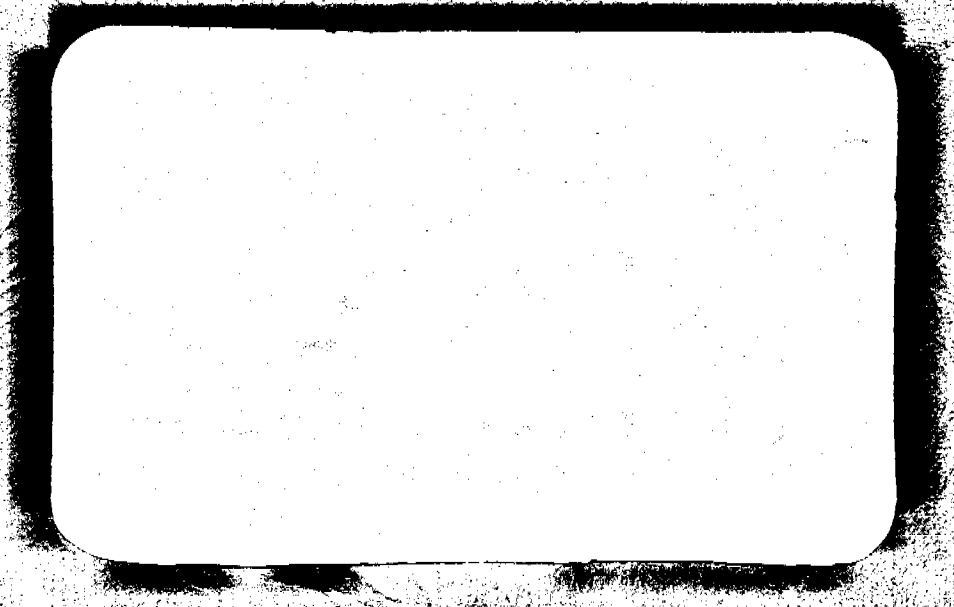
824 KEWE93

MINISTRY OF WATER DEVELOPMENT, KENYA

MINISTRY FOR FOREIGN AFFAIRS, FINLAND

# KENYA-FINLAND
# WESTERN WATER SUPPLY PROGRAMME



KEFINCO
HELSINKI, FINLAND
KAKAMEGA, KENYA

824-KEWE93-10913

**KENYA - FINLAND WESTERN WATER SUPPLY PROGRAMME**

# QUARTERLY REPORT
# (OCTOBER - DECEMBER, 1992)

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## Executive Summary

This report covers the period of 1st October, 1992 to 31st December, 1992. The general progress was according to the planned progress in the work plan as shown in the progress curves. Minor fluctuations within specific components continued to occur.

The financial situation was well in control as 92.5 % of funds budgeted for the year were used. At the same time the programme was instructed to save 2 million FIM to be used during the bridging over phase (January - April 1992). Up to the end of the year the programme was able to save 2.4 million FIM.

The programme was set with a target to reduce the directly employed staff by 50 persons during 1992. Until the end of the report period, a total of 24 people had left the programme mainly to start enterprises providing services in line with their skills with some encouragement from the programme. At the end of December, 176 people were laid off after expiry of their contracts.

The Kenyanization of staffing progressed well when the duties of the Head of Piped Schemes Section, Mr. Jussi Manninen, were taken over by Mr. Joseph Omolo (MoWD), the duties of the Head of Planning Section, Mr. Keijo Ikonen, were taken over by Mr. Joseph Kimeto (MoWD), the duties of System Analyst, Mr. Esko Voutilainen, were taken over by Mr. Lawrence Thooko (MoWD) and the duties of Electrical Engineer, Mr. Asko Uusimaki, were taken over by Mr. Sam Otieno (MoWD).

The major emphasis of the programme continued to be on the handing overs of completed water systems. By the end of the year a total of 1,937 water points and 29 piped water supplies were handed over to water committees, Ministry of Water Development and Ministry of Health.

As an important part of ensuring sustainability of water points, pilot spare part delivery systems were started. A total of 6 local hardware shops and women groups have been in the experiments. The experience gained in using the local hardware shops is encouraging.

The programme continued to receive applications for private and semi private water points. A total of 57 applications were recorded. Community contribution towards the construction of semi private water points was Kshs. 336,280 while the community members contributed materials and labour valued at Kshs. 105,156.

KENYA-FINLAND WESTERN WATER SUPPLY PROGRAMME

# QUARTERLY REVIEW REPORT (OCTOBER - DECEMBER, 1992)

## 0. GENERAL

### 0.1 Introduction

The third phase of Kenya-Finland Western Water Supply Programme started its operations on 1st of January 1989 and it was completed in December, 1992. The programme area included whole Busia and Kakamega districts and partially Bungoma district in Western Province and two divisions from Siaya district in Nyanza Province. The programme area was about 5,230 square kilometres and the total population was estimated to be two million people in 1992.

The overall objective of the Programme was to improve the water supply situation in the Programme area in order to achieve an improvement in general health and economic activities. The more specific objective for the Third Phase was to consolidate the existing water supply facilities and provide 400,000 additional inhabitants with improved and sustainable water supplies.

This report covers the programme activities during the fourth quarter, from October to December 1992.

### 0.2 Planned and Actual General Progress

The planned and actual progress has been illustrated in the form of progress curves.

The General Progress curves (A) for the whole Programme show the monthly progress as a cumulative percentage of the planned total target. The curve is a summary of the progress of different components.

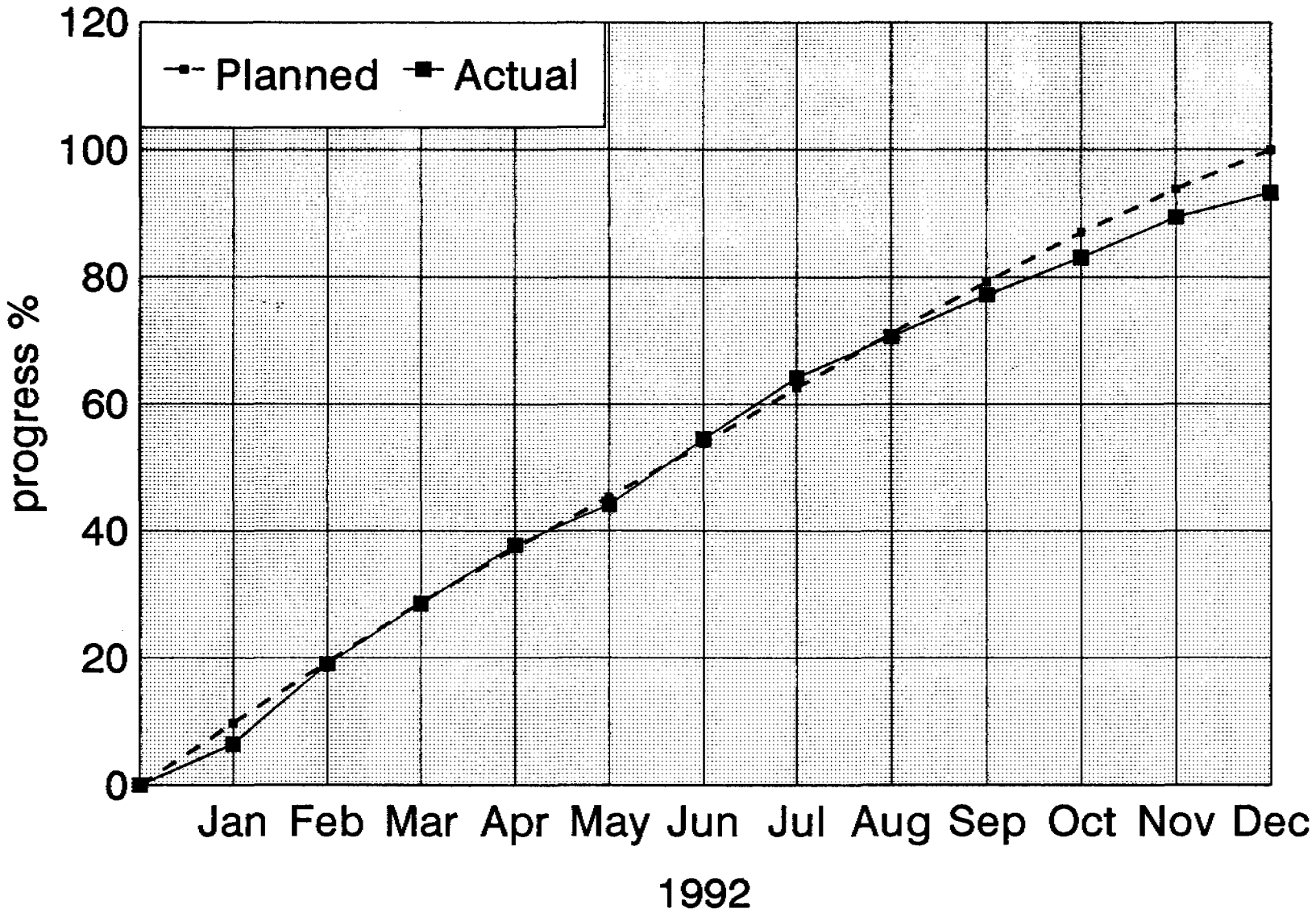
The shares of the individual components are as follows:

| | |
|---|---|
| Planning and Design | 18% |
| Physical Improvements | 50% |
| Operation and Maintenance | 12% |
| Community Development and Training | 20% |
| | === |
| | 100% |

The Population Coverage curves (B) show the planned and actual cumulative monthly increase in the number of population which is covered with improved water supplies through the activities of the Programme.

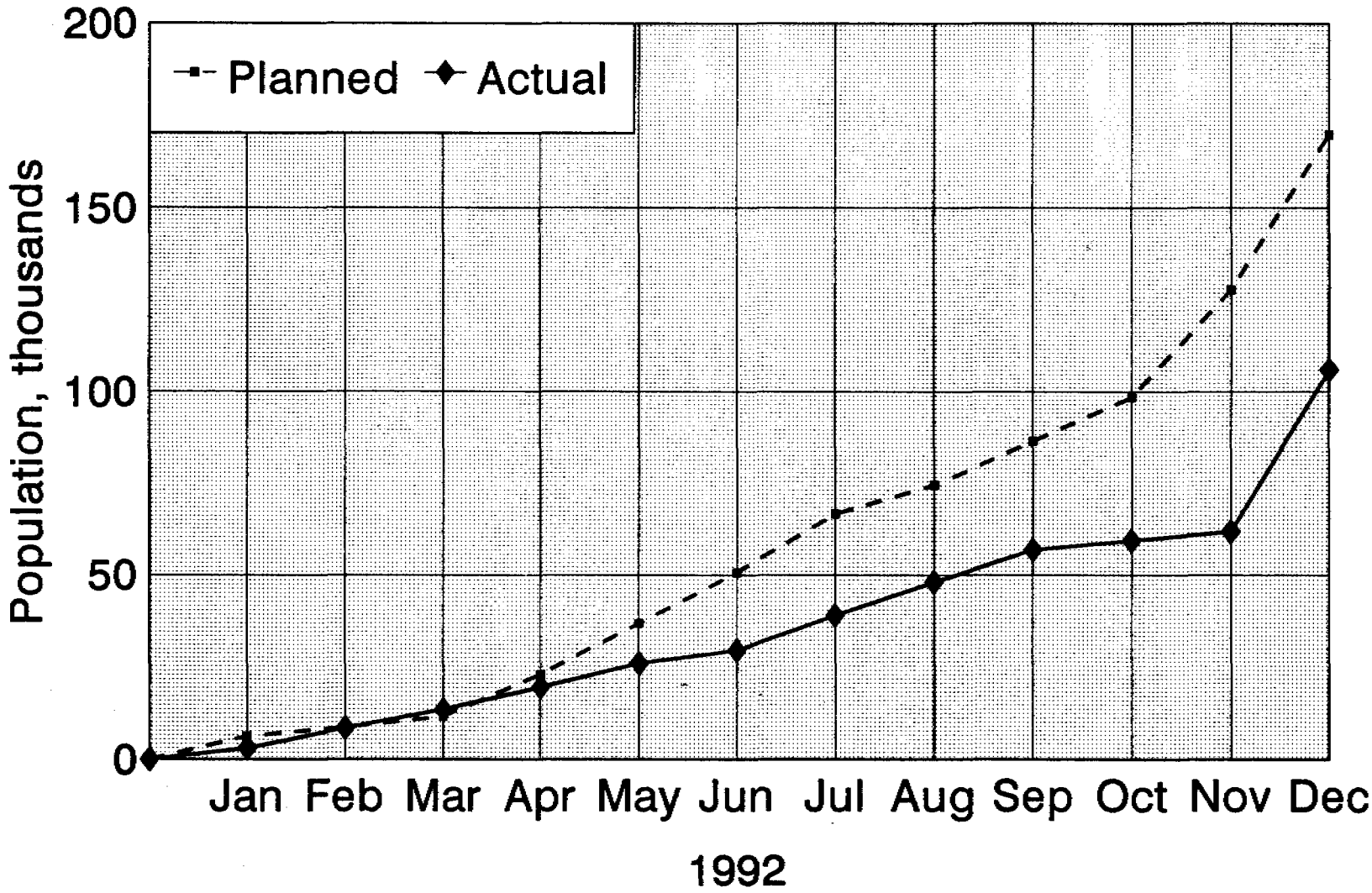
The Production Capacity curves (C) show the planned and actual cumulative increase in the water production capacity through new and rehabilitated piped schemes and new point source supplies.

# A. General Progress



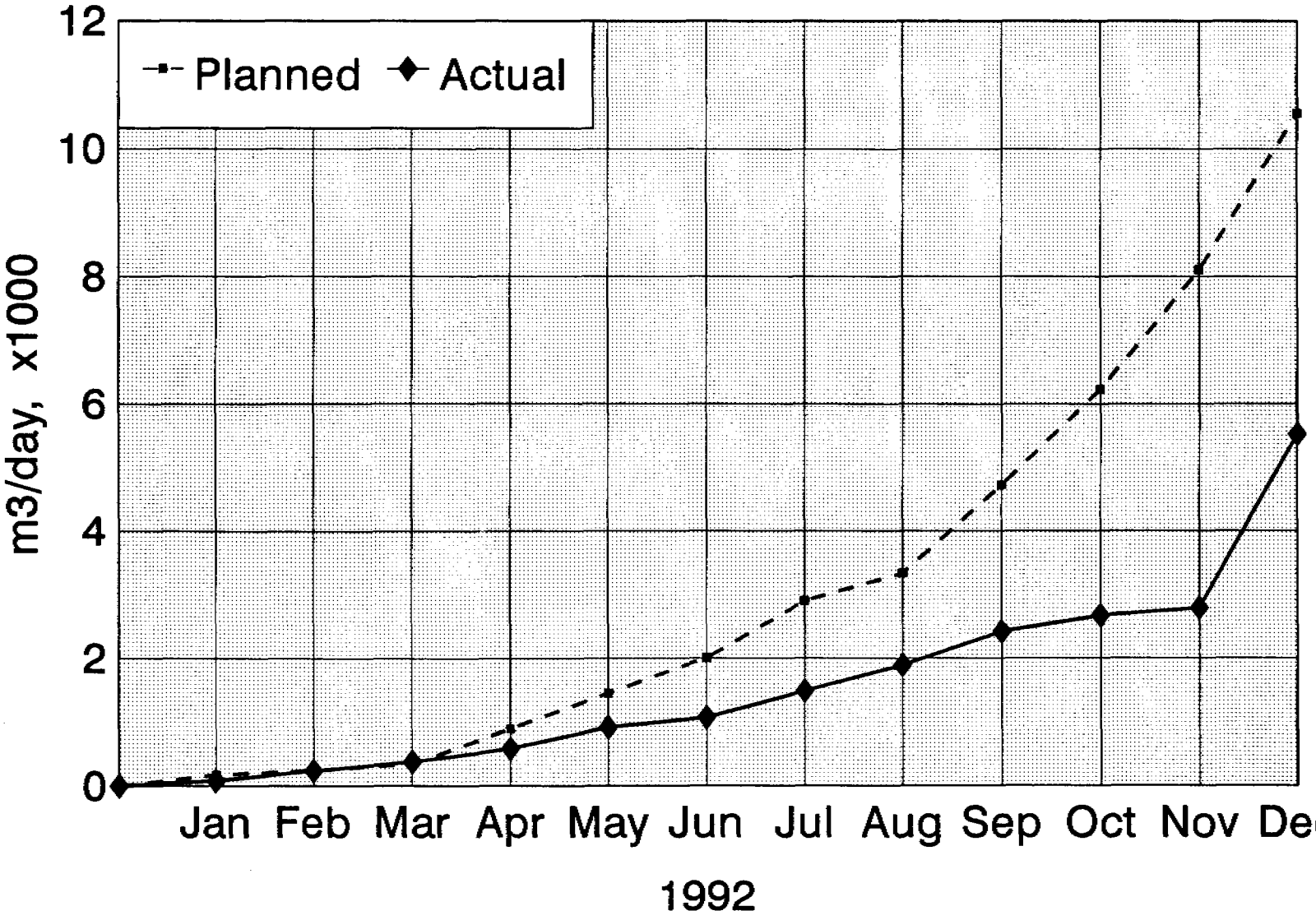
# B. Population Coverage

## Increase through piped and point source supplies



# C. Production Capacity

Increase of water production through piped and point source supplies



# 1. FINANCIAL MANAGEMENT AND ADMINISTRATION

## 1.1 Budget

The planned, committed and actual used Programme funds are shown in figure D. The financial situation was well under control as 92.5 % of budgeted funds for the year. were used.

## 1.2 Manpower Plan

The programme had been set with a target to reduce the directly employed staff by 50 persons during 1992. At the end of December the number of directly employed staff was 361 persons compared with 388 persons in the beginning of 1992. This is a reduction by 27 persons. This reduction was gained through natural reasons and by encouraging certain staff to start providing services on contract basis.

The planned number of consultant staff was 11 . The actual figure (12) in table 2 includes Finnish Junior Engineer, who is part of the trainee exchange programme between the two governments.

The staffing programme is shown in table 2.

**Table 2: STAFFING PROGRAMME, 1992**

| | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONSULTANT | Planned | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | Actual | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| KFWWSP | Planned | 380 | 380 | 379 | 370 | 367 | 361 | 353 | 346 | 345 | 335 | 333 | 333 |
| | Actual | 388 | 386 | 384 | 368 | 368 | 367 | 369 | 367 | 361 | 361 | 361 | 361 |
| MoWD | Planned | 47 | 47 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 |
| | Actual | 43 | 43 | 43 | 43 | 43 | 43 | 45 | 45 | 44 | 44 | 44 | 44 |
| MoCSS | Planned | 38 | 38 | 49 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 |
| | Actual | 42 | 42 | 42 | 47 | 47 | 47 | 44 | 44 | 44 | 44 | 44 | 44 |
| TOTAL | Planned | 476 | 476 | 488 | 484 | 481 | 475 | 467 | 460 | 459 | 449 | 447 | 447 |
| | Actual | 485 | 483 | 481 | 470 | 470 | 469 | 470 | 468 | 461 | 461 | 461 | 461 |

# D. Use of Funds

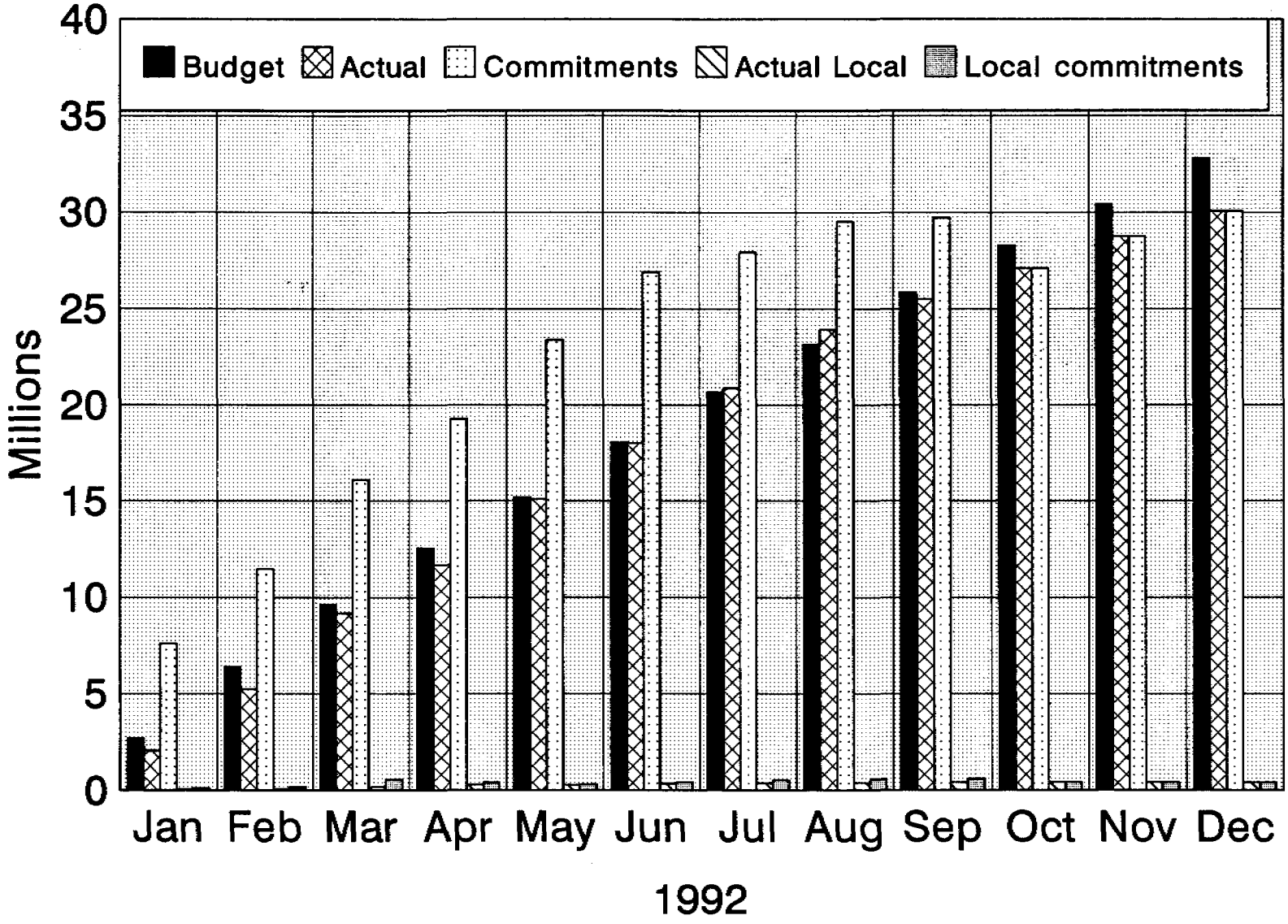


TABLE 1 COST REPORT

| | | | JAN-JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN-DEC | % USED TO DATE | TOTAL LEFT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FIM rate: | | 0.1076 | 0.1156 | 0.0678 | 0.0931 | 0.0995 | 0.1023 | | | |
| 01 | ADMINISTRATION | budget | 475,000 | 88,500 | 73,500 | 73,500 | 63,500 | 58,500 | 58,500 | 891,000 | | |
| | B: 891,000 | actual | 388,397 | 134,921 | 35,096 | 41,288 | 50,234 | 21,696 | 138,216 | 809,848 | 90.9 % | 81,152 |
| 02 | PLANNING & DESIGN | budget | 733,500 | 112,000 | 92,500 | 97,000 | 89,000 | 77,000 | 89,000 | 1,290,000 | | |
| | B: 1,290,000 | actual | 463,525 | 77,413 | 84,218 | 147,899 | 78,460 | 45,959 | 122,376 | 1,019,850 | 79.1 % | 270,150 |
| 03 | CONSTRUCTION | budget | 7,402,000 | 1,314,500 | 1,297,500 | 1,159,500 | 1,091,500 | 858,000 | 780,000 | 13,903,000 | | |
| | B: 13,903,000 | actual | 10,231,600 | 599,309 | 1,972,195 | 504,604 | 742,888 | 912,034 | -341,994 | 14,620,637 | 105.2 % | -717,637 |
| 04 | OPERATION & MAINTENANCE | budget | 2,610,600 | 123,100 | 207,100 | 547,100 | 210,100 | 163,600 | 151,600 | 4,013,200 | | |
| | B: 4,013,200 | actual | 1,485,901 | 763,507 | 103,629 | 305,537 | 64,685 | 66,205 | 748,626 | 3,538,091 | 88.2 % | 475,109 |
| 05 | COMMUNITY PARTICIPATION | budget | 1,083,000 | 284,000 | 169,000 | 169,000 | 169,000 | 169,000 | 169,000 | 2,212,000 | | |
| | B: 2,212,000 | actual | 841,743 | 177,375 | 148,807 | 172,853 | 88,969 | 52,485 | 151,296 | 1,633,528 | 73.8 % | 578,472 |
| 07 | INDIRECT COSTS | budget | 258,000 | 43,000 | 43,000 | 43,000 | 43,000 | 43,000 | 43,000 | 516,000 | | |
| | B: 516,000 | actual | 227,965 | 18,129 | 70,197 | 28,001 | 14,419 | 24,164 | 9,121 | 391,995 | 76.0 % | 124,005 |
| 08 | TECHNICAL ASSISTANCE | budget | 3,930,080 | 634,200 | 614,200 | 614,200 | 614,200 | 614,200 | 914,200 | 7,935,280 | | |
| | B: 7,935,280 | actual | 3,441,537 | 588,160 | 572,257 | 577,089 | 552,625 | 521,875 | 489,063 | 6,742,606 | 85.0 % | 1,192,674 |
| 09 | EQUIPMENT & VEHICLES | budget | 1,350,000 | 0 | 0 | 0 | 0 | 0 | 0 | 1,350,000 | | |
| | B: 1,350,000 | actual | 801,761 | 498,509 | 63,390 | 84,702 | -5,454 | 0 | 878 | 1,443,787 | 106.9 % | -93,787 |
| 10 | MONITORING & EVALUATION | budget | 0 | 0 | 0 | 0 | 150,000 | 150,000 | 150,000 | 450,000 | | |
| | B: 450,000 | actual | 4,544 | 0 | 0 | 0 | 0 | 0 | 0 | 4,544 | 1.0 % | 445,456 |
| 11 | PURCHASES SPECIFIED LATER | budget | 240,000 | 0 | 0 | 0 | 0 | 0 | 0 | 240,000 | | |
| | B: 240,000 | actual | 130,049 | 18,615 | 0 | 0 | 0 | 0 | 0 | 148,663 | 61.9 % | 91,337 |
| | 32,800,480 | budget | 18,082,180 | 2,599,300 | 2,496,800 | 2,703,300 | 2,430,300 | 2,133,300 | 2,355,300 | 32,800,480 | | |
| | | actual | 18,017,022 | 2,875,938 | 3,049,789 | 1,861,973 | 1,586,827 | 1,644,419 | 1,317,582 | 30,353,549 | 92.5 % | 2,446,931 |
| | EQUIVALENT IN KES | actual | 133,805,087 | 26,728,046 | 26,382,254 | 27,462,724 | 17,044,329 | 16,526,828 | 12,879,591 | 260,828,859 | | |

# 2. PLANNING AND DESIGN

## 2.1 General

The planned and actual progress of Planning and Design and its major components is shown in figure E.

The following major activities were carried out during the period under review:

## 2.2 Planning and Design

### 2.2.1 Piped Schemes

The designs of piped schemes were behind schedule as observed in figure E. No design reports were completed during the period under review due to preparation of feasibility statements to FINNIDA.

### 2.2.2 Water Points Register

The work of checking and updating the register continued during the report period.

## 2.3 Field Investigation

The main activities in the section are geophysical and hydrogeological investigations.

### 2.3.1 Geophysical Investigations

Shallow refraction seismic method continued to be used in surveying proposed borehole sites. In some parts, especially those in volcanic formations (e.g. Samia and Bunyala in Busia) resistivity method was preferred. Occasionally, an electromagnetic method based on very low frequency (VLF), method was also employed. In all these cases, the data was interpreted using computer programmes.

During this period drilling activities slowed down giving us a chance to start implementing the new directive from the MoWD headquarters concerning reporting of hydrogeological surveys. Therefore, a report covering 17 sites investigated in North Marama location, Butere division of Kakamega district (during previous quarter) was compiled. The second one dealing with 10 sites in South and East Marama locations was almost complete.

During the report period, a total of 30 borehole sites were surveyed. Of these, some were in the private and semi-private category which had not been catered for during the preparation of the work plan.

### 2.3.2 Hydrogeological Investigations

In the report period a total of 21 boreholes were test pumped. Most of these boreholes had already been installed with hand-pumps which had to be removed before any test could take

place resulting to some delay. However, the backlog that existed was cleared within this period and thus only a few boreholes remained to be test–pumped at the end of the year.

Duration of test pumping for low yielding boreholes was 6 hours and 24 hours for production boreholes and other high yielding ones. During this period, a 10–hour step draw–down test was used in high yielding boreholes to establish their performance and efficiency before the 24–hour aquifer test was undertaken.

Groundwater level measurements were continued within the observation point network covering the programme area. There are 11 boreholes and 37 shallow wells in the network and measurements were taken twice a month at each point. However, efforts were being made to expand the network by including more observation points and dropping those which seemed to be too close to each other or to streams or springs. This is expected to be accomplished during the 'bridging' phase (January– April, 1993) of the Programme.

Spring discharge measurements were carried out twice a month within the observation network consisting of 32 points. Other discharge measurements were for proposed piped schemes and these were carried out on a regular basis.

A total of 11 new springs were identified within the programme area during the report period.

## 2.4 Water Quality Monitoring

The major activities of the section during the report period were inspection, sampling and analysis of piped schemes and water points to be handed over to the community. The actual number of samples analyzed was 343 which is greater than what had been planned due to the following reasons.

(i) Samples from Kenya – Finland Primary Health Care Programme were analyzed. These were not planned for in the work plan.

(ii) The revised handing over programme resulted in the analysis of samples which had not been planned for.

(iii) More than the planned number of samples were analyzed from piped schemes due to water quality complaints.

(iv) Samples for iron removal study were analyzed.

## 2.5 Computerization

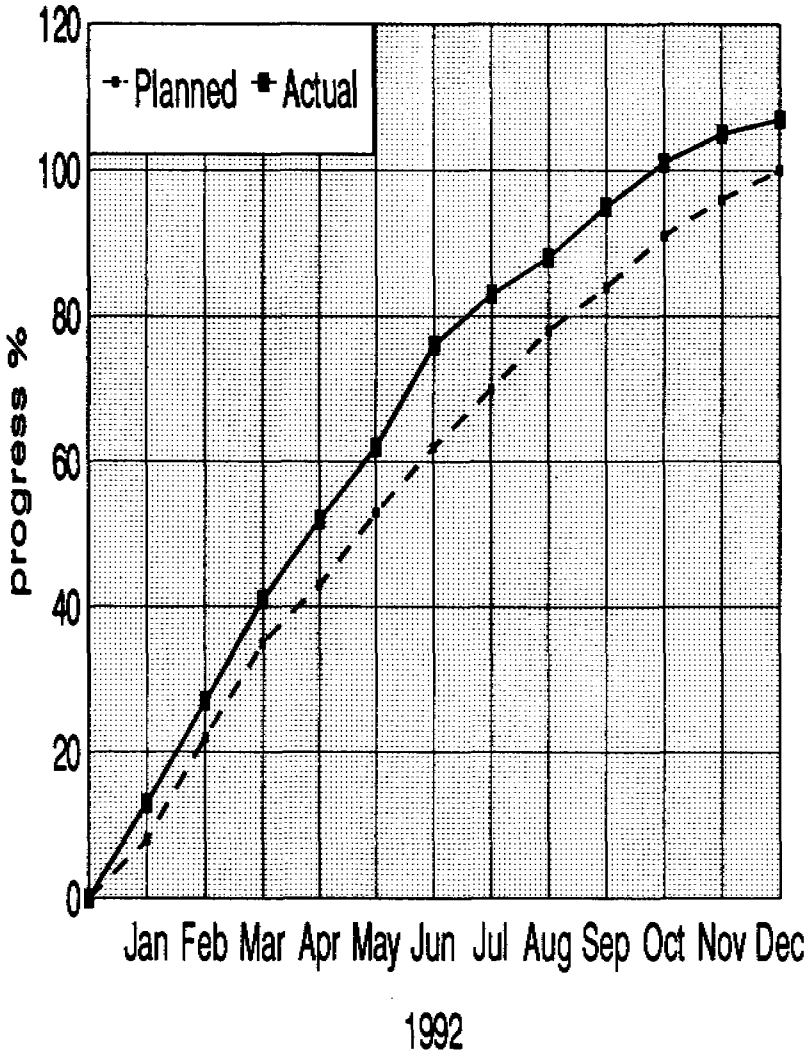
The following activities were carried out during the fourth quarter of the year:

- maintenance of computer hardware
- updating of data in water point and water treatment plant databases
- writing/producing reports

- system development on adequate and flexible reporting
- helping and training users on basic problems
- writing of user manuals and system descriptions
- installation of help messages to programs
- handing over of several responsibilities from the Finnish System Analyst (Mr. Voutilainen) to his Kenyan counterpart (Mr.Thooko).

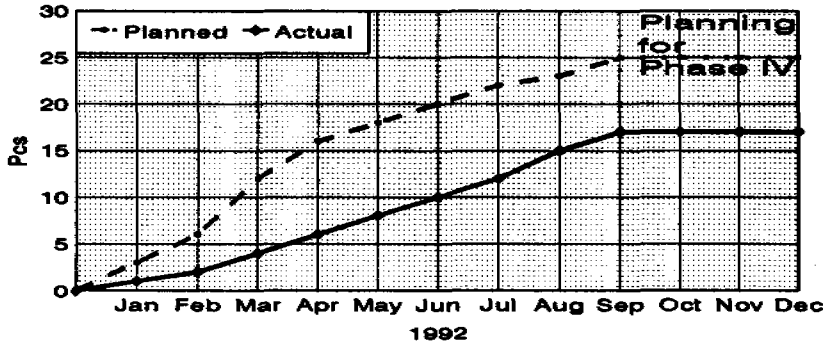
# E. Planning & Design

## General Progress

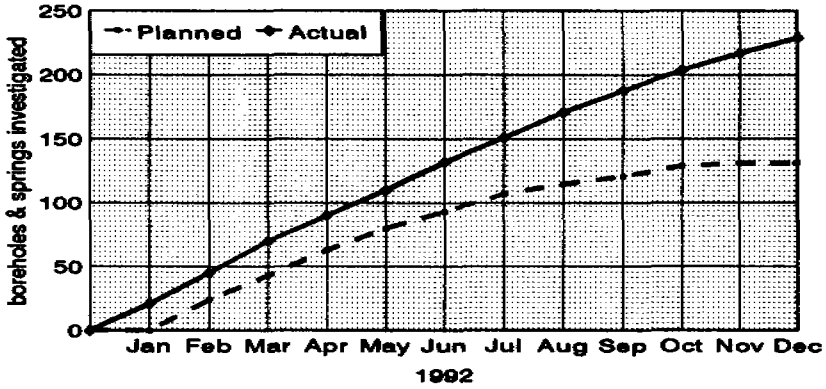



## Planning Section

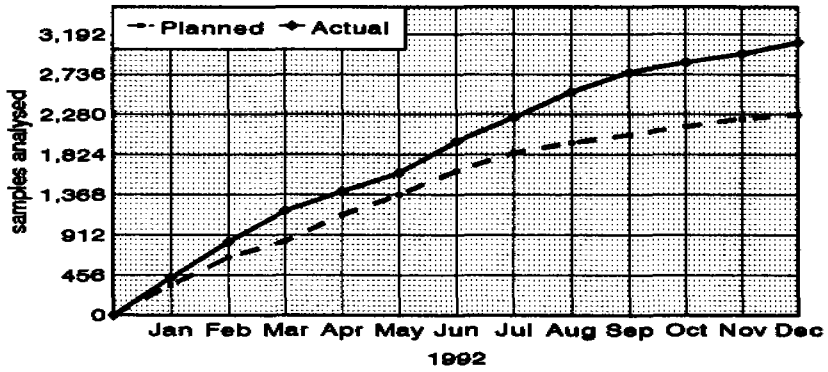
### Progress for design of piped w/s




## Field Investigation Section




## Water Quality Section



# 3. PHYSICAL IMPROVEMENTS

## 3.1 General

The progress of works as compared with the work plan was reflecting the target of saving funds. Efforts were concentrated on completing the already started works. In regard to the saving target special attention was paid to reducing the unnecessary use of the vehicle fleet. Also reflecting the reduced activities the directly employed staff was reduced by 72 persons in the beginning of December, 1992. At the end of December an additional 15 persons were laid off.

While the physical progress was somewhat reduced, development of activities was streamlined. At the vehicle workshop reporting format and indicators of efficiency were developed. A sustainability plan for the workshop was drafted. Efforts were also made to develop indicators to measure the efficiency of the lorry fleet.

In the water point sector a programme to develop the water point structures and working methods was started. The present standard designs will be revised utilizing the gained experience both within the Programme and elsewhere in Kenya in view of more economical and sustainable solutions. Special attention will be paid to develop a model for a "one family well".

The planned and actual progress of physical improvements and its major components are shown in figure F.

## 3.2 Point Source Supplies

Activities concentrated in rehabilitating water points included in the final handing over programme. Since the beginning of the year total 854 (171 %) water points out of 500 scheduled for the whole year have been rehabilitated. It is foreseen that the handing over implies the rehabilitation of 1300 water points.

Construction of new water points progressed according to the work plan. Total 159 (80%) new or resited water points out of 200 scheduled for the year have been completed.

## 3.3 Piped Schemes

Construction and rehabilitation works at 15 water supplies and treatment plants, including the works at water supplies financed through the local component and water supplies for Health Centres were continued. Works at 9 of the mentioned water supplies were completed during the report period.

Handing over of completed water supplies were continued in cooperation with Operation and Maintenance Department and the Resident Engineer. A total of 9 water supplies namely Kaimosi W/S, Hamisi W/S, Nambale W/S, Busia-Mundika W/S, Busia Boreholes (4), Webuye W/S, Mumias W/S, Butula-Muandas W/S and Chesikaki W/S were handed over to MoWD. A total of 6 water supplies namely Sira-Nyawita W/S, Kabuchai W/S, Maturu-Luandeti W/S, Keveye Girls Sec. School W/S, Khwisero W/S and Navakholo W/S were handed over to communities to run and maintain. By the end of the report period a total of 29 water supplies have been handed over to the final undertaker.

### 3.4 Building Construction

Routine maintenance of Programme offices in Kakamega and District Bases was continued.

### 3.5 Workshops

Routine maintenance and repairs of the fleet of apr. 160 vehicles belonging to the three FINNIDA financed Programmes (K-FWWSP, K-FPHCP and K-FLDP) was continued.

Indicators of efficiency were developed. The established indicators show e.g. that the "availability" of the vehicle fleet during the report period was at the level of 87% on average.

### 3.6 Materials and Transportation

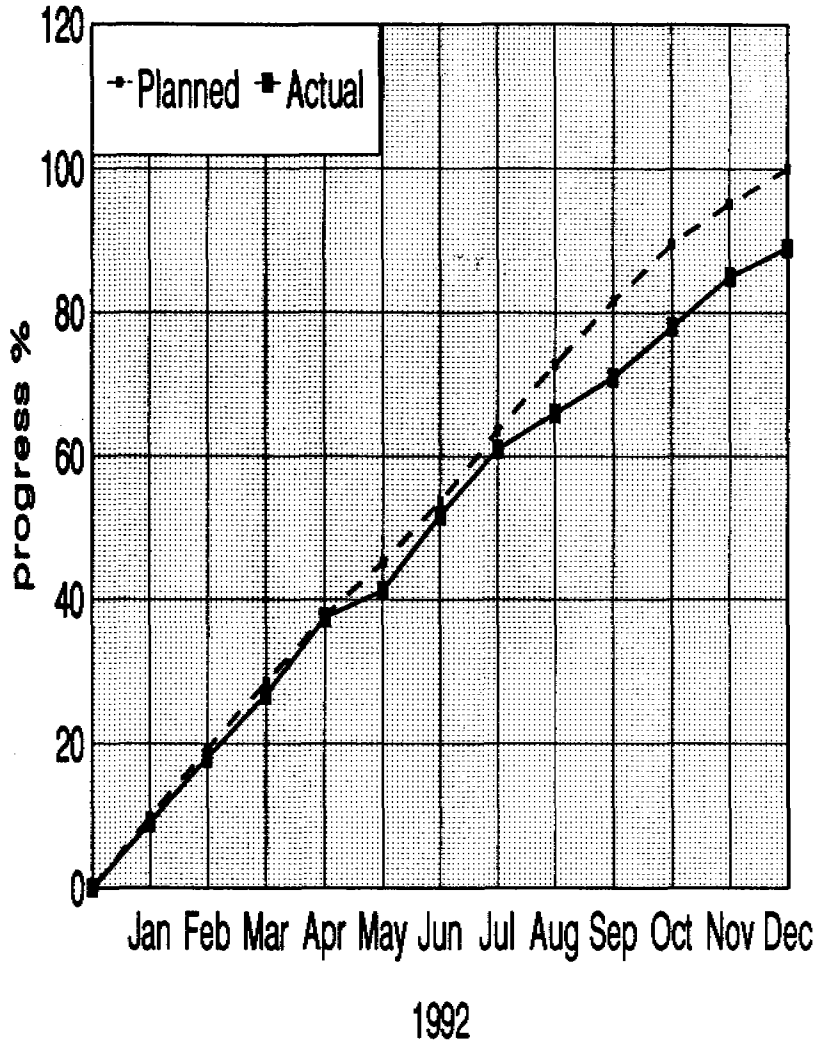
Routine storing and material supply activities were continued.

Transport pool continued to provide services as planned.

Special attention was paid to reduce the unnecessary use of vehicles. This resulted in considerable savings as along with other measures taken the monthly average costs of the fleet dropped down by 30% compared with the previous reporting period.

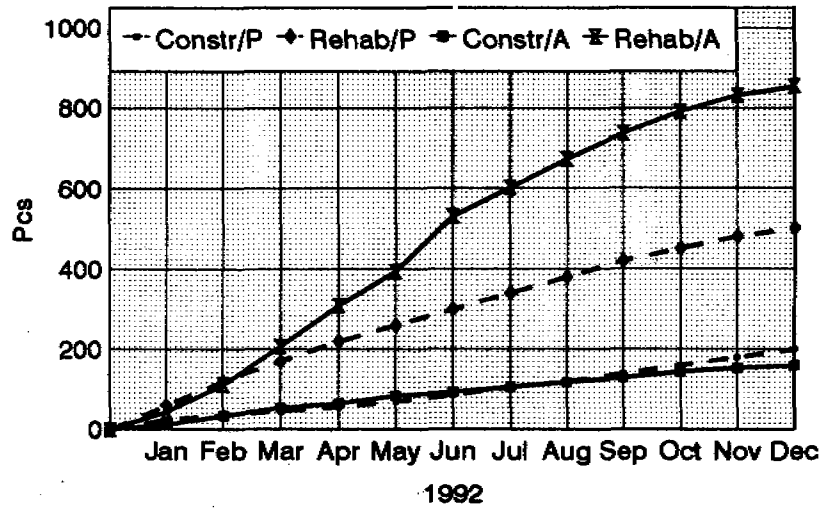
# F. Physical Improvements

## General progress



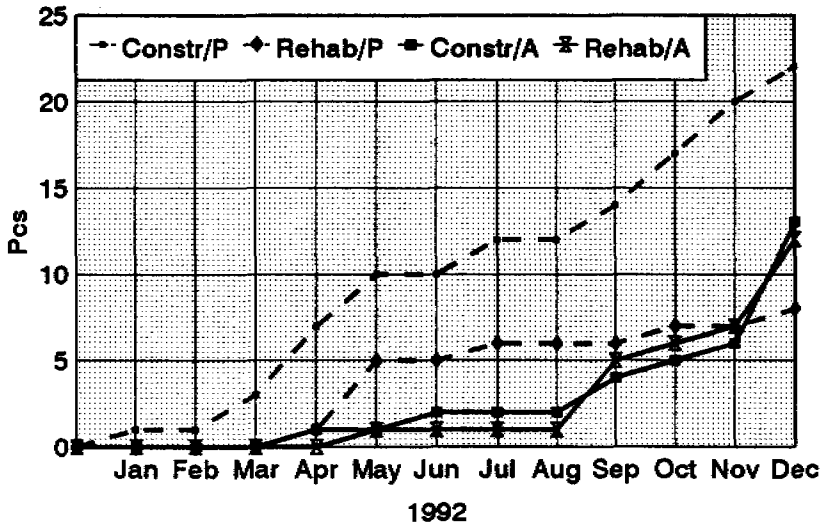

## Point Source Supplies

### Construction/Rehabilitation




## Piped Schemes

### Construction/Rehabilitation



# 4. OPERATION AND MAINTENANCE

## 4.1 General

The work programme for Operation and Maintenance Department is divided into four main components of which each is planned to produce a specified number of outputs. The planned and actual progress Operation and Maintenance Department and it's major components for the report is shown in figure G.

## 4.2 Point Source Supplies

There was no training of locational repairmen in this quarter. By the end of the quarter a total of 56 locational repairmen had been trained for the districts in the Programme area.

Installation of hand pumps and changing proceeded as scheduled. Hand pumps installed were mainly of Afridev and AF 85 types. Changings done were mainly Nira AF 76 to Nira AF 85 and India MKII to Afridev to achieve (VLOM). The installation of Afridev and Nira AF 85 is ahead of schedule.

The implementation of the pilot programme for spare parts delivery systems is still on–going and results of sells are encouraging. One more hardware shop was opened making the total to six hardwares. There is one hardware shop in Siaya, Kakamega and two in Busia and Bungoma respectively.

Mobile teams were withdrawn from areas covered by pilot programme on spare part delivery system and rest of the programme area, to pave way for the encouragement of local participation, build institutional capacities, and cost recoveries in a sustainable manner.

The revenue collection on hand pump repairs on the mobile teams and locational repairmen went on without any balances of payments. The money collected exceeds the amount invoiced due to the outstanding balances of the previous quarters that were recovered in this quarter.

## 4.3 Piped Water Supplies

Inventory of mechanical and electrical equipment of water supply and water treatment plants were completed in the previous quarters.

Organization charts and duties were prepared for 10 W/S and WTP making a total of 57. No management study was successful, attempt was made to prepare two management studies for Busia Mundika and Maseno Water Treatment Plants.

The targets for updating plans and layout, suggestion for improvement and rehabilitations were met in the previous quarters, and therefore, were not done in this quarter.

Developing maintenance procedures was in progress. Five operation and maintenance manuals were completed making a total of 23. System of reliable monitoring for piped water supplies was in progress.

Training of operators for constructed or rehabilitated water supplies were conducted for 13 water supply operators.

Regular service to electrical and maintenance system proceeded with mobile team.

Development of manpower and organization for existing staffing level proceeded. A total of 47 organization charts and lists have been prepared.

Rehabilitation of piped water supply schemes completed for Port Victoria W/S and Butula W/S. Finalization of works for handing over water supplies proceeded and a total of 29 water supplies have been handed over.

### 4.4 Water Treatment Plants

Data collection and inventory of mechanical, electrical plant and equipment was completed for 18 Water Treatment Plants in the previous quarters.

Development of Operation and Maintenance procedures continued by preparing the O&M manuals for Kakamega WTP and Mumias WTP commenced. Preparation of manual for Shitoli WTP commenced.

Regular servicing, preventive maintenance together with on-the-job training for operators in Water Treatment Plants were carried. Training of chemical and pump attendants was not done.

Updating the plans, layouts and organization charts along with detailed planning and programming of rehabilitation were completed in the previous quarters.

Rehabilitation works in Water Treatment Plants were in progress in Kakamega WTP. Maseno WTP, Chesikaki and Mumias WTP.

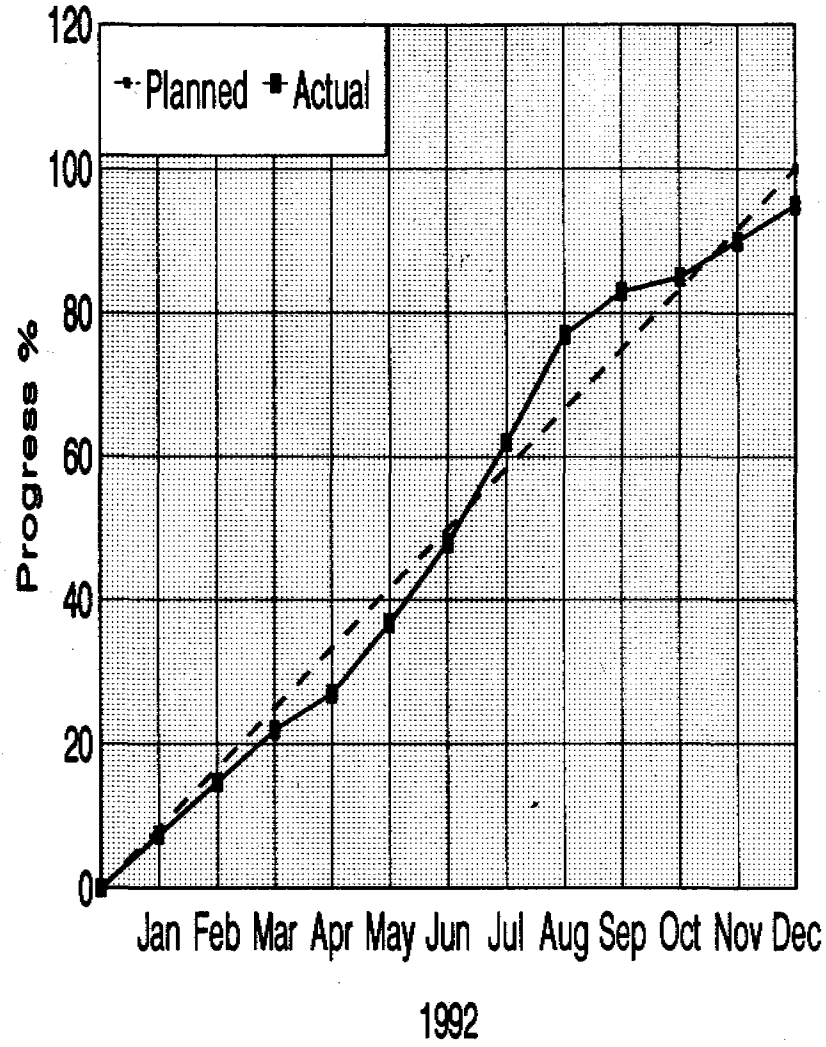
### 4.5 Workshops

Support services were done by metal workshop and lathe machine shop. Training of special duties in the workshop was not held. District base workshops in Busia, Bungoma were operational.

Water meter calibrating and repairing machine was in use. Pump testing and repair workshop were operational.

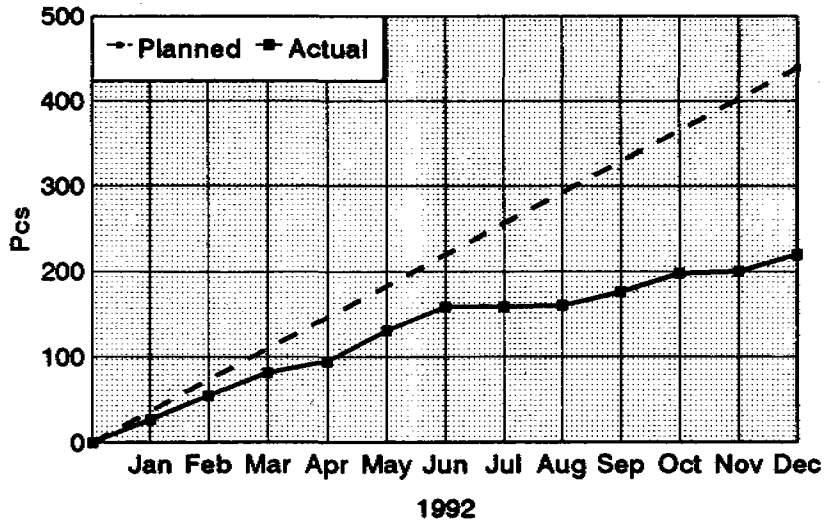
# G. Operation & Maintenance

## General report



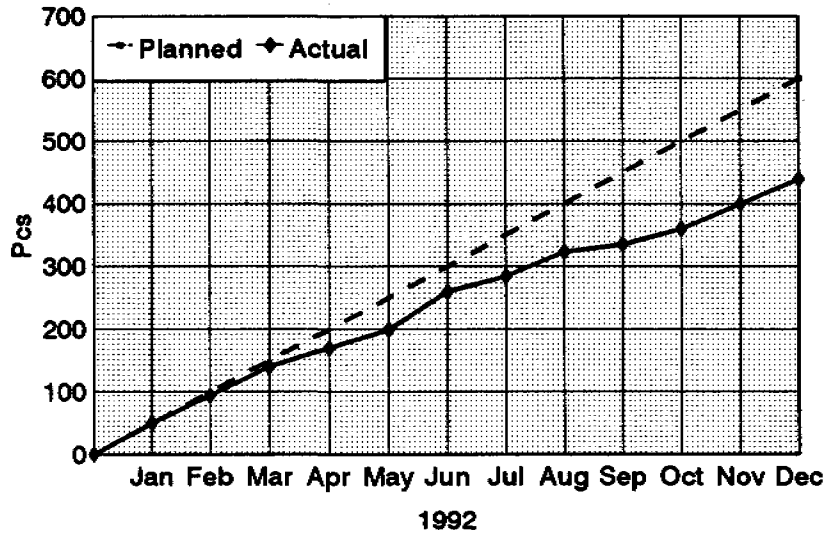

## Point Source Supplies

### Pump installations



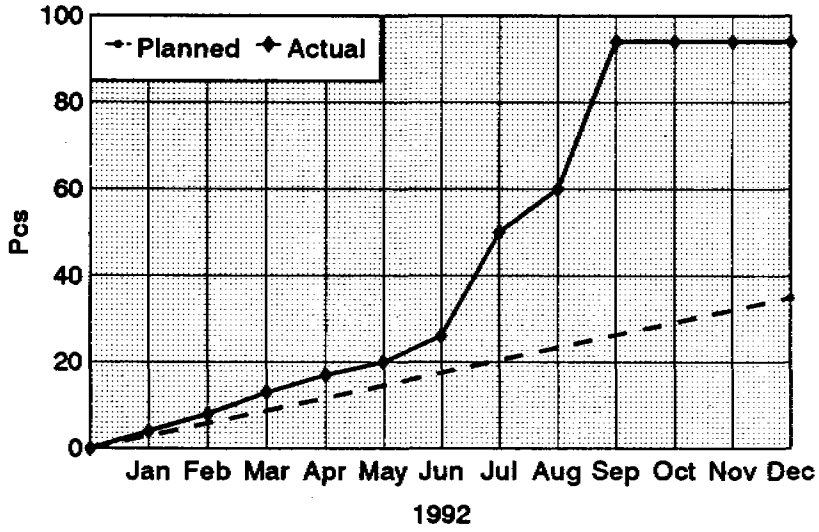

## Point Source Supplies

### Pump removals and reinstallations



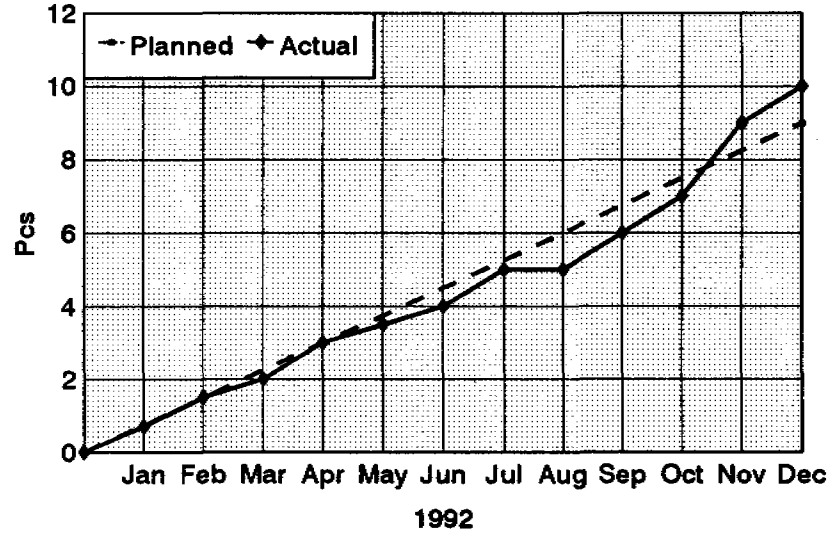
# Piped Water Supplies

## Inventory of supplies



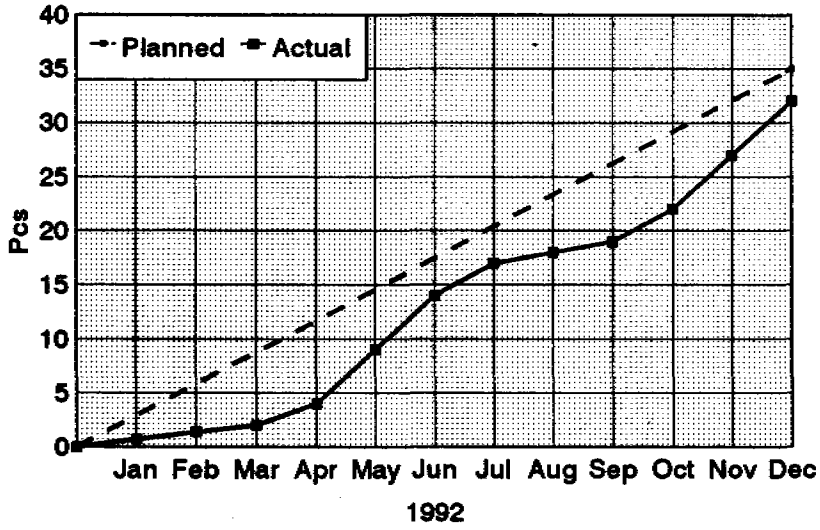

# Piped Water Supplies

## Rehabilitation



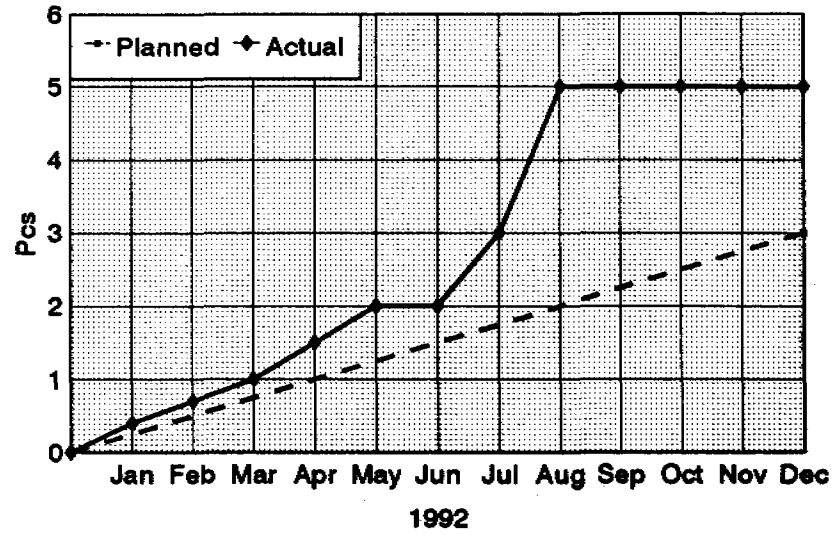

# Piped Water Supplies

## Operation and maintenance manuals




# Point Source Supplies

## Spare part distribution, pilot programmes



# 5. COMMUNITY DEVELOPMENT AND TRAINING

## 5.1 Community Involvement

(a) Siting of Water Points

More efforts were put in the resiting and rehabilitation of the existing water facilities.

(b) Land Easement

The land easement procedures were streamlined, and as a result 74 land easements were recorded during the report period.

(c) Handing Over of Water Points

Good progress was made towards handing over of the completed facilities to the beneficiaries. During the report period, 239 water points were handed over to the community.

(d) Registration of Water Points

Collaboration with the Ministry of Culture and Social Services was intensified, and as a result 190 water committees were registered during the report period.

## 5.2 Socio-Economic Section

(a) Feasibility studies

The Section recorded good progress towards the feasibility studies carried out jointly with the Planning Section.

(b) Income Generating Activities

Communities intensified their efforts towards initiating and managing the income generating activities.

## 5.3 Training and Manpower Development

(a) Community Training

A high coverage was recorded in preparation for the handing over of water points. The training equipped community members with management skills. A total of 268 members of the community were trained during the report period.

(b) Skill Training

Skill training was intensified during the report period. Trained pump attendants trained other community members, resulting in self reliance on the part of the beneficiaries.

(c) Local Contractors

Training of both locational repairmen and contractors took place as planned.

### 5.4 Indicators of Sustainability

Communities continued to play a leading role towards the construction and maintenance of the water facilities. Materials and labour valued at Kshs.105,156 were recorded as contribution by community members.

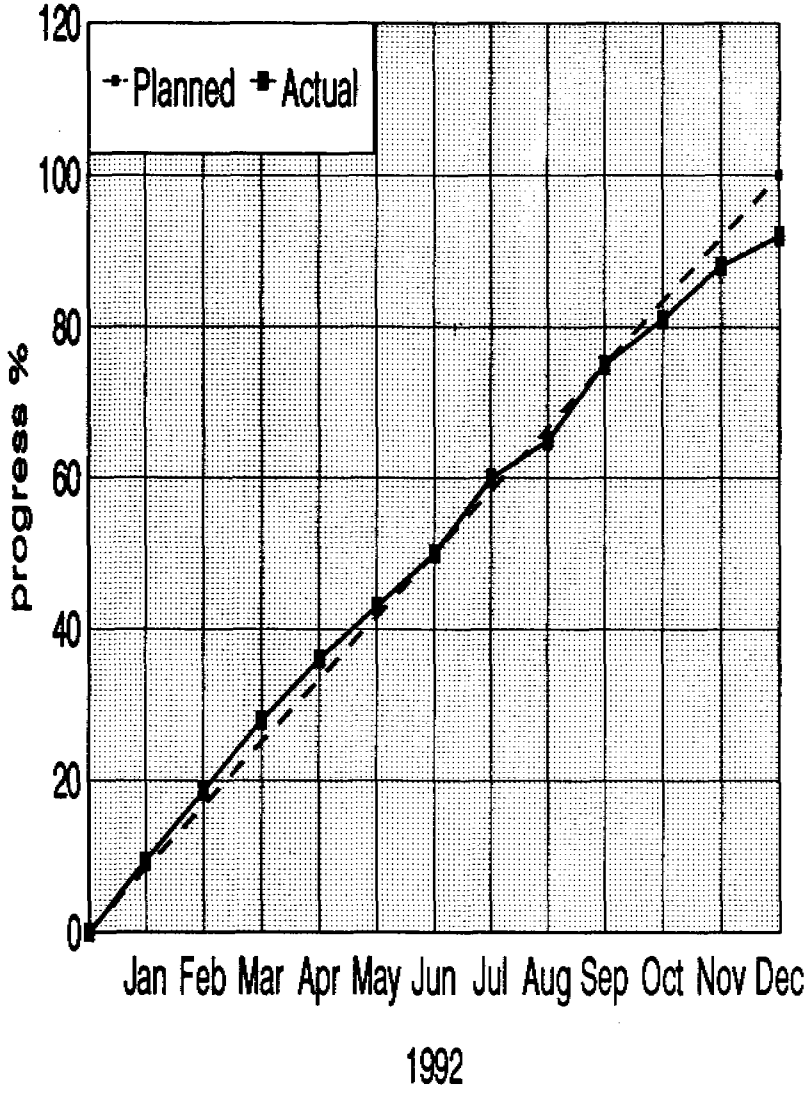
The Programme continued to receive applications for private and semi private water points. A total of 57 applications were recorded. Community contributions towards the construction of semi private water points was Kshs.336,280.

Monitoring and follow up of programme activities was intensified. During the report period, communities took their operation and maintenance obligations seriously by paying most of the new and old maintenance bills.

The extension workers continued to promote health and hygiene education among the community members.

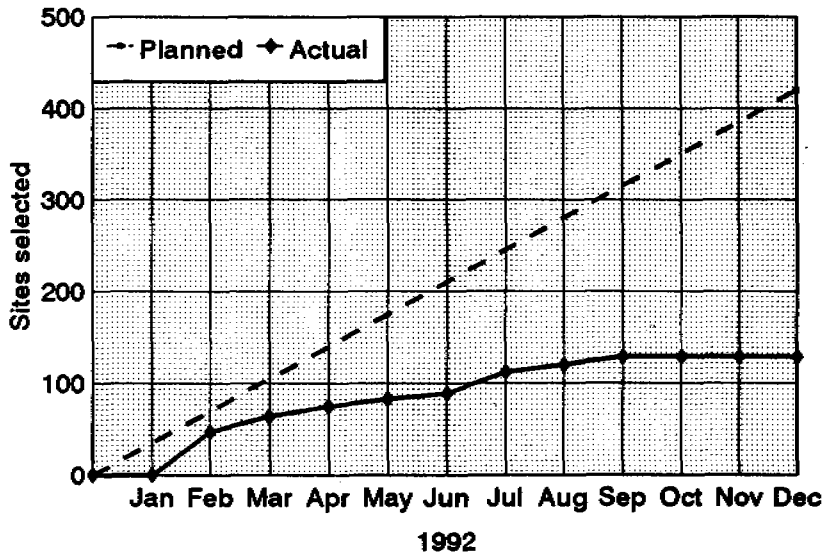
# H. Community Development and Training

## General Progress



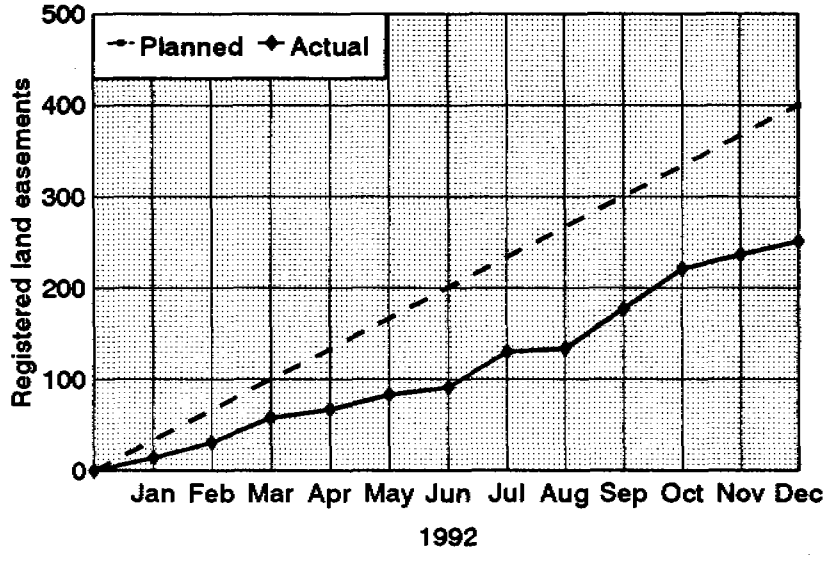

## Community Participation in Decision Making

### Siting of Water Points

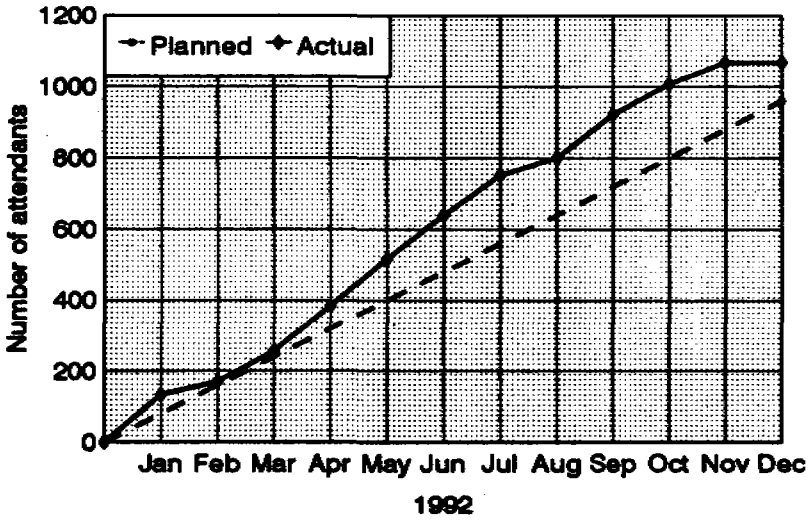



## Community Participation in Decision Making

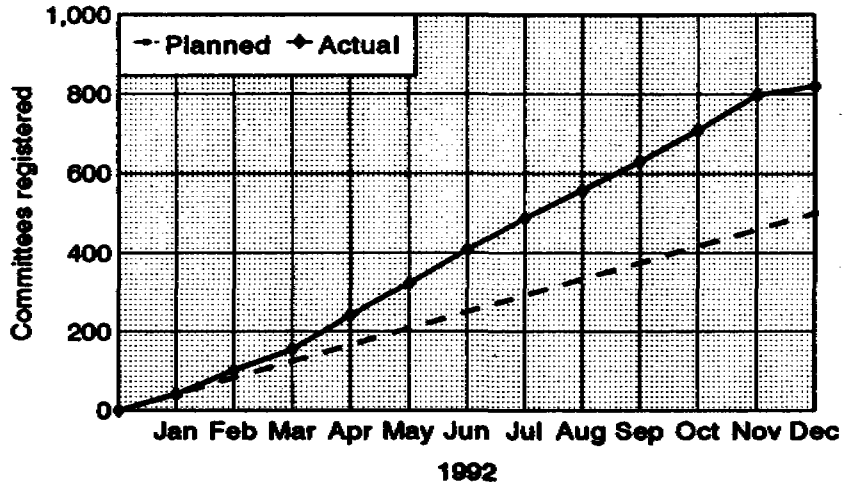
### Land Easements



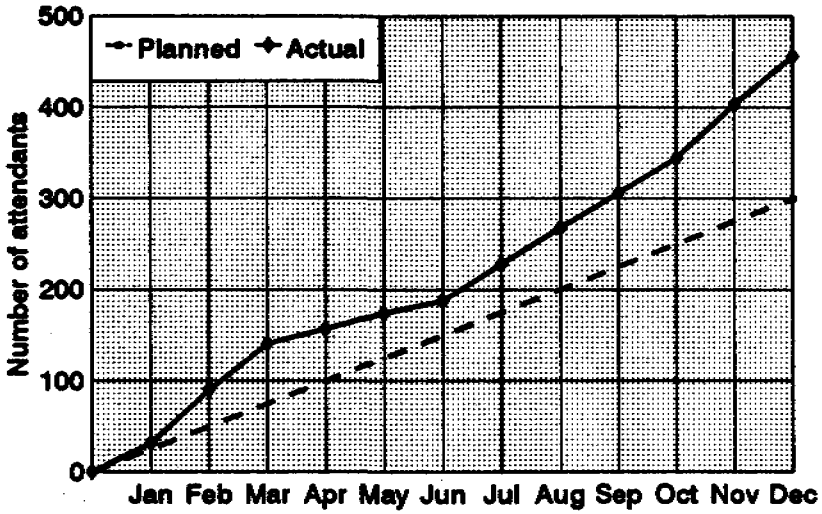
## Operation and Maintenance Competence
### Training of Pump Attendants



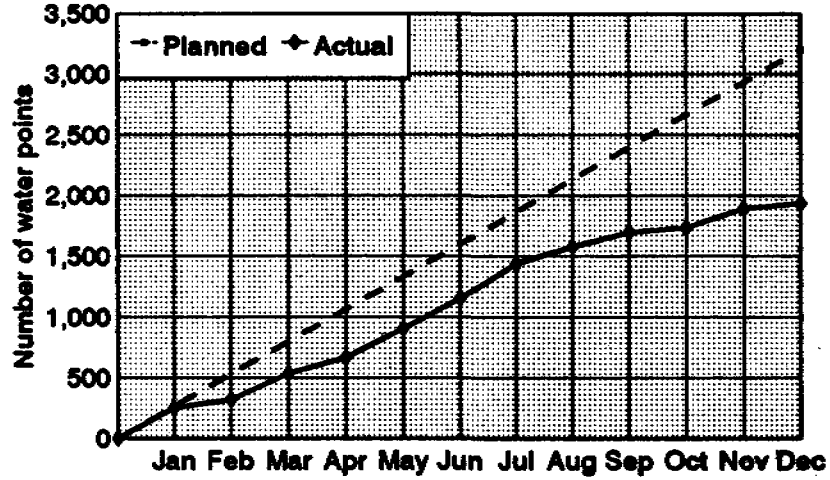

## Water Point Management
### Registration of Water Committees



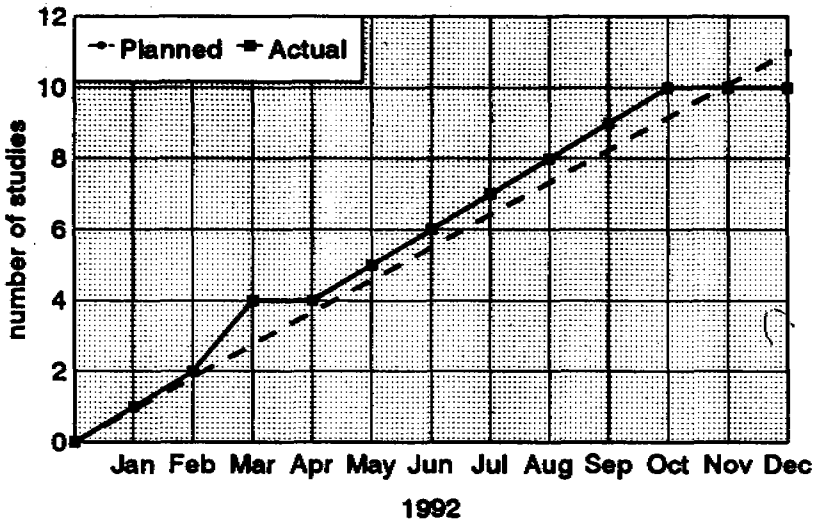

## Operation and Maintenance Competence
### Training of Spring Attendants



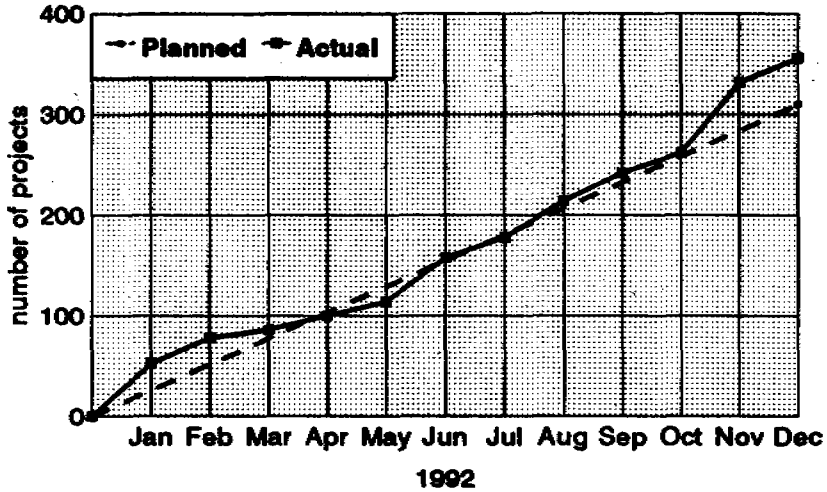

## Water Point Management
### Final Handing Over of the Water Points



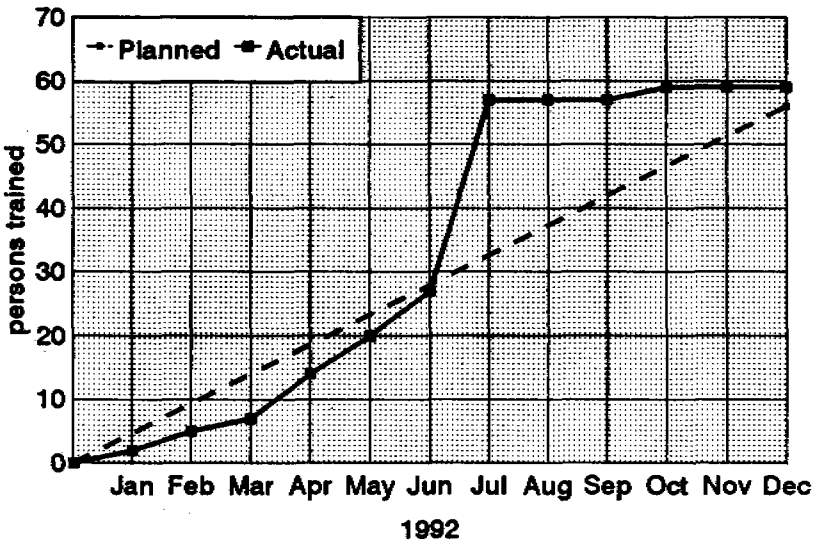
# Socio-Economic Section
## Feasibility Studies



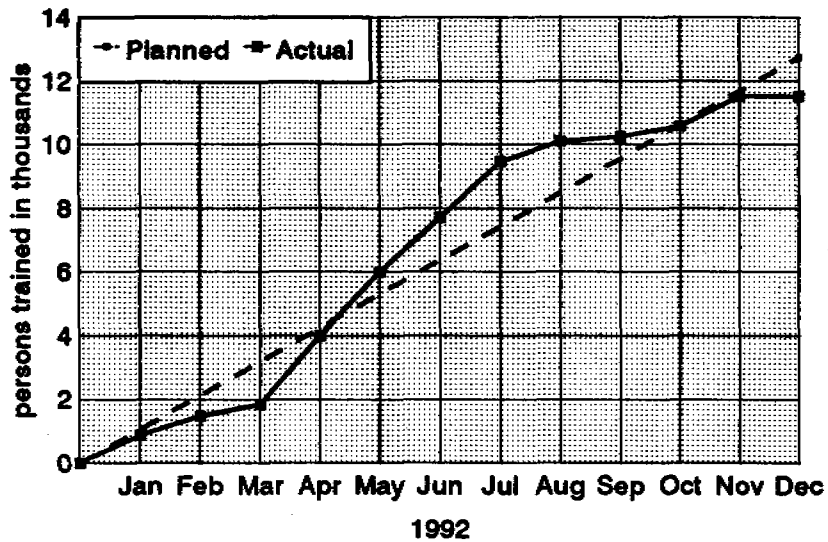

# Socio-Economic Section
## Income-Generating Support




# Training and Manpower Development
## Local Contractors




# Training and Manpower Development
## Community Training



KEFINCO

KENYA—FINLAND WESTERN WATER SUPPLY PROGRAMME

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KEF/52 Vol.II/46 15th March, 1993

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**RE: QUARTERLY REPORT**

OCTOBER - DECEMBER, 1992

Please find enclosed the above Quarterly Report, for October-December, 1992 for your information and retention.

Yours faithfully,

**REIJO HAKKINEN**
**PROJECT MANAGER**