - Upgrade GOGCWS VAX computer - Computer support specialist Hecht mobilized - Provided software & network training - <i>M. Zawawy mobilized</i> - <i>Rod El Farag renovation near completion</i> - <i>Furniture & equipment procurement for Rod El Farag</i> - <i>Extensive publications & graphics support for GOGCWS & MTSS programs</i> - <i>Continued software training</i>
<p>Baseline Data Collection</p> <ul style="list-style-type: none"> 2.1 Review and catalog previous reports 2.2 Verify program performance indicators 2.3 Verify budget allocations for staff and other direct costs to support program 	<ul style="list-style-type: none"> - Preliminary list of publications prepared - Library data entry form prepared - information on GOGCWS mainframe computer system collected - Completed GOGCWS computer survey - Performance data collection & analysis summary prepared - Identified GOGCWS base map source - <i>Developed MTSS project map</i> - <i>Library inventory complete</i> - <i>LAN manual complete</i> - <i>Performance indicators flow diagrams complete</i>

productivity due to inadequate transportation for project team members and their counterparts.

Repair and Maintenance

As project equipment and facilities approach one year in age, and warranty periods are expiring, the frequency of repairs and maintenance are beginning to rise. The impact of this situation began to be felt during the fourth quarter. Although maintenance costs can be assessed as minor at this time, it is anticipated that expenditures will increase for these items.

Project Accounting

The addition of a new Program Deputy during the fourth quarter has had a positive impact on project accounting. The tracking of project funds, invoicing, and report generation have improved with the help of this additional staff resource.

Noteworthy aspects of the project accounting for the fourth quarter are as follows:

The amount of disallowances imposed vs. previous disallowances paid increased by approximately \$10,000 during the fourth quarter. (see fig. 4.5.2)

Inv No.	Period	Date Submitted	Amount Billed	Amount Approved	Date Approved	Amount Paid	Date Paid	Amount Disallowed	Amount Rebilled
1	5 Feb--26 Feb-93	28/4/93	\$13,782	\$13,782	6/8/93	\$13,782	27-Jun-94	\$0	
2	19 Feb--25 Mar	13/5/93	\$49,749	\$49,749	6/8/93	\$49,749	27-Jun-94	\$0	
3	26 Mar--22 Apr	10/6/93	\$59,061	\$58,840	6/24/93	\$58,840	6-Jul-94	\$222	
4	23 Apr--21 May	5/7/93	\$121,175	\$117,052	7/28/93	\$117,052	18-Aug-94	\$4,122	
5	22 May--25 Jun	22/8/93	\$202,508	\$199,959	9/14/93	\$199,959	27-Sep-94	\$2,549	
6	26 Jun--23 Jul	28/9/93	\$188,804	\$175,927	10/28/93	\$175,927	15-Nov-94	\$12,877	\$2,467
7	24 Jul--20 Aug	21/10/93	\$139,269	\$131,574	11/17/93	\$131,574	12-Dec-94	\$7,695	\$278
8	21 Aug--24 Sep	17/11/93	\$183,744	\$178,528	12/18/93	\$178,528	20-Jan-94	\$5,216	
9	25 Sep--22 Oct	13/12/93	\$168,417	\$165,930	1/13/94	\$165,930	6-Feb-94	\$2,486	
10	23 Oct--19 Nov	23/1/94	\$220,810	\$214,117	2/23/94	\$214,117	17-Mar-94	\$6,693	\$700
10a	23 Oct--19 Nov	13/2/94	\$1,800	\$1,800	3/5/94	\$1,800	18-May-94	\$0	
11	20 Nov--24 Dec	10/2/94	\$215,166	\$210,063	3/27/94	\$210,063	28-Apr-94	\$5,103	\$5,322
12	25 Dec--21 Jan-94	17/3/94	\$254,509	\$248,071	4/21/94	\$248,071	26-May-94	\$6,438	
13	22-Jan--18Feb	30/3/94	\$234,992	\$225,537	6/2/94			\$9,455	\$9,456
14	19 Feb -- 25 Mar	2/5/94	\$251,526	\$245,844	6/2/94			\$5,682	
15	ROD EL FARAG	19/5/94	\$106,037						
16	26 Mar -- 22 Apr	23/5/94	\$225,152						
TOTALS			\$2,636,502	\$2,236,774		\$1,765,393		\$68,539	\$18,223

Figure 4.5.2 Invoice Summary

Total project billings approved are approximately \$2 million below the straight line budget for the project. (see figure 4.5.3). Recent expenditures and staff increases are expected to change this indicator by the end of the calendar year to be more in line with the straight line projection.

Petty cash expenditures were limited during the fourth quarter to LE 150 maximum, with some minor exceptions. All other expenditures are paid by check. This has drastically reduced the amount of uncontrolled cash expenditures and limited the chance for errors.

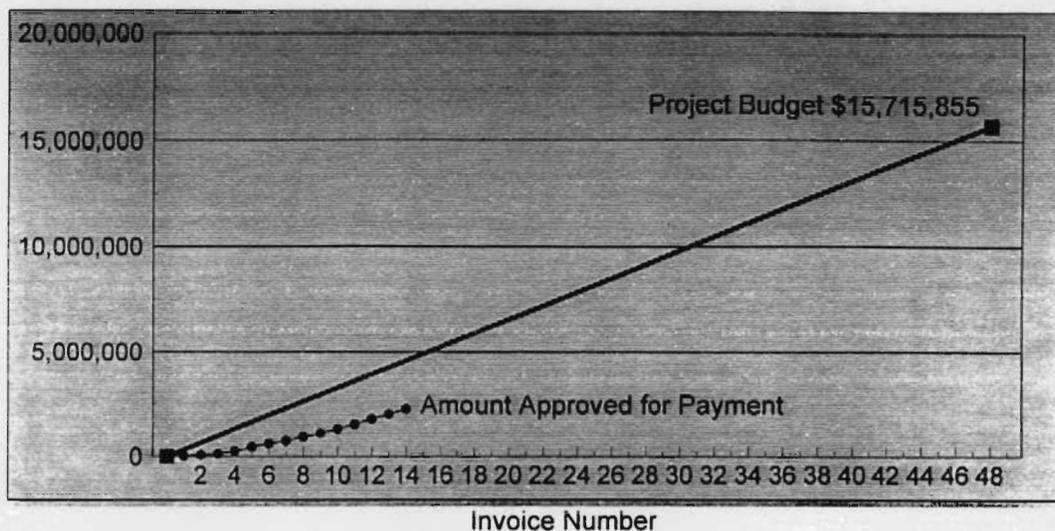


Figure 4.5.3 Budgeted vs. Actual

Office Setup

Much of the PM&A staff resources were allocated during the fourth quarter to the renovation of the expanded MTSS project facilities at Rod El Farag. There are two primary reasons for acquiring this additional space. They are: 1) to provide an adequate working environment for the large number of MTSS staff, which will exceed fifty persons in the near future; and 2) to provide a training center. The preliminary estimated cost for renovating the Rod El Farag facility is \$107,000.

Microcomputers for Management

Fourth quarter Microcomputers for Management (MFM) activities were focused on requirements for performance indicator (PI) data input and report generation. This included:

- Identification of information flow
- Assignment of responsibility for data collection activities
- Hardware & software requirements

Information flow diagrams have been developed for 17 individual performance indicators. Each of these flow diagrams identifies the source and process by which data is gathered and culled for input into the performance model. Additionally, the flow diagrams locate and identify those GOGCWS personnel designated as responsible for overseeing the process and the hardware & software required to accommodate the work effort.

These flow diagrams are intended to provide: 1) justification for acquisition of the proposed PI hardware & software through supplementary funding from USAID; 2) the initial data input design requirements specific to implementing the performance data collection and monitoring process. A sample flow diagram is displayed in figure 4.5.4.

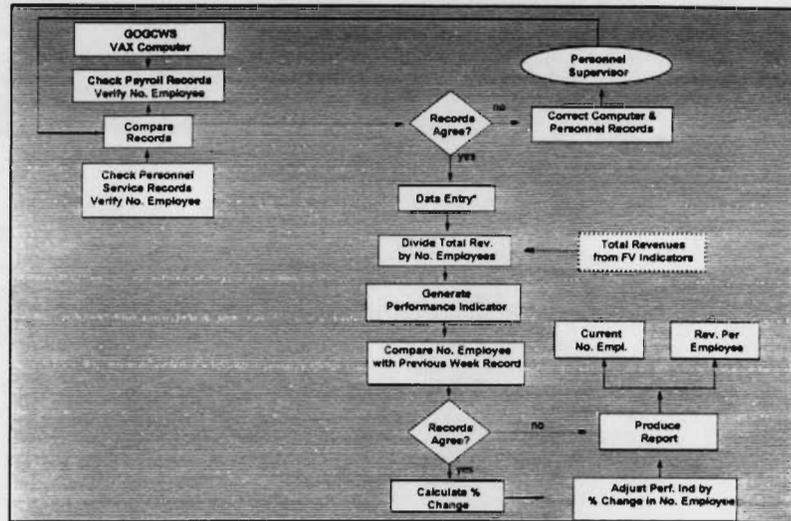


Figure 4.5.4 Sample Flow Diagram

Mapping

Part of the fourth quarter activities included the generation of GOGCWS base maps. The availability of up-to-date and accurate maps is an important aspect of modern utility management. The current status of the GOGCWS computerized maps are reflected in figure 4.5.5

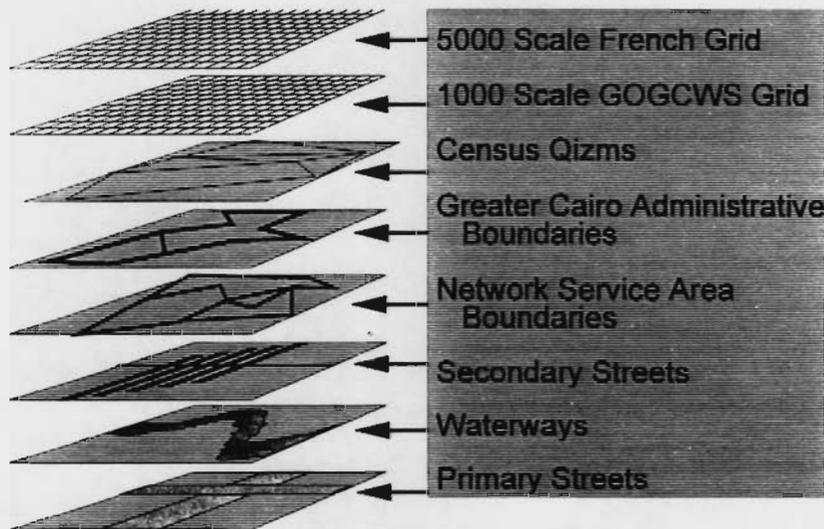


Figure 4.5.5 GOGCWS Maps & Boundaries

In June the PM&A Program Manager made a presentation on maps and boundaries to the Network Service Area Chiefs and Regional Managers. Subsequent discussions with these managers & chiefs entailed outlining a plan whereby Network Service Area boundaries could be more accurately represented in the system.

Planned Accomplishments July - September 1994

Systems Implementation: The implementation of performance monitoring systems and procedures will begin during the next quarter. These systems will be based on the information flow, data entry, and report generation requirements established during the previous quarter. The steps in the process are as follows:

- Secure funding from USAID for hardware & software procurement
- Procure hardware & software according to USAID guidelines
- Design & implement simplified user interfaces for input screens and standardized reports
- Train GOGCWS staff responsible for data input and report generation

Baseline Data Collection

Continue to acquire data on facilities and customers to assist each of the other MTSS programs in to achieve their objectives and formulate policy level recommendations for Cairo Water. Some specific areas of focus include:

- Assist with the production of maps for network service area boundaries
- Produce census maps showing general growth patterns within The GOGCWS service area

Project Support

Support services identified at the beginning of this report will be continued in the next quarter.

Prepare Phase 2 Work Plan

A high priority during the next quarter will be the development of a Phase 2 Work Plan for the PM&A program. The phase 2 plan will emphasize information management systems and procedures within GOGCWS. A systematic approach will be outlined for the future use of strategic automation tools to support long term data gathering and analysis.

Annex B: Project Staffing During the Quarter #4 from 1 April 94 thru 30 June 94

POSITION	DURATION (CALENDAR) MONTHS)	NAME	START DATE	MONTHS USED	PERCENT USED
EXPATRIATE					
Team Leader	24	JOHN DALTON	6-May-93	14	58%
Training Development Specialist	47.7	VINCE NIEMEYER	11-Apr-93	15	31%
Training Development Specialist	36	HOWARD SOKOLOFF	12-Sep-93	10	27%
FV Program Manager	36	PEGGY HOWE	7-Nov-93	8	22%
MM&P Program Manager	18	BUCK OSTEEEN	5-Dec-93	7	38%
Project Administrator	47.9	SHER SINGH	5-Apr-93	15	31%
Publications Records Advisor	22	KEVIN HAUPT	10-Nov-93	8	35%
Computer Support Specialist	24	GREG HECHT	28-Aug-93	10	43%
Accounting Systems Specialist	24	BILLY STEEKLY	3-May-94	2	8%
SABBOUR ASSOCIATES					
Management & Organization	47.4	HUSSEIN TALAAT	21-Apr-93	15	31%
FV Program Deputy Manager	43.8	MAHMOUD BAKR	8-Aug-93	11	25%
Financial Analyst	30	MAHMOUD ABOU RAYA	12-Sep-93	10	32%
Financial Analyst	24	FAIZ KHAMIS	1-Dec-93	7	29%
Administrative & Procurement Specialist	47.1	M. HAMZA WARDANI	29-Apr-93	14	30%
Inventory Systems Specialist	34	HASSAN MOHAMED ISMAIL	23-Nov-93	7	21%
Operations Management Specialist	30	AHMED ALLAM	12-Sep-93	10	32%
Organization Specialist	39	FAROUK EL SHEIK	1-Jun-94	1	2%
Water Works Engineer	36	ALI FOUAD	17-Apr-94	2	7%
Deputy Program Manager	39	KAMAL EL SHENSHOURY	10-Apr-94	3	7%
Financial Specialist Advisor	30	HASSAN HUSSNI	20-Feb-94	4	14%
Personnel Specialist	34	Moftah Galal	3-May-94	2	6%
Operation & Maintenance Specialist	18	AHMED HAMDY	12-May-94	2	9%
WARDANI GROUP					
Executive Secretary	12	RAWHIA HASSAN	8-Nov-93	8	65%
Secretary	12	SHIRLEY HABIB	1-Nov-93	8	67%
Secretary	12	HANAA ADLY	20-Apr-93	15	121%
Secretary	12	FATMA HUSSIEEN	6-Jun-93	13	108%
Translator	12	LOUIS KAMEL	1-Oct-93	9	76%
Security	12	ABD EL KADER	4-May-93	14	117%
Office Boy	12	ABD EL HAKEEM	3-Jun-94	0	2%
Office Boy	12	MOSTAFA AHMED	25-Jul-93	11	94%

Project Duration: 1 April 1993 to 30 March 1997

Departures during fourth quarter:

LAILA HADAAD	12-Jun-94
EMAD A. GHAFAR	10-Jun-94
RAEESA EL NAHASS	15-May-94