# FPLM/Kenya

## Quarterly Performance Report

### 3rd Quarter

July 1 - September 30, 1993

Logistics Management Unit
Division of Primary Health Care

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# FPLM

## Quarterly Performance Report

### 3rd Quarter, 1998

**Country:** **Kenya**

**Period of this Report:** **July 1 – September 30, 1998**

**Person Completing this Report:** **John Wilson**

**CURRENT ACTIVITIES:**

The primary goal of the FPLM/Kenya Project is **"to strengthen health sector logistics management systems"**. This goal is critical in achieving the overall USAID/Kenya's Strategic Plan objective which is **"to increase the sustainability of family planning and HIV/AIDS service delivery systems"** within the GOK/MOH Health Sector Reform Framework.

Within the FPLM/Kenya goal, four discreet strategic objectives were developed. These are listed below together with a description of the pertinent highlights and accomplishments during the reporting period.

**Strategic Objective One (SO1):**

**To sustain and further institutionalize current gains in family planning logistics in Kenya over the FPLM Project lifetime**

- ***Contraceptives & FP Supplies Distribution ($1.7m).*** The Logistics Management Unit (LMU) of the Division of Primary Health Care (DPHC) continued the routine distribution of Contraceptives throughout the quarter, utilizing the Distribution Resource Planning (DRP) module of the Logistics Management Information System (LMIS).

  Contraceptive commodities valued at over $1.7m were distributed during 80 distribution/delivery/supervision visits. At the time of delivery to every district store, an LMU officer provides on the job training on stores management,

including taking a physical count, updating bincards, and completing/retrieving any outstanding Quarterly Reports.

As the MSCU FP Warehouse Report indicates (see **Appendix I**), there were adequate supplies of all items during the reporting period.

- ***Disposal of Unserviceable FP Commodities.*** The LMU, in collaboration with the Chief Drug Inspector facilitated the disposal of expired and damaged contraceptive supplies and other unserviceable items at the FP Warehouse. Most of these items had been collected from district and regional stores over the past several years and returned to the FP Warehouse for disposal. The disposal exercise is an extremely cumbersome and difficult process, and in fact this was the first time this type of disposal had been effected since the warehouse was opened in late 1991. Copies of the official documents that facilitated the disposal are included as **Appendix II**.

- ***Logistics Management Support to the US Embassy in Kenya Following the August Terrorist Bombing.*** In the immediate aftermath of the terrorist bombing of the American Embassy in Nairobi on August 7th, the LMU was requested by the Embassy/UDAID Medical Coordinator to assist in receiving, allocating, and distributing emergency medical supplies from the United States Government. LMU staff met emergency medical supplies arriving via the Unites States Airforce, primarily from Bahrain, transported them to the MSCU/FP Warehouse, and sorted, inventoried, and distributed them to the 13 major hospitals in the Nairobi area. A distribution list is attached as **Appendix III**.

  Subsequent supplies (see **Appendix IV**) were also transported to the MSCU FP Warehouse where they were inventoried and are awaiting distribution together with those emergency items from other donors currently at the Kenyatta National Hospital stores, which is the designated emergency relief centre for the bombing tragedy.

- ***Logistics Management Support for World Bank Financed MCH/FP Equipment: Distribution Value $2.2m.*** During the reporting period, The Logistics Management Unit provided substantial technical assistance to the MSCU and the GTZ Procurement Unit. Specifically, the LMU designed a distribution plan for all MCH/FP equipment procured by GTZ on behalf of the MOH through World Bank funds. This plan was presented to and approved by the Coordination Committee for Receipt, Warehousing, and Distribution of Goods Financed from IDA Credits 2110-KE and 2310-KE, appointed by and responsible to the Permanent Secretary, MOH. Excerpts of the distribution plan are attached as **Appendix V**. These include the commodity allocation plan, together with the rationale, the actual allocation by type of facility, and sample packing lists for each type of facility. The Committee met on a weekly basis to coordinate the distribution activities.

It is noteworthy that the initial list that the LMU was provided with by the GTZ Procurement Unit included only 47 sites in the proposed distribution. The LMU plan, however provided for a much more equitable distribution and facilitated distribution to 13 Provincial level hospitals, 52 district hospitals, 42 sub-district hospitals, 400 health centres, and 1,400 dispensaries. To illustrate the substantial volumes of equipment involved in this exercise, equipment for a provincial level hospital is equivalent to one twenty foot container, a district hospital half a container, and a sub-district hospital a quarter of a container.

The distribution began in September, utilizing both FPLM trucks (one full time and one on a part time basis. Most trucks utilized were from Kenya Express, a private trucking company under contract with GTZ through World Bank funding. Private sector trucks often went in convoy with FPLM trucks. In all cases, an officer from the LMU accompanied the trucks to ensure the security of the deliveries and accountability for the commodities. Accountable MOH documentation (S12 forms) were used. As none of the equipment was marked MOH or GOK by GTZ prior to leaving the warehouse, FPLM ensured that recipients signed that it was their responsibility to have equipment marked appropriately to reduce the risk of theft after delivery.

The total value of MCH equipment and supplies distributed by the end of the reporting period is $2,237,406

- ***Lessons Learned from Private Sector Transportation Outsourcing.*** The MCH/FP equipment distribution exercise was the first experience FPLM has had with a private sector distribution company in distributing commodities to the field. This was anticipated as an important opportunity as there is a generalized opinion among many health sector donors that the private sector is more cost-efficient than public sector distribution systems. This was FPLM's first opportunity to test some of these underlying assumptions.

  Experience from this exercise has resulted in a number of important lessons learned. Although these lessons learned cannot at this point be generalized to other private sector operations, they are none the less very interesting and sobering. The major lessons learned are as follows:

  a) The general state of repair and roadworthiness of the subcontracted private transporter trucks is far below the standards of the FPLM trucks. This resulted in frequent breakdowns - both in the field and sometimes even prior to departure after loading. This obviously affects the efficiency of the distribution adversely.

  b) The number of kilometers per day covered by the private vehicles was far less than the FPLM vehicles because private drivers delayed

unnecessarily for extra nights in the field, possibly because they are paid according to the number of nights spent out of Nairobi. This proved very frustrating to FPLM who on a number of occasions (e.g. Nakuru and Naivasha) left the private vehicle after the last delivery and returned to Nairobi by public means to avoid another unnecessary night out in the field.

c) At the delivery site, on most occasions, the loaders accompanying the private vehicles refused to assist in offloading unless they were paid direct by the recipients. This usually resulted in the FPLM drivers and LMU officers doing all the offloading themselves, once again reducing the efficiency of the distribution.

- ***Increasing Accessibility and Availability of Public Health Condoms.*** The Coordination Committee appointed by the Permanent Secretary also proposed and approved an initiative to increase the availability of MOH public health condoms through distribution to bars and lodgings in towns. This was in response to the recent reduction in MOH condom distribution through NGO outreach/CBD projects and the UNFPA condom dispenser project. FPLM was requested to implement this initiative. The response to this initiative was extremely positive with proprietors eagerly accepting the condoms to make them available to their customers. During September, a total of 539 sites (primarily bars and lodgings) were supplied with what was estimated to be a three month supply (as determined through discussions between FPLM staff and proprietors) – a total of 8,271,600 condoms. The areas covered were Murang'a, Maragua, Meru, Siaya, Nakuru, Nyeri, Nanyuki, Mukurweini, Homa Bay, and Machakos. Nairobi was deliberately excluded from this initial distribution effort as FPLM was under the impression that PSI was providing Trust (social marketing) condoms to Nairobi bars and lodgings. FPLM staff was also instructed not to supply MOH condoms in any sites where Trust condoms were already available. These measures were taken to ensure that the MOH condoms were not "competing" in the same marketplace with the Trust condoms.

- ***Fieldwork Completed for 1998 LMU Health Facilities Database.*** Management information staff of the Logistics Management Unit collected field data for the Health Facilities Survey. It is anticipated that this database will be of value to all donors, project managers, and researchers in the health sector. For example, FPLM staff is collaborating with MACRO Systems, a USAID supported co-operating agency, to utilize this database in structuring a research project to determine the costs of family planning service delivery.

- ***Improved Logistics Management Makes Critical Contribution to Increases in CPR and Reduction in TFR.*** The preliminary results of the 1998 Kenya Demographic and Health Survey were made available by USAID during the reporting period. Most significant, is the fact that of all the indicators measured

for health, only family planning indicators offer good news. Highlights of the DHS are that the Contraceptive Prevalence Rate (CPR) for all women, modern methods, increased from 21% (in 1993) to 24% (a relative increase of 14%) and the Total Fertility Rate (TFR) has decreased from 5.4 in 1993 to 4.7 in 1998 (a relative decrease of 13%), indicating that the earlier gains in terms of family planning performance (reduction in TFR from 6.8 in 1989 to 5.4 in 1993) have been sustained and that the National Family Planning Programme is "on track" as a highly successful public health intervention. There is no doubt that the LMU has been a major contributor in this achievement. Although there are many factors contributing to this success, perhaps the most critical component of FP service delivery is the availability of contraceptives and supplies when service providers need them. The substantial relative increase (43%) in male use of condoms with non-regular partners is very interesting and helps account for the dramatic increase in demand for condoms.

These Family Planning indicators are all the more impressive considering that child mortality is increasing, immunization coverage is down, and life expectancy is being lowered – extremely worrying trends possibly explainable to a large extent by the AIDS epidemic.

**Strategic Objective Two (SO2):**

**To coordinate donor and MOH support for commodities procurement and logistics management**

- ***LMIS ForeCast Module: Successful Projection/Ordering Tool for Donors and MOH.*** The LMU continued its role of assisting the MOH and donors in coordinating commodity forecasting, funding commitments and delivery scheduling by maintaining the LMIS ForeCast module through ongoing communication with the donors.

**Strategic Objective Three (SO3):**

**To expand FPLM techniques and technologies to include STI drugs, HIV/AIDS testing reagents, essential drugs and vaccines**

- ***Number of STI Cases Treated Hits New High.*** Supported by the DFID funded HIV/AIDS Prevention and Care Project (HAPAC), the LMU continued the distribution and tracking of STI drugs and testing reagents. During the reporting period, a total of 490 STI kits, valued at $210,700 were distributed to 329 service delivery sites. In addition, a total of 716 HIV/AIDS testing reagent kits, valued at $84,371 were distributed to district and provincial hospitals, the Mission for Essential Drug Supplies (MEDS), and the Department of Defense (DOD). See **Appendix VI** for details.

  The continued increase in the number of cases being treated per month is reflected in the chart included in **Appendix VII** (through August 1998 only as September data were not yet available at the time of preparation of this performance report). A total estimated 116,500 STI cases were treated during the reporting period, an average 27% increase over the previous quarter, and highest number since the inception of the project almost three years ago.

  During the previous quarter, it was observed that a significant proportion of rural health centres appeared to have relatively low stock levels of critical FP commodities (relatively low levels, not stockouts). During this reporting period LMU logistics and clinical support staff made a concerted effort to carry FP commodities (condoms, orals, injectables and gloves) in addition to STI items in an attempt to address this issue.

- ***Implementation of MSCU Restructuring Process Begins.*** In follow up to the National Conference on Strategies for Reforming the Public Sector Drug and Medical Supply Systems which took place during the last quarter, two significant implementation bodies were officially established: the MSCU Restructuring Steering Committee (chaired by the Director of Medical Services, mandated to provide policy guidance for the restructuring process) and the MSCU Restructuring Taskforce, (to manage the implementation process of the Conference recommendations on a daily basis, answerable to the Steering Committee). The composition of these two committees, together with their terms of reference is included in **Appendix VIII**.

  One of the first steps in the implementation process is the strengthening of the Computer Section at the MSCU, in terms of computer equipment, software development and training. This major activity is in close collaboration with DANIDA. For example, FPLM/Kenya provided DANIDA with the specifications for the first batch of new computers for the MSCU computer section. Procurement

was financed by DANIDA and the computers were set up and tested by FPLM computer staff ready for installation at the MSCU once security strengthening for the computer section has been carried out and MSCU staff have been given computer training in Windows 95 and the Microsoft Office 97 applications.

FPLM computer staff produced a Computer Foundations Training Manual in preparation for the training. A copy is attached as **Appendix IX**.

**Strategic Objective Four (SO4):**

**To facilitate cross-national dissemination of successful logistics Management techniques and technologies**

- **GHANA:** ***FPLM/Kenya Provides TA to MOH/Ghana for LMIS Assessment / Improvement Plan***

  From 14-29th July 1998 a team comprising the FPLM/Kenya MIS Specialist, a JSI/Washington Consultant and a Pharmacist from the Ghana Ministry of Health carried out an in-depth assessment of the Ghana LMIS (funded through Ghana mission field support to FPLM/Washington). The assessment identified critical short-term and longer term institutional and information system issues, which need to be addressed in order to ensure the smooth operation of an Integrated Logistics Management Information System for the Ghana Ministry of Health.

  Prior to the TDY, the MOH health management information system (HMIS) was described as weak as it does not capture and track comprehensive health data below the regional level. Given the relatively early stages in the ongoing process of health sector reform, decentralization and integration, it was considered that this was would be an appropriate time to assess the current status of MIS serving the Ministry of Health and to explore how the system should be further developed to support decentralized management of the health care system.

  The scope of work of the TDY was as follows:

  - Discuss with programmes within the Ministry of Health the specifics of their data and information needs

  - Assess the present capacities of the Ministry of Health MIS to capture and transmit data and health information from the peripheral units through all levels to the centre and back again

- Assess the present computer capacities in several central level units, for example, the Central Medical Stores, the MOH Procurement Unit, and the Ghana Drug Programme and explore how these separate systems might be linked with a view to serving as initial steps in the development of an integrated logistics management information system (ILMIS)

- Explore capabilities and staff competencies for formulating a pilot study in the near future to collect consumption (dispensing) data at District and sub-District levels for essential drugs, and

- Make recommendations for the next steps for the development of the Ministry of Health MIS and, specifically, for the development of an integrated logistics management information system

The Ghana public health supplies system has won international recognition in terms of an integrated distribution system and sustainable cost recovery mechanisms. As such, this assessment represented an excellent learning experience for the FPLM/Kenya project in addition to being able to provide MIS technical assistance – a value added feature of the TDY. See **Appendix X** for the technical TDY report.

- **JORDAN:** ***FPLM/Kenya Provides TA to FPLM/Jordan in Development of Logistics 2000 Plus Software.***

In follow up to a technical assistance mission to Jordan by the FPLM/Kenya MIS Specialist and Deputy Director for Central Activities (FPLM/Washington) in March 1998, funded by USAID/Jordan, an FPLM/Kenya computer programmer developed technical specifications for the revision and upgrading of the Essential Commodities Management Information System (ECMIS) currently in use in Jordan. This revision was completed in the third quarter and a test installation was sent to Jordan and has been running successfully in parallel to the old version. All "bugs" in the new system as reported by the FPLM/Jordanian users have been removed and the data in the old system can now be converted into the new system, called Logistics 2000 Plus.

The FPLM/Kenya computer programmer also produced draft technical documentation and a User's Manual for the new system which have both been forwarded to FPLM/Jordan for comments by the Logistics 2000 Plus users prior to finalization.

All software development costs and production costs of the documentation were funded by USAID/Jordan field support.

- **MOZAMBIQUE:** ***Technical Assistance, Contraceptive Forecasting and CBD Logistic System Assessment***

  A two-week TDY was carried out by Logistics Advisor Beatriz Ayala and MIS Specialist Gideon Nzoka to Maputo City and Nampula Province. The purpose of the TDY was twofold:

  1. To assist the mission and MOH in improving their capability to make rational projections of contraceptive needs, and share the growing burden of contraceptive procurement with other donors. In this regard the team:

     - Assessed the current contraceptive supply status
     - Demonstrated available forecasting software (PMPP, ForeCast and CPT) to mission, MOH and donor staff
     - Installed and provided training on the software of choice at the mission and the MOH, and
     - Provided a catalyst for a Mission/MOH/donor meeting on contraceptive forecasting as a means of facilitating multi-donor, coordinated inputs to sustain the pipeline over the next three years

  2. To meet with USAID and MOH officials in Maputo and to visit the PVO II project areas in Nampula Province to review the constraints of the current logistics system and assist with the design of a logistics system for implementation of a pilot CBD project for contraceptives.

  The costs of this TDY were supported through USAID/Mozambique field support funds to the RLI. The trip report is included as **Appendix XI**.

**Major Activities Planned for Next Quarter:**

- Dissemination of the 1998 LMU Health Facilities Database
- Computer training for key MSCU staff (co-financed with DANIDA)
- Design of LMIS feedback system for district level for FP and health facility level for STI data
- Prepare proposal for World Bank funding of logistics management services to continue and expand the current logistics component of the HAPAC Project
- Complete Archive component of LMIS ForeCast module
- Complete the distribution of World Bank financed MCH/FP equipment

- FPLM Computer Programmer TDY to FPLM/Jordan to finalize installation and training of Logistics 2000 Plus software, and finalization of technical documentation and User's Manual. Funding from USAID/Jordan field support.
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# APPENDICES

## FPLM Quarterly Performance Report

# Appendix I

## MSCU/FP Warehouse Contraceptives & Supplies Distribution

## FAMILY PLANNING AND HIV/AIDS PREVENTION COMMODITIES DISTRIBUTED FROM THE FAMILY PLANNING WAREHOUSE, MSCU/NAIROBI IN 1998

| | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY |
|---|---|---|---|---|---|---|---|
| CONDOMS | 3,086,000 | 2,572,600 | 2,886,700 | 2,001,272 | 2,242,700 | 3,000,500 | 1,696,704 |
| DEPO-PROVERA | 119,300 | 270,900 | 99,300 | 107,700 | 137,500 | 180,900 | 142,400 |
| LOW DOSE PILLS | 607,230 | 552,730 | 425,700 | 323,400 | 406,400 | 260,580 | 131,190 |
| PROGEST. PILL | 71,900 | 3,300 | 0 | 6,100 | 3,900 | 5,900 | 97,220 |
| COPPER T | 4,600 | 3,300 | 2,185 | 1,800 | 1,200 | 4,575 | 1,500 |
| NORPLANT | 800 | 2,650 | 4,800 | 300 | 300 | 150 | 1,750 |
| GLOVES | 0 | 0 | 0 | 0 | 0 | 0 | 67,200 |

| | AUGUST | SEPTEMBER | OCTOBER | NOVEMBE | DECEMBE | TOTAL ISSUES 10/97-09/98 | MONTHLY AVERAGE | END BALANC 30/09/98 | MONTHS ON HAND 30/09/9 |
|---|---|---|---|---|---|---|---|---|---|
| CONDOMS | 9,972,100 | 13,609,186 | | | | 45,974,362 | 3,831,197 | 56,977,986 | 15 |
| DEPO-PROVERA | 238,200 | 110,400 | | | | 1,849,800 | 154,150 | 930,000 | 6 |
| LOW DOSE PILLS | 475,240 | 376,080 | | | | 3,863,000 | 321,917 | 3,606,915 | 11 |
| PROGEST. PILL | 64,890 | 39,180 | | | | 616,890 | 51,408 | 2,050,257 | N/A |
| COPPER T | 2,425 | 3,650 | | | | 33,610 | 2,801 | 22,250 | 8 |
| NORPLANT | 100 | 400 | | | | 15,950 | 1,329 | 148,550 | N/A |
| GLOVES | 238,800 | 22,400 | | | | 360,750 | 30,063 | 89,250 | 0 |

** Months on Hand is based on average monthly distribution for past 12 months.*

*Source: DPHC Logistics Unit: October 3, 1998.*

# Appendix II

Official Disposal of Unserviceable Family Planning Commodities

REPUBLIC OF KENYA

P.O. 30

# REPORT OF THE BOARD OF SURVEY ON STORES (UNSERVICEABLE AND SURPLUS TO REQUIREMENTS)

Ministry of HEALTH MSCU-FAMILY PLANNING Department Station NAIROBI

N.B.—Column Nos. 1 to 6 to be completed by the Department prior to the assembly of the Board.

| 1 Item No. | 2 Article | 3 Quantity | 4 Date of Purchase | 5 Original Value | 6 State whether Unserviceable or Surplus | 7 Board's Report on Condition | 8 Recommendation of Board for Disposal | 9 Estimated Local Saleable Value if Sale is Recommended | 10 Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | DOXYCYCLINE HCL 100mg | 89,000 tabs | | FREE | | | | | Jan 1998 |
| | ERYTHROMYACIN 250mg | 25,500 tabs | | FREE | | | | | 1997/1998 |
| | METRONIDAZOLE 250mg | 118000 tabs | | FREE | | | | | Nov 1997 |
| | NYASTATIN PESSARIES | 23,400 tabs | | FREE | | | | | Dec. 1997 |
| | BENZATHINE PENICILLIN | 800 vials | | FREE | | | | | NOV 1997 |
| | WATER FOR INJECTION | 25,500 VIALS | | FREE | | | | | OCT 1997 |
| | TETRACYCLINE EYE OINT | 261340 tubes | | FREE | | | | | OCT. 1997 |
| | COPPER T | 405680 units | | FREE | | | | | 93/94/95 |
| | Nordette | 23816 | | FREE | | | | | 87/94 |
| | Logynon | 35,332 | | FREE | | | | | 95 |
| | Cilogynon | 66,400 | | FREE | | | | | 94/95/96 |
| | Microgynon | 140,200 cycles | | FREE | | | | | 94/95/96 |
| | Trinordial | 26266 cycles | | FREE | | | | | 94 |

Catherine Mugane
C10
Signature and Official Designation of Officer-in-Charge of Stores

Date 25/9/98 MSCU-FP Station

J. J.M. KITAU – CSO – Chairman
DANIEL ... – Member
Dr. C.K. Kandie – Member
Member
Date Station

DECISION OF:—

Accounting Officer
Accounting Officer
Date

Treasury
for Ministry of Finance
Date

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REPUBLIC OF KENYA

P.O. 38

# REPORT OF THE BOARD OF SURVEY ON STORES (UNSERVICEABLE AND SURPLUS TO REQUIREMENTS)

Ministry of OF HEALTH MSCU-FAMILY PLANNING Department Station NAIROBI

N.B.—Column Nos. 1 to 6 to be completed by the Department prior to the assembly of the Board.

| 1<br>Item No. | 2<br>Article | 3<br>Quantity | 4<br>Date of Purchase | 5<br>Original Value | 6<br>State whether Unserviceable or Surplus | 7<br>Board's Report on Condition | 8<br>Recommendation of Board for Disposal | 9<br>Estimated Local Saleable Value if Sale is Recommended | 10<br>Remarks<br>YEAR OF EXPIRY |
|---|---|---|---|---|---|---|---|---|---|
| | Depo-provera | 60vials | | FREE | | | | | 94/93/95. |
| | Neogynon | 18984 | | FREE | | | | | 94, 95 |
| | Nova T | 87452 | | FREE | | | | | 93 |
| | Noristrat | 2400vials | | FREE | | | | | 96 |
| | microlut | 300680cycles | | FREE | | | | | 93/94/95/96 |
| | Condoms | 12000pcs | | FREE | | | | | 92/93/91/94 |
| | MUREX | 3300kits | | FREE | | | | | 96 |
| | SYRINGES | 33500 | | FREE | | | | | 97 |
| | GLOVES | 125 | | FREE | | | | | 96 |
| | DIAPHRAM | 101 | | FREE | | | | | 86 |
| | FACT | 650 | | FREE | | | | | 1985 |
| | FOAMING TABS | 400kgs | | FREE | | | | | 89/88 |
| | | | | | | | | | |
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| | | | | | | | | | |

Catherine Mugane
c/o
Signature and Official Designation of Officer-in-Charge of Stores

Date 25/9/98 MSCU-FP Station

T.M. KIAM - CSO - Chairman
DANIEL MWAKU - Member
Eric K. Kaudi Member
Member
Date Station

DECISION OF:—

Accounting Officer
Accounting Officer
Date

Treasury
for Ministry of Finance
Date

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# Appendix III

## Emergency Medical Supplies Distributed Following Terrorist Bombing of U.S. Embassy, Nairobi

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

### Recipient: Aga Khan Hospital

| | | | |
|---|---|---|---|
| Autoclaving Bags | 1 carton | 6 | |
| Clinical Pad(Iodine) | 400 | 1 | |
| Cover Sponges | 100 | 1 | |
| Crepe Bandages (Elastic) | 10 | 2 | |
| Disposable Lab Sponges | 100 | 7 | |
| Gauze sponges | 200 | 1 | |
| Giving sets | 23 | 2 | |
| Irrigation Trays | 7 | 1 | |
| Lactated Injection USP | 12 | 4 | |
| Metricide | 1 bottle | 11 | |
| Non-sterile Gauze Sponges | 800 | 1 | |
| Resuscitation tubes | 50 | 3 | |
| Silk sutures | 1 pkt | 1 | |
| Sodium Chloride Injection | 36 | 8 | 12 |
| Sterile Bandages | 1 pkt | 3 | |
| Sterile Sheet (Medium) | 18 | 10 | |
| Suction Catheters | 10 | 1 | |
| Suction Reservoir | 20 | 2 | |
| Suction Tubes | 25 | 9 | |
| Super Sponges | 10 | 1 | |
| Surgical Electronodes | 20 | 3 | |
| Surgical Pads | 20 | 1 | |
| Surgical Tapes | 12 | 1 | |
| Syringes(20mls) | 50 | 2 | |
| Thoracic Catheters | 10 | 2 | |
| Urine Bags | 3pkt | 2 | |

All received
With thanks

Received by: A. MOHAMMED Designation: NURSE MANAGER for CSD Date: 13/8/98

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

2 Boxes.

**Recipient: Avenue Nursing Home**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 300 |
| Comouflaged Gauze | | 12 |
| Cover Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 8 |
| Irrigation Trays | | 7 |
| Non-sterile Gauze Sponges | | 200 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 12 |
| Suction Tubes | | 19 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Urine Bags | 1 pkt | |

AVENUE HOSPITAL
P. O. Box 45280
Tel: 744012, 744554.
NAIROBI.

Received by: Irene Kobere Designation: Administrator Date: 13/08/98

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

2 Boxes

**Recipient: Equator Hospital**

| | | |
|---|---|---|
| Assorted Bandages | 1 pkt | |
| Clinical Pad(Iodine) | | 300 |
| Cover Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 8 |
| Irrigation Trays | | 7 |
| Lactated Injection USP | | 12 |
| Non-sterile Gauze Sponges | | 200 |
| Silk sutures | 1 pkt | |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Urine Bags | 1 pkt | |

Received by: M.N. NACHARIA Designation: MATRON Date: 14/8/98

Equator Nursing Homes Ltd.
P. O. Box 44995, NBI. Tel: 6[illegible]720/2
NAIROBI

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

5 Boxes

**Recipient: Forces Memorial Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 400 |
| Cover Sponges | | 100 |
| Crepe Bandages (Elastic | | 10 |
| Gauze sponges | | 200 |
| Giving sets | | 20 |
| Irrigation Trays | | 7 |
| Non-sterile Gauze Sponges | | 400 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 36 |
| Sterile Water for Irrigation | | 12 |
| Suction Tubes | | 25 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 30 |
| Urine Bags | 1 pkt | |

FORCES MEMORIAL HOSPITAL
14 AUG 1998
DEPARTMENT OF DEFENCE

Received by: LT. COL. MWANIKI Designation: NURSING OFFICER 1/C Date: 14/8/98

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

1 Box

**Recipient: Guru Nanak Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 200 |
| Cover Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 8 |
| Irrigation Trays | | 7 |
| 'on-sterile Gauze Sponges | | 200 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 12 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 6 |
| Urine Bags | 1 pkt | |

Received by: _____ Designation: _____ Date: 12/8/98

GURU NANAK RANGARHIA SIKH HOSPITAL

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

23 Boxes

## Recipient: Kenyatta National Hospital

| | | |
|---|---|---|
| Absorbent Dressing | | 10 |
| Angiocath | | 150 |
| Assorted First Aid Dressing Gauze | | 17 |
| Autoclaving Bags | 2 cartons | |
| Burn Dressing | 1 pkt | |
| Clinical Pad(Iodine) | | 500 |
| Comouflaged Gauze | | 12 |
| Conforming Bandages | | 96 |
| Crepe Bandages (Elastic | | 10 |
| Disposable Lab Sponges | | 100 |
| Disposable Surgical Blades | | 100 |
| Disposable Towels | | 300 |
| Elastic Gauze | | 43 |
| Gauze sponges | | 600 |
| Giving sets | | 96 |
| Irrigation Trays | | 16 |
| Ivac Covers (Probe) | | 5000 |
| Lactated Injection USP | | 12 |
| Lid covers for eyes | | 10 |
| Nasoppharyngeal Airway | | 12 |
| Neck Collars | 1 kit | |
| Norcuron Injection | | 20 |
| Ostromy Bags | | 30 |
| Povidine Solution | 1 bottle | |
| Radiopaque tubes | | 50 |
| Rectal Thermometer | | 12 |
| Resusciation tubes | | 50 |
| Silk sutures | 6 pkts | |
| Skin staplers | | 6 |
| Sodium Chloride Injection | | 61 |
| Sterile Bandages | 2 pkts | |
| Sterile Towel Absorbent | | 120 |
| Sterile Water | 2 bottles | |
| Suction Catheters | | 20 |
| Suction Reservoir | | 20 |

Received by: L. N. Muiruri Designation: NR STM II Date: 13/8/98.

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# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

23 Boxes

**Recipient: Kenyatta National Hospital**

| | | |
|---|---|---|
| Suction Tubes | | 25 |
| Super Sponges | | 120 |
| Surgical Blades | | 150 |
| Surgical Electronodes | | 20 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 60 |
| Syringes(20mls) | | 100 |
| Thoracic Catheters | | 10 |
| Undercast Paddings | 144 rolls | |
| Urine Bags | 13 pkts | |
| Zaneca Injectable | | 50 |

Received by: [illegible] Designation: STM II Date: 13/8/98

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# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

4 Boxes

**Recipient: Masaba Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 400 |
| Cover Sponges | | 100 |
| Crepe Bandages (Elastic | | 10 |
| Dextrose 5% | | 12 |
| Gauze sponges | | 200 |
| Giving sets | | 16 |
| Irrigation Trays | | 7 |
| Non-sterile Gauze Sponges | | 600 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 12 |
| Sterile Water for Irrigation | | 16 |
| Suction Catheters | | 9 |
| Suction Tubes | | 25 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Urine Bags | 1 pkt | |

Received by: Esther Anzeze Designation: Hosp Adm. Date: 14/8/98.

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## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

**Recipient: Mater Misericordiae Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 400 |
| Cover Sponges | | 100 |
| Crepe Bandages (Elastic | | 10 |
| Dextrose 5% | | 12 |
| Disposable Lab Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 28 |
| Irrigation Trays | | 7 |
| Lactated Injection USP | | 12 |
| Non-sterile Gauze Sponges | | 600 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 24 |
| Sterile Bandages | 1 pkt | |
| Suction Tubes | | 25 |
| Super Sponges | | 10 |
| Surgical Electronodes | | 20 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Syringes(20mls) | | 50 |
| Thoracic Catheters | | 10 |
| Urine Bags | 1 pkt | |

Received by: Mrs M. Nzuu Designation: Pharmacist Date: 13/8/95

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# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

2 Boxes

**Recipient: Metropolitan Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 300 |
| Cover Sponges | | 100 |
| Dressing Sponges | | 10 |
| Gauze sponges | | 200 |
| Giving sets | | 8 |
| Irrigation Trays | | 7 |
| Non-sterile Gauze Sponges | | 200 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 12 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 4 |
| Urine Bags | 1 pkt | |

METROPOLITAN HOSPITAL

Received by: P.O. Box 24 Mwingi Designation: Pharmacy-in Charge Date: 13/08/98

2 Boxes

# UNITED STATES OF AMERICA



## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

**Recipient: M P Shah Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 400 |
| Cover Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 8 |
| Irrigation Trays | | 7 |
| Lactated Injection USP | | 12 |
| Non-sterile Gauze Sponges | | 200 |
| Silk sutures | 1 pkt | |
| Suction Tubes | | 20 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Urine Bags | 1 pkt | |

Received by: _____ Designation: Pharmacist Date: 13/8/95

M. P. SHAH HOSPITAL PHARMACY

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

12 Boxes

**Recipient: Nairobi Hospital**

| | | |
|---|---|---|
| Assorted First Aid Dressing Gauze | | 14 |
| Autoclaving Bags | 1 carton | |
| Clinical Pad(Iodine) | | 400 |
| Conforming Bandages | | 96 |
| Cover Sponges | | 150 |
| Crepe Bandage wire | | 10 |
| Crepe Bandages (Elastic | | 10 |
| Disposable Lab Sponges | | 100 |
| Disposable Surgical Blades | | 12 |
| Disposable Towels | | 300 |
| Dressing gel | | 4 |
| Gauze sponges | | 200 |
| Giving sets | | 44 |
| Irrigation Trays | | 7 |
| Lid covers for eyes | | 10 |
| Nasoppharyngeal Airway | | 10 |
| Plastic Apron | | 3 |
| Rectal Thermometer | | 12 |
| Resusciation tubes | | 50 |
| Silk sutures | 1 pkt | |
| Skin staplers | | 6 |
| Sodium Chloride Inj | | 24 |
| Sterile Bandages | 2 pkts | |
| Sterile Water for Irrigation | | 32 |
| Sterile Towel Absorbent | | 120 |
| Storage Bags (Assorted) | 1 pkt | |
| Suction Catheters | | 20 |
| Suction Reservoir | | 20 |
| Suction Tubes | | 25 |
| Super Sponges | | 10 |
| Surgical Blades | | 150 |
| Surgical Electronodes | | 20 |
| Surgical Lubricant | | 12 |

Received by: M Kelch Designation: Hospital Administrator Date: 13/8/98

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

12 Boxes

**Recipient: Nairobi Hospital**

| | |
|---|---|
| Surgical Pads | 20 |
| Surgical Tapes | 12 |
| Syringes(20mls) | 50 |
| Thoracic Catheters | 10 |
| Urine Bags | 3 |

Received by: MMeldon Designation: Hospital Administrator Date: 13 8 98

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

2 Boxes

**Recipient: Nairobi West Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 200 |
| Cover Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 8 |
| Irrigation Trays | | 7 |
| Non-sterile Gauze Sponges | | 200 |
| Silk sutures | 1 pkt | |
| Sodium Chloride Injection | | 24 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Urine Bags | 1 pkt | |

Received by: IMTIAZ KHAN Designation: In charge of Pharmacy Date: 14/8/98

# UNITED STATES OF AMERICA

## DONATION TO

## GOVERNMENT OF KENYA
## MINISTRY OF HEALTH

2 Boxes

**Recipient: St James Hospital**

| | | |
|---|---|---|
| Clinical Pad(Iodine) | | 200 |
| Cover Sponges | | 100 |
| Gauze sponges | | 200 |
| Giving sets | | 14 |
| Irrigation Trays | | 7 |
| Lactated Injection USP | | 12 |
| Non-sterile Gauze Sponges | | 400 |
| Silk sutures | 1 pkt | |
| Suction Tubes | | 20 |
| Super Sponges | | 10 |
| Surgical Pads | | 20 |
| Surgical Tapes | | 12 |
| Urine Bags | 1 pkt | |

Received by: Mario Designation: Secretary Date: 13th August 98

# Appendix IV

## Emergency Medical Supplies In Stock - Post Terrorist Bombing of U.S. Embassy, Nairobi

Family Planning
Logistics Management
Project

FPLM

Reproductive Health Logistics Unit
Division of Primary Health Care
Old Mbagathi Road
P.O. Box 46566
Nairobi, Kenya
Tel: (254) 2-716812
Fax: (254) 2-716814
Internet: jsifplmken@form-net.com

Dr. Augustine Kahare Mwita
Director
Kenyatta National Hospital
Nairobi

September 1st, 1998

**Re: United States Government Donations of Emergency Medical Supplies to the Ministry of Health in response to the Terrorist Bombing August 7th, 1998**

**Dear Dr. Mwita,**

As you may be aware, the Logistics Management Project (FPLM) is currently providing assistance to the MSCU in the development of improved logistics systems. The project is funded primarily by USAID.

In the hectic days immediately following the bomb blast, the United States Embassy and USAID asked FPLM for help in receiving and distributing emergency supplies to cater for the injured in the short term and to replenish medical supplies used for bomb victims in the longer term.

The USAID-supported section of the MSCU was used to receive the US Government donated supplies and to make an initial distribution of supplies to Nairobi hospitals August 12-14. A total of five consignments have been received. The first one, received on August 10th, was distributed to Nairobi hospitals between August 12-14. A further four consignments were received on 17/8, 19/8, 21/8, and 1/9. The balance of items remaining at the warehouse following this initial distribution, together with information on what was distributed, is attached.

We are aware that Kenyatta National Hospital has received many donations from a variety of sources. Please indicate how you would like us to handle the above US government donated items. If you prefer, we can deliver them direct to KNH for allocation by your staff in coordination the other donated items. Alternatively, if you would like us to allocate the items and deliver direct to the hospitals, we can do so. We await your instruction.

With best regards,

John C. Wilson
Logistics Advisor/COP

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c.c. Mildred Howard, Acting Chief, OPH/USAID/Nairobi
Josiah Munene, I/C FP Section. MSCU

**UNITED STATES GOVERNMENT DONATION TO GOK**
**STANDARD DRUG KITS**

| | ITEM | QTY |
|---|---|---|
| 1 | Basic Drug kits | 40 |
| 2 | supplementary 1 drug Kits (A - G) | 4 |
| 3 | Renewable supplies Supp.111 A-B) | 4 |
| 4 | Supplementary 11 Equipment (A-B) | 4 |
| 5 | KIT 1 | 4 |
| 6 | Unmarked Cartons | 2 |

## *Basic unit* (for 1,000 persons 3 months)

### Drugs

| | | |
|---|---|---|
| Acetylsalicylic acid, tab 300 mg | tab | 3000 |
| Aluminium hydroxyde, tab 500 mg | tab | 1000 |
| (1) Benzyl benzoate, lotion 25% | bottle 1 litre | 1 |
| (2) Chlorhexidine (5%) | bottle 1 litre | 1 |
| Chloroquine, tab 150 mg base | tab | 2000 |
| Ferrous sulfate + folic acid, tab 200 + 0.25 mg | tab | 2000 |
| Gentian violet, powder | 25 g | 4 |
| Mebendazole, tab 100 mg | tab | 500 |
| ORS (oral rehydration salts) | sachet for 1 litre | 200 |
| Paracetamol, tab 100 mg | tab | 1000 |
| Sulfamethoxazole + trimethoprim, tab 400 + 80 mg (cotrimoxazole) | tab | 2000 |
| Tetracycline eye ointment 1% | tube 5 g | 50 |

### Renewable supplies

| | | |
|---|---|---|
| Absorbent cotton wool | kg | 1 |
| Adhesive tape 2.5 cm x 5 m | roll | 30 |
| Bar of soap (100-200 g) | bar | 10 |
| Elastic bandage (crepe) 7.5 cm x 10 m | unit | 20 |
| Gauze bandage 7.5 cm × 10 m | roll | 100 |
| Gauze compresses 10 × 10 cm, 12 ply, nonsterile | unit | 500 |
| Ballpen, blue or black | unit | 10 |
| Exercise book A4, hard cover | unit | 4 |
| (3) Health card + plastic cover | unit | 500 |
| Small plastic bag for drugs | unit | 2000 |
| Notepad A6 | unit | 10 |
| Thermometer Celsius / Fahrenheit | unit | 6 |
| Protective glove, nonsterile, disposable | unit | 100 |
| (4) *Treatment guidelines for basic list* | unit | 2 |

*1) According to WHO recommendations benzyl benzoate solution 25% concentration is being supplied. The use of 90% concentration is not recommended.*
*2) Chlorhexidine 20% needs distilled water for dilution, otherwise precipitation may occur. 5% solution is WHO standard. Alternatives include the combination of chlorhexidine 1.5% and cetrimide 15%.*
*3) For a sample health card, see Annex 5.*
*4) For sample treatment guidelines, see Annexes 1,2 and 3.*



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## Equipment

| | | |
|---|---|---|
| | Nail brush, plastic, autoclavable | unit |
| | Bucket, plastic, approx. 20 litres | unit |
| | Gallipot, stainless steel, 100 ml | unit |
| | Kidney dish, stainless steel, approx. 26 × 14 cm | unit |
| (1) | Dressing set (3 instruments + box) | unit |
| | Dressing tray, stainless steel, approx. 30 × 15 × 3 cm | unit |
| | Drum for compresses, approx. 15 cm H, diam. 14 cm | unit |
| | Foldable jerrycan, 20 litres | unit |
| | Forceps Kocher, no teeth, 12-14 cm | unit |
| | Plastic bottle, 1 litre | unit |
| | Syringe Luer, disposable, 10 ml | unit |
| | Plastic bottle, 125 ml | unit |
| | Scissors straight/blunt, 12-14 cm | unit |

*1) Dressing set (3 instruments + box):*
- *1 stainless steel box approx. 17 x 7 x 3 cm*
- *1 pair surgical scissors, sharp/blunt, 12-14 cm*
- *1 Kocher forceps, no teeth, straight, 12-14 cm*
- *1 dissecting forceps, no teeth, 12-14 cm*

## Supplementary unit *(for 10,000 persons fo 3 months)*

### Drugs

***Anaesthesics***

| | | |
|---|---|---|
| Ketamine, inj. 50 mg/ml | 10 ml/vial | 25 |
| (1) Lidocaine, inj.1% | 20 ml/vial | 50 |

***Analgesics***

| | | |
|---|---|---|
| (2) Pentazocine, inj. 30 mg/ml | 1 ml/ampoule | 50 |
| (3) Probenecid, tab 500 mg | tab | 500 |
| Recall from basic unit: | | |
| *Acetylsalicylic acid, 300 mg/tab* | *(10 x 3,000) 30,000* | |
| *Paracetamol, 100 mg/tab* | *(10 x 1,000) 10,000* | |

***Anti-allergics***

| | | |
|---|---|---|
| Dexamethasone, inj. 4 mg/ml | 1 ml/ampoule | 50 |
| Prednisolone, tab 5 mg | tab | 100 |
| Epinephrine (adrenaline), see "respiratory tract" | | |

***Anti-epileptics***

| | | |
|---|---|---|
| Diazepam, inj. 5 mg/ml | 2 ml/ampoule | 200 |
| Phenobarbital, 50 mg | tab | 1000 |

***Anti-infective drugs***

| | | |
|---|---|---|
| (4) Ampicillin, tab 250 mg | tab | 2000 |
| (4) Ampicillin, inj. 500 mg/vial | vial | 200 |
| Benzathine benzylpenicillin, inj. 2,4 MIU/vial. | vial | 50 |
| Chloramphenicol, caps 250 mg | caps | 2000 |
| Chloramphenicol, inj. 1 g/vial | vial | 500 |
| Metronidazole, tab 250 mg | tab | 2000 |
| (5) Nystatin, non-coated tablet | 100,000 IU/tab | 2000 |

*1) 20 ml vials are preferred, although 50 ml vials may be used as an alternative*
*2) Because of narcotic drugs regulation, pentazocine has been chosen as an alternative to morphine or pethidine*
*3) To be used with penicillin in the treatment of gonorrhea*
*4) Ampicillin tablets and injections to be used only in neonates and pregnant women*
*5) For the treatment of oral candidiasis*



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| | | |
|---|---|---|
| Phenoxymethylpenicillin, tab 250 mg | tab | 4( |
| (1) Procaine benzylpenicillin, inj. 3-4 MU/vial | vial | 1( |
| (2) Quinine, inj. 300 mg/ml | 2 ml/ampoule | 1 |
| Quinine sulfate, tab 300 mg | tab | 3( |
| (3) Sulfadoxine + pyrimethamine, tab 500 mg + 25 mg | tab | 3· |
| (4) Tetracycline, caps or tab 250 mg | caps or tab | 2( |
| **Recall from basic unit:** | | |
| *Mebendazole, tab 100 mg* | *(10 × 500) 5,000* | |
| *Cotrimoxazole, tab 400 + 80 mg* | *(10 × 2,000) 20,000* | |
| *Chloroquine, tab 150 mg base* | *(10 x 2,000) 20,000* | |
| ***Blood, drugs affecting the*** | | |
| Folic acid, tab 1 mg | | 50· |
| **Recall from basic unit:** | | |
| *Ferrous sulfate + folic acid, tab 200 + 0.25 mg* | *(10 x 2000) 20,000* | |
| ***Cardiovascular drugs*** | | |
| (5) Methyldopa, 250 mg | tab | 5( |
| Hydralazine, inj. 20 mg/ml | 1 ml/ampoule | 2 |
| ***Dermatological*** | | |
| (6) Polyvidone iodine 10%, sol, 500 ml | bottle | |
| Zinc oxyde 10% ointment | kg | |
| Benzoic acid 6% + salicylic acid 3% ointment | kg | |
| **Recall from basic unit:** | | |
| *Tetracycline eye ointment, 1%* | *(10 × 50) 500* | |
| *Gentian violet, powder 25 g* | *(10 x 4) 40* | |
| *Benzyl benzoate, lotion 25%, litre* | *(10 × 1) 10* | |

*1) The combination of procaine benzylpenicillin 3 MU and benzylpenicillin 1 MU (procaine penicillin fortified), is used in many countries and may be included as an alternative.*
*2) For the treatment of cerebral and resistant malaria cases. Intravenous injection of quinine must always be diluted in 500 ml glucose 5%.*
*3) For the treatment of resistant malaria strains (check national protocols).*
*4) For the treatment of cholera and chlamydia infections.*
*5) For the treatment of hypertension in pregnancy.*
*6) Polyvidone iodine has been chosen because the use of iodine tincture in hot climates may result in toxic concentrations of iodine by partial evaporation of the alcohol.*



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| | | |
|---|---|---|
| ***Diuretics*** | | |
| Furosemide, inj. 10 mg/ml | 2 ml/ampoule | 20 |
| Furosemide, tab 40 mg | tab | 200 |
| ***Gastro-intestinal drugs*** | | |
| Promethazine, tab 25 mg | tab | 500 |
| Promethazine, inj. 25 mg/ml | 2 ml/ampoule | 50 |
| Atropine, inj. 1 mg/ml | 1 ml/ampoule | 50 |
| Recall from basic unit: | | |
| *Aluminium hydroxide, tab 500 mg* | *(10 x 1000) 10,000* | |
| ***Oxytoxics*** | | |
| Ergometrine maleate, inj. 0.2 mg/ml | 1 ml/ampoule | 200 |
| ***Psychotherapeutic drugs*** | | |
| Chlorpromazine, inj. 25 mg/ml | 2 ml/ampoule | 20 |
| ***Respiratory tract, drugs acting on*** | | |
| Aminophylline, tab 100 mg | tab | 1000 |
| Aminophylline, inj. 25 mg/ml | 10 ml/ampoule | 50 |
| Epinephrine (adrenaline), inj. 1 mg/ml | 1 ml/ampoule | 50 |
| ***Solutions correcting water, electrolyte and acid-base disturbances*** [1] | | |
| Compound solution of sodium lactate (Ringer's Lactate), inj. sol., with giving set and needle | 500 ml/bag | 200 |
| [2] Glucose, inj. sol. 5%, with giving set and needle | 500 ml/bag | 100 |
| Glucose, inj. sol 50% | 50 ml/vial | 20 |
| Water for injection | 10 ml/plastic vial | 2000 |
| Recall from basic unit: | | |
| *Oral rehydration salts* | *(10 x 200) 2,000* | |

*1) Because of the weight, the quantity of infusions included in the kit is minimal. Look for local supply, once in the field.*
*2) Glucose 5%, bag 500 ml, for dilution of quinine/injection.*



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| | | |
|---|---|---|
| ***Vitamins*** | | |
| Retinol (Vitamin A), caps 200,000 IU | caps | 40 |
| Ascorbic acid, tab 250 mg | tab | 40 |
| **Renewable supplies** | | |
| Scalp vein infusion set, disposable, 25G (diam. 0.5 mm) | unit | 3( |
| Scalp vein infusion set, disposable, 21G (diam. 0.8 mm) | unit | 1( |
| IV placement canula, disposable, 18G (diam. 1.7 mm) | unit | [illegible] |
| IV placement canula, disposable, 22G (diam. 0.9 mm) | unit | [illegible] |
| Needle Luer IV, disposable, 19G (diam. 1.1 mm × 38 mm) | unit | 1,0( |
| Needle Luer IM, disposable, 21G (diam. 0.8 mm × 40 mm) | unit | 2.0( |
| Needle Luer SC, disposable, 25G (diam. 0.5 mm × 16 mm) | unit | 1( |
| Spinal needle, disposable, 20G (64 mm - diam. 0.9 mm) | unit | [illegible] |
| Spinal needle, disposable, 23G (64 mm - diam. 0.7 mm) | unit | [illegible] |
| Syringe Luer resterilisable, nylon, 2 ml | unit | [illegible] |
| Syringe Luer resterilisable, nylon, 5 ml | unit | 1( |
| Syringe Luer resterilisable, nylon, 10 ml | unit | 4 |
| Syringe Luer, disposable, 2 ml | unit | 4( |
| Syringe Luer, disposable, 5 ml | unit | 5( |
| Syringe Luer, disposable, 10 ml | unit | 2( |
| Syringe conic connector (for feeding), 60 ml | unit | 2 |
| Feeding tube, CH5 (premature baby), disposable | unit | 2 |
| Feeding tube, CH8, disposable | unit | 5 |
| Feeding tube, CH16, disposable | unit | 1 |
| Urinary catheter (Foley), n°12, disposable | unit | 1 |
| Urinary catheter (Foley), n°14, disposable | unit | [illegible] |
| Urinary catheter (Foley), n°18, disposable | unit | |
| Surgical gloves sterile and resterilisable n°6.5 | pair | 5 |
| Surgical gloves sterile and resterilisable n°7.5 | pair | 15( |
| Surgical gloves sterile and resterilisable n°8.5 | pair | 5( |
| Recall from basic unit: | | |
| *Protective glove, non-sterile disposable* | *(100 units x 10) 1,000* | |
| Sterilization test tape (for autoclave) | roll | [illegible] |
| Chloramine, tabs or powder | kg | 2.[illegible] |
| Thermometer (oral/rectal) dual Celsius/Fahrenheit | unit | 1[illegible] |
| Spare bulb for otoscope | unit | [illegible] |
| Batteries R6 alkaline AA size (for otoscope) | unit | [illegible] |



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| | | | |
|---|---|---|---|
| Recall from basic unit: | | | |
| *Thermometer (oral/rectal) Celsius/Fahrenheit* | *(6 units × 10) 60* | | |
| *Ballpens* | *(10 units × 10) 100* | | |
| *Hardcover exercise book* | *(4 units × 10) 40* | | |
| *Health card + plastic cover* | *(500 units × 10) 5,000* | | |
| *Plastic bag for drugs* | *(2,000 units × 10) 20,000* | | |
| *Small notepads (A6)* | *(10 units x 10) 100* | | |
| Urine collecting bag with valve, 2000 ml | | unit | 10 |
| Finger stall 2 fingers, disposable | | unit | 300 |
| Suture, synthetic absorbable, braided, size DEC.2 (000) with cutting needle curved 3/8, 20 mm triangular | | unit | 24 |
| Suture, synthetic absorbable, braided, size DEC.3 (000) with cutting needle curved 3/8, 30 mm triangular | | unit | 36 |
| Surgical blade (surgical knives) n°22 for handle n°4 | | unit | 50 |
| Razor blade | | unit | 100 |
| Tongue depressor (wooden, disposable) | | unit | 100 |
| Gauze roll 90 m × 0.90 m | | roll | 3 |
| Gauze compresses, 10 × 10 cm, 12 ply, sterile | | unit | 1000 |
| Recall from basic unit: | | | |
| *Absorbent cotton wool* | *(1 kg × 10) 10* | | |
| *Adhesive tape 2.5 cm × 5 m* | *(30 rolls × 10) 300* | | |
| *Bar of soap (200 g/bar)* | *(10 bars × 10) 100* | | |
| *Elastic bandage (crepe), 7.5 cm × 10 m* | *(20 units × 10) 200* | | |
| *Gauze bandage 7.5 cm × 10 m* | *(100 rolls × 10) 1000* | | |
| *Gauze compress 10 × 10 cm, 12 ply, nonsterile* | *(500 units x 10) 5000* | | |
| **Equipment** | | | |
| Clinical stethoscope, dual cup | | unit | 2 |
| Obstetrical stethoscope (metal) | | unit | 1 |
| Sphygmomanometer (adult) | | unit | 2 |
| Razor non disposable | | unit | 2 |
| Scale for adult | | unit | 1 |
| Scale hanging 25 kg × 100 g (Salter type) + trousers | | unit | 3 |
| Tape measure | | unit | 5 |
| Drum for compresses, H: 15 cm, diam. 14 cm | | unit | 2 |
| Recall from basic unit: | | | |
| *Drum for compresses, H: 15 cm, diam. 14 cm* | *(2 units x 10) 20* | | |

| | |
|---|---|
| Otoscope + set of pædiatric speculums | unit |
| Tourniquet | unit |
| Dressing tray, stainless steel, approx. 30 × 15 × 3 cm | unit |
| Kidney dish, stainless steel, approx. 26 × 14 cm | unit |
| Scissors straight/blunt, 12/14 cm | unit |
| Forceps Kocher no teeth, 12/14 cm | unit |

Recall from basic unit:

| | |
|---|---|
| *Kidney dish, stainless steel, approx. 25 x 14 cm* | *(1 unit x 10) 10* |
| *Gallipot stainless, 100 ml* | *(1 unit × 10) 10* |
| *Dressing tray, stainless steel, approx. 30 × 15 × 3 cm* | *(1 unit x 10) 10* |
| *Scissors straight/blunt, 12-14 cm* | *(2 units × 10) 20* |
| *Forceps Kocher no teeth, 12-14 cm* | *(2 units x 10) 20* |

| | |
|---|---|
| (1) Abscess/suture set (7 instruments + box) | unit |
| (2) Dressing set (3 instruments + box) | unit |

Recall from basic unit:

| | |
|---|---|
| *Dressing set (3 instruments + box)* | *(2 units × 10) 20* |

| | |
|---|---|
| Pressure sterilizer, 7.5 litres (type: Prestige 7506, double rack, ref. UNIPAC 01.571.00) | unit |
| Additional rack Public Health Care 2ml/5ml, ref. Prestige 7531 | unit |
| Pressure sterilizer, 20-40 litres with basket (type UNIPAC 01.560.00) | unit |
| Kerosene stove, single burner (type UNIPAC 01.700.00) | unit |
| Water filter with candles, 10/20 litres (type UNIPAC 56.199.02) | unit |
| Nail brush, plastic, autoclavable | unit |

---

*1) Abscess/suture set (7 instruments + box):*
- *1 stainless steel box approx. 20 x 10 x 5 cm*
- *1 dissecting forceps with teeth, 12-14 cm*
- *1 Kocher forceps with teeth, straight, 12-14 cm*
- *1 Pean forceps straight, 12-14 cm*
- *1 pair surgical scissors sharp/blunt, 12-14 cm*
- *1 probe, 12-14 cm*
- *1 Mayo-Hegar needle holder, 18 cm*
- *1 handle scalpel, N°4*

*2) Dressing set (3 instruments + box)*
- *1 stainless steel box approx. 17 x 7 x 3 cm*
- *1 pair surgical scissors sharp/blunt, 12-14 cm*
- *1 Kocher forceps, no teeth, straight, 12-14 cm*
- *1 dissecting forceps, no teeth, 12-14 cm*



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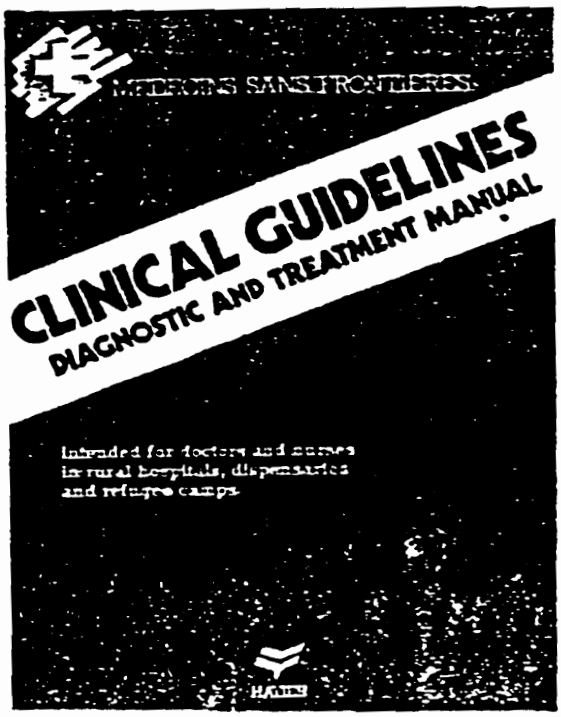
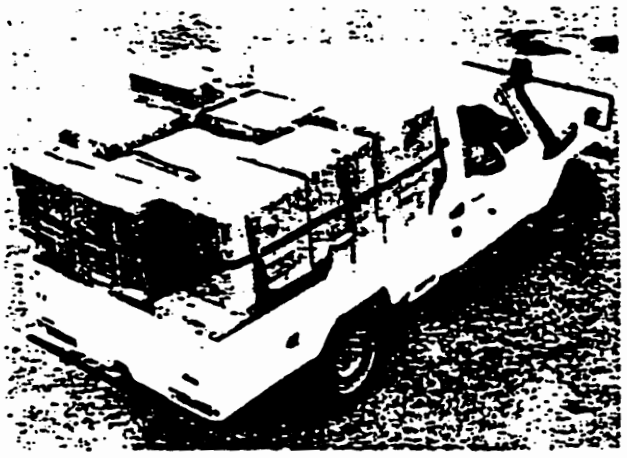
| | | |
|---|---|---|
| <u>Recall from basic unit:</u> | | |
| *Plastic bottle, 1 litre* | *(3 units × 10) 30* | |
| *Syringe Luer, disposable, 10 ml* | *(1 unit x 10) 10* | |
| *Plastic bottle, 125 ml* | *(1 unit × 10) 10* | |
| *Brush plastic (nail brush) autoclavable* | *(2 units × 10) 20* | |
| *Bucket plastic, 20 litres* | *(1 unit × 10) 10* | |
| *Foldable jerrycan, 20 litres* | *(1 unit x 10) 10* | |
| Portable weight/height chart (UNIPAC 01.455.70) | unit | 1 |
| (1) Clinical guidelines (diagnostic and treatment manual) | | 2 |




*1) "Clinical Guidelines - Diagnostic and Treatment Manual" is available at cost price in English, French and Spanish from Médecins sans Frontières.*

# *Chapter 3: Composition of the New Emergency Health Kit*



1000 persons for 3 months. Each u contains drugs, renewable supplies basic equipment, and is packed in c carton.

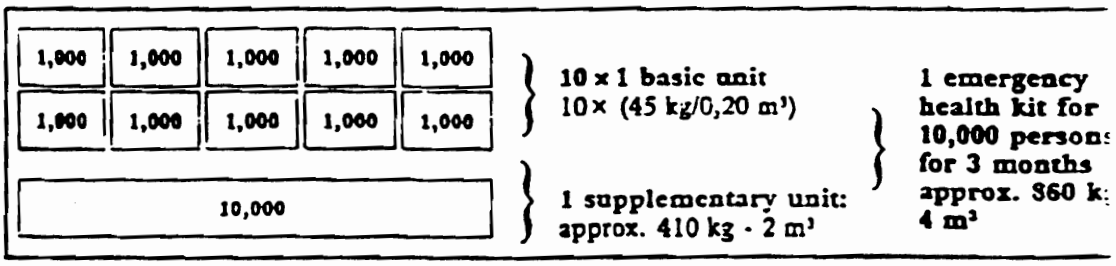
**1 supplementary unit** (for physic and senior health workers, for a po tion of 10,000 people for 3 months. One supplementary unit contains:

- drugs (approximately 130 kg)
- essential infusions (approximately 180 kg)
- renewable supplies (approximatel 60 kg)
- equipment (approximately 40 kg)

The New Emergency Health Kit consists of ten basic units and one supplementary unit.

**10 basic units** (for basic health workers), each unit for a population of

NB: The supplementary unit does n contain any drugs and medical supp from the basic unit. To be operatio the supplementary unit should be us together with ten basic units.

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**UNITED STATES GOVERNMENT DONATED MEDICAL SUPPLIES TO KENYA AUGUST 1998.**
**(U.S MILITARY/BAHRAIN)**
**SERVICEABLE SUPPLIES**

| | Item | Quantity |
|---|---|---|
| 1 | 3-Way Stopcock male L.L | 400 |
| 2 | Assorted Surgical Forceps/scissors | 127 |
| 3 | Bandage Adhesive 3/4" x 3" | 14 boxes |
| 4 | Base Compressed gas cylinder | 30 |
| 5 | Basic Drug kits | 40 |
| 6 | Benadryl. Injection | 17 Packets |
| 7 | Cefadyl Injection | 10 Vials |
| 8 | chest drain valve | 40 |
| 9 | Compressed gas (Adapter) Cylinders | 86 |
| 10 | Dental H/Light 120v Kit | 2 |
| 11 | Diagnostix 920 Adult | 2 |
| 12 | Dressing 1st Aid Camouflaged | 48 Packets |
| 13 | Dressing Burn 24X36" | 124 |
| 14 | Elastic Tape | 6 |
| 15 | Epinephrine Injection | 10 Packets |
| 16 | Ethicon | 41Packets |
| 17 | Ethicon | 8 Packets |
| 18 | Ethicon Catgut | 19 Packets |
| 19 | Eye dressing 1st Aid kit | 216 |
| 20 | Eye Pads | 2 |
| 21 | Flashlight Eye examination | 100 |
| 22 | Fluor-L-Strip - A.T. x 300 strips | 14 |
| 23 | Forceps hemostatic curved 9" | 100 |
| 24 | French urine catheters | 600 |
| 25 | Gauze Bandage (tubular) | 50 |
| 26 | Gloves Sterile Latex | 2400 Pairs |
| 27 | Hypoallergenic Paper Tape | 1 |
| 28 | IV Catheters Assorted 16G | 125 Pieces |
| 29 | Kit I | 4 |
| 30 | Kit II | 2 |
| 31 | Lactated Ringerls Injection | 48 Bottles |
| 32 | Lactated Ringer's Injection | 396 Bottles |
| 33 | Local tool ROD IRRIG SUP (Rod Irrigator Supporting) | 48 |
| 34 | Nasal Oxygen Cannula | 50 |
| 35 | Needles 1/2 G | 900 |
| 36 | Operating Scissors | 62 |
| 37 | Pad Abdominal 12x16 Inches | 144 s |
| 38 | Prime Saw Finger Ring (Surgical) | 11 |
| 39 | Providone Iodine Impregnated Pad | 10000 Pieces |
| 40 | Razor Surgical preparation sterile | 900 |
| 41 | Renewable supplies Supp.III A-B) | 4 |
| 42 | Resuscitation device | 7 |
| 43 | Scalpels # 15 Blade | 17 Boxes of 100 @ |
| 44 | Scissors | 1 |
| 45 | Shield Eye Surgical Black | 5 Packets |
| 46 | Sked Rescue Systems | 20 |
| 47 | Small E&D Cyl Base | 52 |
| 48 | Sodium Chloride Injection 0.9% | 12 Bottles |
| 49 | Solution Adminstration set | 92 Packets |
| 50 | Splint Traction - Extri | 104 |
| 51 | Splint Univ. 36 x 4.5" | 960 |
| 52 | Sponge Surgical Gauze Compressed | 4000 |
| 53 | Sponge/Brush | 200 |

**UNITED STATES GOVERNMENT DONATED MEDICAL SUPPLIES TO KENYA AUGUST 1998.**
**(U.S MILITARY/BAHRAIN)**
**SERVICEABLE SUPPLIES**

| | Item | Quantity |
|---|---|---|
| 54 | Sterile water for Injection | 1150 |
| 55 | Stopcocks with extension tube | 1050 |
| 56 | Suction Catheter | 100 |
| 57 | Supplementary II equipment (A-B) | 4 |
| 58 | Supplementary II Equipment (A-B) | 4 |
| 59 | Supported cervical collar | 29 Pairs |
| 60 | Surgical bowl sponge | 8 |
| 61 | Surgical Drape (Large sheet Plastic) | 12 Packets |
| 62 | Surgical Gloves 51/2 | 100 Pairs |
| 63 | Surgical Gloves 71/2 | 50 Pairs |
| 64 | Surgical H/Light Kit | 2 |
| 65 | Surgical Tape | 10 |
| 66 | Surgical Tape | 18 |
| 67 | Surgical Thoracic Drainage tubes | 80 Tubes |
| 68 | Syranges 3cc | 800 |
| 69 | Syringes 10cc | 800 |
| 70 | Trachael tubes assorted | 20 Packets |
| 71 | Tracheal tubes | 262 |
| 72 | Transparent Dressings | 6 |
| 73 | V Care Manual Pediatric Resuscitator | (Vn 2000) 8 |
| 74 | V Care Manual Pediatric Resuscitator | (Vn 1000) 8 |
| 75 | Vaginal Speculum | 100 |
| 76 | Velket tourniquet Adult size | 9 Dozens |
| 77 | Wheel Chair | 1 |
| 78 | White Latex Surgical Gloves 81/2 | 200 Pairs |

# Appendix V

## Excerpts From Distribution Plan For World Bank Financed MCH/FP Equipment

DIVISION OF PRIMARY HEALTH CARE

# DISTRIBUTION PLAN
# FOR
# MCH/FP EQUIPMENT AND SUPPLIES

**World Bank IDA Credit 2110-KE AND 2310-KE**

Distribution Plan Produced by John Snow, Inc.
**Family Planning Logistics Management Project**
Under USAID Contract No. CCP-3038-C-00-5058-00

**September 1998**

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A List of Recipients (Provincial General Hospital, District and Sub-District Hospitals).

B Rationale For Equipment and Supplies Allocation

C Allocation by Type of Facility

D Packing Lists by Individual Health Facility

**PROVINCIAL GENERAL HOSPITALS** **13**

| | FACILITY |
|---|---|
| 1 | Mombasa Provincial General Hospital |
| 2 | Embu Provincial General Hospital |
| 3 | Garissa Provincial General Hospital |
| 4 | Kakamega Provincial General Hospital |
| 5 | Nakuru Provincial General Hospital |
| 6 | Kisumu Provincial General Hospital |
| 7 | Nyeri Provincial General Hospital |
| 8 | Homabay District Hospital (PG) |
| 9 | Kisii District Hospital (PG) |
| 10 | Machakos District Hospital (PG) |
| 11 | Thika District Hospital (PG) |
| 12 | Meru District Hospital (PG) |
| 13 | Eldoret District Hospital (PG) |

**NCPD SITES** **7**

| | FACILITY |
|---|---|
| 1 | Kimalel Hospital |
| 2 | Chaptalale Hospital |
| 3 | Tatu Health Center |
| 4 | Engineer Health Center |
| 5 | Kocholwa Health Center |
| 6 | Nonkopil Health Center |
| 7 | Gesusu Hospital |

| | DISTRICT HOSPITALS | 51 |
|---|---|---|
| | | |
| | FACILITY | DISTRICT |
| 1 | Bungoma District Hospital | Bungoma |
| 2 | Busia District Hospital | Busia |
| 3 | Isiolo District Hospital | Isiolo |
| 4 | Kajiado District Hospital | Kajiado |
| 5 | Makindu Sub-District Hospital | Makindu |
| 6 | Loitoktok District Hospital | Loitoktok |
| 7 | Kabaranet District Hospital | Kangundo |
| 8 | Kangundo District Hospital | Kangundo |
| 9 | Kericho District Hospital | Kericho |
| 10 | Kiambu District Hospital | Kiambu |
| 11 | Kilifi District Hospital | Kilifi |
| 12 | Kerugoya District Hospital | Kirinyaga |
| 13 | Kitui District Hospital | Kitui |
| 14 | Eldama Ravine District Hospital | Koibatek |
| 15 | Msambweni District Hospital | Kwale |
| 16 | LongisaDistrict Hospital | Laikipia |
| 17 | Ol Kalau District Hospital | Laikipia |
| 18 | Lamu District Hospital | Lamu |
| 19 | Makueni District Hospital | Makueni |
| 20 | Malindi District Hospital | Malindi |
| 21 | Marsabit District Hospital | Marsabit |
| 22 | Migori District Hospital | Migori |
| 23 | Naivasha District Hospital | |
| 24 | Mandera District Hospital | Moyale |
| 25 | Moyale District Hospital | Moyale |
| 26 | Muranga District Hospital | Muranga |
| 27 | Mwingi District Hosopital | Mwingi |
| 28 | Mbagathi District Hospital | Nairobi |
| 29 | Kapsabet District Hospital | Nandi |
| 30 | Narok District Hospital | Narok |
| 31 | Chuka District Hospital | Nithi |
| 32 | Nyambene District Hospital | Nyambene |
| 33 | Nyamira District Hospital | Nyamira |
| 34 | Nanyuki District Hospital | Nyandarua |
| 35 | Nyahururu District Hospital | Nyandarua |
| 36 | Karatina District Hospital | Nyeri |
| 37 | Maralal District Hospital | Samburu |
| 38 | Siaya District Hospital | Siaya |
| 39 | Hola District Hospital | Tana River |
| 40 | Kitale District Hospital | Trans Nzoia |
| 41 | Transmara District Hospital | Transmara |
| 42 | Lodwar District Hospital | Turkana |
| 43 | Mbale District Hospital | Vihiga |
| 44 | Wajir District Hospital | Wajir |
| 45 | Kapenguria District Hospital | West Pokot |
| 46 | Sindo Sub-District Hospital | |
| 47 | Iten District Hospital | Iten |
| 48 | Moi Voi District Hospital | |
| 49 | Kisumu District Hospital | |
| 50 | Kehancha District Hospital | |
| 51 | Mt Elgon District Hospital | |

| | | |
|---|---|---|
| | **SUB-DISTRICT HOSPITALS** | **42** |
| | | |
| | **FACILITY** | |
| 1 | Ahero Sub-District Hospital | |
| 2 | Alupe Sub-District Hospital | |
| 3 | Bondo Sub-District Hospital | |
| 4 | Cheptalal Sub-District Hospital | |
| 5 | Chulaimbo Sub-District Hospital | |
| 6 | Elwak Sub-District Hospital | |
| 7 | Gatundu Sub-District Hospital | |
| 8 | Gilgil Sub-District Hospital | |
| 9 | Ishiara Sub-District Hospital | |
| 10 | Kapkatet Sub-District Hospital | |
| 11 | Karuri Sub-District Hospital | |
| 12 | Karurumo Sub-District Hospital | |
| 13 | Kinango Sub-District Hospital | |
| 14 | Kwale Sub-District Hospital | |
| 15 | Likoni Sub District Hospital | |
| 16 | Loco Dispensary | |
| 17 | Lokitaung Sub-District Hospital | |
| 18 | Londiani Sub-District Hospital | |
| 19 | M.O.H. Nakuru (HC & Disp) | |
| 20 | Maragwa Sub-District Hospital | |
| 21 | Mariakani Sub District Hospital | |
| 22 | Marigat Sub-District Hospital | |
| 23 | Mathari Mental Hospital | |
| 24 | Miathene Sub-District Hospital | |
| 25 | Mokowe Sub District Hospital | |
| 26 | Molo Sub-District Hospital | |
| 27 | Mosoriot Sub-District Hospital | |
| 28 | Mt Kenya Sub-District Hospital | |
| 29 | Muriranjas Sub-District Hospital | |
| 30 | Nandi Hills Sub-District Hospital | |
| 31 | National Spinal Injury Hospital | |
| 32 | Ngao Sub District Hospital | |
| 33 | Port Reitz Sub District Hospital | |
| 34 | Port Victoria Sub-District Hospital | |
| 35 | Runyenjes Sub-District Hospital | |
| 36 | Tambach Sub-District Hospital | |
| 37 | Taveta Sub-District Hospital | |
| 38 | Tigoni Sub District Hospital | |
| 39 | Tiwi Sub District Hospital | |
| 40 | Webuye Sub-District Hospital | |
| 41 | Wesu Sub District Hospital | |
| 42 | Yala Sub-District Hospital | |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 1 | Speculum,Vaginal XL | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 2 | Speculum, Vaginal L | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 3 | Speculum, Vaginal M | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 4 | Speculum, Vaginal SM | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 5 | Sphygomamometer, Aneroid | 5,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 6 | Stethoscope,Binaural | 5,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 7 | Stethoscope, Fetal | 2,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 8 | Thermometer,Clinical | 5,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 9 | Sound, Uterine | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 10 | Forceps Sponge-holding,200mm | 30 | 2 each NCPD, 1 each PGH |
| 11 | Forceps, Sponge-holding 250mm | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 12 | Forceps uterine | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 13 | Forceps, Artery | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 14 | Forceps, Dissecting 175mm | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 15 | Forceps, Dissecting 210mm | 1,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 16 | Forceps, Dissecting PJ,175mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 17 | Forceps, Dissecting 125mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 18 | Forceps Dissecting 1x2, 225mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 19 | Forceps, Dissecting 225mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 20 | Forceps, Dissecting 125mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 21 | Forceps, Dissecting 175mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 22 | Forceps, Dissecting 200mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 23 | Forceps, Dissecting 175mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 24 | Forcepts Dissecting 220mm | 700 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 25 | Forceps Artery 200mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 26 | Forceps Artery 125mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 27 | Forceps Artery Hal. | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 28 | Forceps Artery175mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 29 | Forceps Arery 125mm | 250 | 2 NCPD, 3 PGH, 2RHTC, 2DH |
| 30 | Forceps Korchers | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 31 | Forceps, Sterilizer 250mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 32 | Forceps Dissecting 200mm | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 33 | Forceps sterilizer 270mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 34 | Forceps, Dressing 200mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 35 | Scissors Episiotomyu | 600 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 36 | Forceps, Bryants | 600 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 37 | Forceps, Artery 125mm | 600 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 38 | Forceps, Sinus 125mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 39 | Forceps, Sinus 175mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 40 | Forceps, Allis | 240 | 2each |
| 41 | Forceps, Nichel | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 42 | Forceps, Tissue 200mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 43 | Forceps, Tissue 190mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 44 | Forceps Cheatle | 2,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 45 | Scissors, 175mm | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 46 | Scissors 140mm | 75 | 1 each for NCPD, PGH, DH, SDH |
| 47 | Scissors, ward | 2,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 48 | Scissors 230mm | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 49 | Scissors, 165mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 50 | Scissors 185mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 51 | cissors Dissecting 115mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 52 | Scissors Dissecting 125mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 53 | Scissors Dissecting 145 | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 54 | Scissors Dissecting 115mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 55 | Scissors Dissecting125mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 56 | Scissors Dissecting 145mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 57 | Scissors Dissecting 115mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 58 | Scissors Dissecting 125mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 59 | Scissors Dissecting 145mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 60 | Scissors, Borne 160mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 61 | Scissors, Borne 200mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 62 | Scissors, Borne 230mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 63 | Scissors Bowel 210mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 64 | Scissors, Bowel 250mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 65 | Shear, Post Mortem | 75 | 1 each for NCPD, PGH, DH, SDH |
| 66 | Scissors, Aufrechts | 75 | 1 each for NCPD, PGH, DH, SDH |
| 67 | Scissors Enucleation | 60 | 1 ncpd, 1pgh, 1sdh except Mokowe and Mathare |
| 68 | Scissors, Ligature/Dressing | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 69 | Scissors Mayos | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 70 | Scissors, Melzenbaum | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 71 | Needle Holder | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 72 | Kidney Dishes 300mm | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 73 | Kidney Dishes 250mm | 10,500 | 20 (NCPD), 35(PGH), 25(DH), 11(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 74 | Gallipot, Large | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 75 | Gallipot Medium | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 76 | Bowels, Lotion 150mm | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 77 | Bowels Lotion 250mm | 10,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 78 | Basin, Plastic 20mm | 2,000 | same ratio as item#312 |
| 79 | Basin Plastic 100mm | 2,000 | same ratio as item#312 |
| 80 | Tray, instruments | 2,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 81 | Bin, Pedal Action | 2,880 | same ratio as item#312 |
| 82 | Trays, Kidney 160mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 83 | Trays, Kidney 280mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 84 | Kidney Dishes 175mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 85 | Tray instruments 125mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 86 | Tray instruments 110mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 87 | Trays oblong 250mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 88 | Trays, oblong 450mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 89 | Tray, Oblong 300x 300mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 90 | Trays, Oblong 300x 200mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 91 | Trays, Oblong 320mm | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 92 | Safety Razor | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 93 | Tongue Depressor | 350 | 2 NCPD, 3PGHs, 2SDHs, 1 RHTCs, 4 DH |
| 94 | Holders, Needle Bard | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 95 | Holders, Needle Sim's | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 96 | Holders, Needle Kilners | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 97 | Knives, Skin Grafting | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 98 | Blades Skin Grafting | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 99 | Retractors 25mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 100 | Retractors 50mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 101 | Retractors 160mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 102 | Retractors 40mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 103 | Retractors 70mm | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 104 | Retractors Morris | 200 | 2 to each ncpd, 3 to each pgh, 2 to each dh, 1 to each sdh |
| 105 | Retractors Molleys | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 106 | Retractors Pozzis | 50 | 1 each for NCPD, PGH, 4DHs from each Province, Mbagathi 2 |
| 107 | Razor, Skin Grafting with metal h | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 108 | Razor, Skin Grafting board | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 109 | Razor, Skin Grafting narrow | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 110 | Razor, Skin Grafting narrow blade | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 111 | Forceps Kuesters | 30 | 2 NCPD, 1 for PGHs, 3 buffer |
| 112 | Forceps Virchows | 30 | 2 NCPD, 1 for PGHs, 3 buffer |
| 113 | Forceps Amussets | 30 | 2 NCPD, 1 for PGHs, 3 buffer |
| 114 | Forceps 200mm | 30 | 2 NCPD, 1 for PGHs, 3 buffer |
| 115 | Hammer, Metal hammer | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 116 | Hammer 28 oz | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 117 | Hammer 20mm | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 118 | Wrench, Post Morten | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 119 | Chisel, 20mm | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 120 | Chisel, 23mm | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 121 | Chisel, 14mm | 10 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 122 | Trephine Horseley's | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 123 | Trephine, set of 3 | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 124 | Trephine set of 4 | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 125 | Trephine Rowbothaims 3/4 | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 126 | Trephine Rowbathaims 1 | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 127 | Tenaculum 200mm | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 128 | Tenaculum 250mm | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 129 | Forceps, Teales Vulsellum | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 130 | Tenaculum, double ended | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 131 | Forceps, Uterine Vulsellum | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 132 | Hook and shears | 30 | 5 NCPD excl Ruiru/Engineer, 2 each PGH except Garissa (1) |
| 133 | Cornet, Lunds Skull | 10 | 5 ncpd Mchakos, Moi Voi, Thika Meru, Naivasha - highway |
| 134 | Carafes | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 135 | Cup, feeding | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 136 | Male urinal | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 137 | Bed pans child | 2,000 | 20 (NCPD), 27(PGH), 20 (DH), 10(sdh), 8(RHTC) 6(HCs), 4(disp) |
| 138 | Bed pans adult | 600 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 139 | Drums sterilizing 340x240mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 140 | Drums sterilizing 340x140mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 141 | Drums sterilizing 290x145mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 142 | Drums, sterilizing 275x150mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 143 | Drums sterilizing 150x 100mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 144 | Drums sterilizing 240mmx160mm | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 145 | Drums sterilizing, square | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 146 | Drums sterilizing for gloves | 300 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 147 | Hurricane Lamps | 50 | 7 NCPD, Nyambene, Makueni, Siakago, Hola, Kinango, Ngao, Lamu, Maralal, Transmara, Lodwar, K |
| 148 | Scale, weighing | 20 | 7 NCPD,13 PGHS |
| 149 | Scale, infant 0-6kg | 50 | 7 NCPD, Nyambene, Makueni, Siakago, Hola, Kinango, Ngao, Lamu, Maralal, Transmara, Lodwar, K |
| 150 | Scale, infant 0-25kg | 40 | 7 NCPD, Nyambene, Makueni, Siakago, Hola, Kinango, Ngao, Lamu, Maralal, Transmara, Lodwar, K |
| 151 | Scale | 40 | 7 NCPD, Nyambene, Makueni, Siakago, Hola, Kinango, Ngao, Lamu, Maralal, Transmara, Lodwar, K |
| 152 | Jar Dressing .95l | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 153 | Jar, Forceps | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 154 | Jar Dressing 21 | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 155 | Buckets | 600 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 156 | Measure 500ml | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 157 | Measure 1000ml | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 158 | Measure medicine | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 159 | Measure medicine | 500 | 2 NCPD, 3PGHs, 3SDHs, 2 RHTCs, 6 DH |
| 160 | Funnel, catheter | 250 | 2 NCPD, 3 PGH, 2RHTC, 2DH |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 161 | Funnel, | 250 | 2 NCPD, 3 PGH, 2RHTC, 2DH |
| 162 | Mug, sputum | 600 | 2 NCPD, 2 PGH, 1 SDH 2 RHTC 4DH |
| 163 | Recuscitator set, infant | 20 | 7 NCPD, 13 PGHs |
| 164 | Regulator, oxygen | 60 | 7 NCPD, 51 DHs |
| 165 | Key and spanner | 60 | 7 NCPD, 51 DHs |
| 166 | Resuscitator, Manual, adults | 1,000 | 2 each NCPD, 2 each to RHF, SDHs, DHs (balance) |
| 167 | Resuscitator, Manual infant | 1,000 | 2 each NCPD, 2 each to RHF, SDHs, DHs (balance) |
| 168 | Dilators | 100 | 1 pr each to NCPD (7), PGHS(13) and 1 each for DHs and busiest SDHs |
| 169 | Splint set multipurpose | 10 | Highway DHs |
| 170 | Vacuum Extractors | 100 | 1 each DH, SDHs |
| 171 | Torch Flashlight | 1,000 | 2 to each HC, 1 for others, 2 for each NCPD |
| 172 | Splint, set femour | 25 | Busy/Highway DHs |
| 173 | Vacuum Extractor, manual | 20 | 1 each to Baringo, Kocholia, Bomet, Gesusu, busy SDHs |
| 174 | Boots Surgeon 6 | 100 | 2 each for NCPD divide among others based on beds |
| 175 | Boots Surgeon 7 | 100 | 2 each for NCPD divide among others based on beds |
| 176 | Boots Surgeon 8 | 300 | 6 each for NCPD divide among others based on beds |
| 177 | Boots, Surgeon 9 | 300 | 6 each for NCPD divide among others based on beds |
| 178 | Boots Surgeon 10 | 300 | 6 each for NCPD divide among others based on beds |
| 179 | Receptacle, Soiled Dressing | 300 | 2 each for NCPD, divide among PGHs, DHs, SDHs |
| 180 | Stand, Saline | 500 | divide same proportion as beds |
| 181 | Diagnostic set | 10 | |
| 182 | Laryngoscope | 10 | Dr Makumi to Advice up to 273 (draining rack) |
| 274 | Strips, for testing | 52 | 7 each to NCPD, bal to Mbagathi |
| 275 | Autoclave clinical | 100 | 1 each for NCPD, 2 Mbagathi, 1 each DHs, busiest SDHs |
| 276 | Autoclave dressing | 500 | 1 each for NCPD, 2 Mbagathi, 1 each DHs, busiest SDHs (ratio as 275) |
| 277 | Electro-surgical unit | 20 | 1 each NCPD, 1 each PGH, 1 Mbagathi, Machakos 1, Naivasha 1, Kericho 1, Thika 1, Moi Voi 1 |
| 278 | Wheel chairs | 50 | 1 each for NCPD, 3 Spinal Injury, 40 busiest DHs |
| 279 | Sterilizer-20x20x45cm | 70 | 1 each for NCPD, 48 for DHs, new SDHs |
| 280 | Sterilizer-20x14x38cm | 70 | 1 each for NCPD, 48 for DHs, new SDHs |
| 281 | Sterilizer-90 litre | 70 | 1 each for NCPD, 48 for DHs, each pghs |
| 282 | Refrigerator | 25 | 2 each for NCPDs, 11 new SDHs |
| 283 | Operating light | 25 | 1 for each NCPD, 1 each for PGHs - Garissa (2), 2 Mbagathi, 1 Siaya, 1 Kericho, 1 Machakos, Moi V |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 284 | Incubabor baby | 10 | 1 each dor NCPD, 3 for Mabagathi |
| 285 | Chairs | 350 | 7each for NCPD sites, 3 each for 7 PGHS, 48DHs, 45SDHs |
| 286 | Tables, office | 150 | 3 each for NCPD sites, 1 each for 48 DH, 45 SDH and 6 RHTCs and1 extra for busy DHs |
| 287 | Beds, mobile | 200 | 10 each for NCPD, 130 for PGHS, |
| 288 | Replacement castors | 400 | 10 each for NCPD, 130 for PGHS, |
| 289 | Overbed table | 200 | 10 each for NCPD, 130 for PGHS, |
| 290 | Bed mattress for item 3. | 200 | 10 each for NCPD, 130 for PGHS, |
| 291 | Manual delivery beds | 20 | 2 each to NCPD and 1 each to RHTCs |
| 292 | Mattresses for item 7 | 20 | same as 291 |
| 293 | Stretcher | 50 | 1 each for NCPD and 1 each for first 43 SDHs |
| 294 | Stool, surgeon's | 50 | 1 each for NCPD and 1 each for first 43 DHs |
| 295 | Trolley, anaesthetic | 10 | 1 each for NCPD, 1 each to Nyeri, Embu, Garissa PGHs |
| 296 | Tables operating | 15 | 1 for each NCPD, 1 each for PGHs |
| 297 | Coach, Universal examination | 70 | 1 each for NCPD, 48 for DHs, busiest SDHs |
| 298 | Couches examination | 50 | 1 each for NCPDs, 43 busiest SDHs |
| 299 | Cots baby with trolley | 70 | 3 NCPD DHs get 10 each, 5 Gesusu, 5 Nonkopir, 2 Ruiru, 2 Engineer divide bal between Nakuru, Co |
| 300 | Screens, ward | 14 | 2 each to NCPD |
| 301 | Trolley medicine | 11 | 1 each to NCPD, 4 to Mabagathi |
| 302 | Trolley instrument | 10 | 1 each to NCPD, 3 to Mabagathi |
| 303 | Trolleys patient | 10 | 1 each to NCPD, 3 to Mabagathi |
| 304 | Filing cabinets | 250 | 3 for each NCPD, 2 each for DH/SDH/RTC, 3 each PGH |
| 305 | Anaesthetic machine | 20 | 7 NCPD, 7 PGHS, + busy facikities |
| 306 | Laboratory machine | 8 | 1 each for NCPD, 1 to Mbagathi |
| 307 | Body cart | 36 | 1 each for NCPD, 1 to Mbagathi, 1 to PGHs, 1 Machakos, 1 Kisumu DH, 1 Naivasha, all other highw |
| 308 | Autopsy saw | 3 | Nakuru, Kisumu, Coast PGHs |
| 309 | Morgue Refrigeration system | 3 | Nakuru, Kisumu, Coast PGHs |
| 310 | Hydraulic Body Tray Lifter | 3 | Nakuru, Kisumu, Coast PGHs |
| 311 | Bed stools | 3000 | |
| 312 | Abdominal sheets | 20,000 | |
| 313 | Bed cover | 10,000 | |
| 314 | Bed sheets | 10,000 | |
| 315 | Blanket | 20000 | |

| CODE | ITEM NAME | Ordered | RATIONALE |
|---|---|---|---|
| 316 | Canvas shoes | 5,000 | |
| 317 | Surgical cap | 3000 | |
| 318 | Surgical drape 1 x 1 m | 1500 | |
| 319 | Surgical drapes 1 x 1.5m | 1,500 | |
| 320 | Surgical gown medium | 1,500 | |
| 321 | Surgical Gown large | 1,500 | |
| 322 | Face Masks | 3,000 | |
| 323 | Hand towels | 3,000 | |
| 324 | Pillows | 5,000 | |
| 325 | Surgical trousers medium | 5,000 | |
| 326 | . Surgical trousers large | 3,000 | |
| 327 | Shirts medium | 3,000 | |
| 328 | Shirts large | 3,000 | |
| 329 | Pillow cases | 10,000 | |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Speculum,Vaginal XL | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 2 | Speculum, Vaginal L | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 3 | Speculum, Vaginal M | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 4 | Speculum, Vaginal SM | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 5 | Sphygomamometer, Aneroid | 5,000 | 17 | 10 | 13 | 10 | 5 | 4 | 3 | 2 | 4983 |
| 6 | Stethoscope,Binaural | 5,000 | 17 | 10 | 13 | 10 | 5 | 4 | 3 | 2 | 4983 |
| 7 | Stethoscope, Fetal | 2,000 | 8 | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 1992 |
| 8 | Thermometer,Clinical | 5,000 | 17 | 10 | 13 | 10 | 5 | 4 | 3 | 2 | 4983 |
| 9 | Sound, Uterine | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 10 | Forceps Sponge-holding,200mm | 30 | 3 | 2 | 1 | | | | | | 27 |
| 11 | Forceps, Sponge-holding 250mm | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 12 | Forceps uterine | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 13 | Forceps, Artery | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 14 | Forceps, Dissecting 175mm | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 15 | Forceps, Dissecting 210mm | 1,000 | 48 | 2 | 3 | 1 | 1 | 1 | 2 | | 952 |
| 16 | Forceps, Dissecting PJ,175mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 17 | Forceps, Dissecting 125mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 18 | Forceps Dissecting 1x2, 225mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 19 | Forceps, Dissecting 225mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 20 | Forceps, Dissecting 125mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 21 | Forceps, Dissecting 175mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 22 | Forceps, Dissecting 200mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 23 | Forceps, Dissecting 175mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 24 | Forcepts Dissecting 220mm | 700 | 6 | 4 | 6 | 8 | 4 | 2 | | | 694 |
| 25 | Forceps Artery 200mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 26 | Forceps Artery 125mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 27 | Forceps Artery Hal. | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 28 | Forceps Artery175mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 29 | Forceps Arery 125mm | 250 | 83 | 2 | 3 | 2 | | 2 | | | 167 |
| 30 | Forceps Korchers | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 31 | Forceps, Sterilizer 250mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 32 | Forceps Dissecting 200mm | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | Forceps sterilizer 270mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 34 | Forceps, Dressing 200mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 35 | Scissors Episiotomyu | 600 | 4 | 4 | 4 | 8 | 2 | 4 | | | 596 |
| 36 | Forceps, Bryants | 600 | 4 | 4 | 4 | 8 | 2 | 4 | | | 596 |
| 37 | Forceps, Artery 125mm | 600 | 4 | 4 | 4 | 8 | 2 | 4 | | | 596 |
| 38 | Forceps, Sinus 125mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 39 | Forceps, Sinus 175mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 40 | Forceps, Allis | 240 | 2 | 2 | 2 | 2 | 2 | 2 | | | 238 |
| 41 | Forceps, Nichel | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 42 | Forceps, Tissue 200mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 43 | Forceps, Tissue 190mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 44 | Forceps Cheatle | 2,000 | 8 | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 1992 |
| 45 | Scissors, 175mm | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 46 | Scissors 140mm | 75 | 4 | 1 | 1 | 1 | | | | | 71 |
| 47 | Scissors, ward | 2,000 | 8 | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 1992 |
| 48 | Scissors 230mm | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 49 | Scissors, 165mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 50 | Scissors 185mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 51 | cissors Dissecting 115mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 52 | Scissors Dissecting 125mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 53 | Scissors Dissecting 145 | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 54 | Scissors Dissecting 115mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 55 | Scissors Dissecting125mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 56 | Scissors Dissecting 145mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 57 | Scissors Dissecting 115mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 58 | Scissors Dissecting 125mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 59 | Scissors Dissecting 145mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 60 | Scissors, Borne 160mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 61 | Scissors, Borne 200mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 62 | Scissors, Borne 230mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 63 | Scissors Bowel 210mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 64 | Scissors, Bowel 250mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65 | Shear, Post Mortem | 75 | 4 | 1 | 1 | 1 | | | | | 71 |
| 66 | Scissors, Aufrechts | 75 | 4 | 1 | 1 | 1 | | | | | 71 |
| 67 | Scissors Enucleation | 60 | 0 | 1 | 1 | | one by 40 | | | | 60 |
| 68 | Scissors, Ligature/Dressing | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 69 | Scissors Mayos | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 70 | Scissors, Melzenbaum | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 71 | Needle Holder | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 72 | Kidney Dishes 300mm | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 73 | Kidney Dishes 250mm | 10,500 | 521 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 74 | Gallipot, Large | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 75 | Gallipot Medium | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 76 | Bowels, Lotion 150mm | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 77 | Bowels Lotion 250mm | 10,000 | 21 | 20 | 27 | 20 | 10 | 8 | 6 | 4 | 9979 |
| 78 | Basin, Plastic 20mm | 2,000 | 9 | 3 | 2 | 2 | 1 | 0 | 1 | 1 | 1991 |
| 79 | Basin Plastic 100mm | 2,000 | 9 | 3 | 2 | 2 | 1 | 0 | 1 | 1 | 1991 |
| 80 | Tray, instruments | 2,000 | 9 | 3 | 2 | 2 | 1 | 0 | 1 | 1 | 1991 |
| 81 | Bin, Pedal Action | 2,880 | 12 | 10 | 8 | 10 | 9 | 1 | 1 | 1 | 2868 |
| 82 | Trays, Kidney 160mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 83 | Trays, Kidney 280mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 84 | Kidney Dishes 175mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 85 | Tray instruments 125mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 86 | Tray instruments 110mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 87 | Trays oblong 250mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 88 | Trays, oblong 450mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 89 | Tray, Oblong 300x 300mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 90 | Trays, Oblong 300x 200mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 91 | Trays, Oblong 320mm | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 92 | Safety Razor | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 93 | Tongue Depressor | 350 | 3 | 2 | 3 | 4 | 2 | 1 | | | 347 |
| 94 | Holders, Needle Bard | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 95 | Holders, Needle Sim's | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 96 | Holders, Needle Kilners | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 97 | Knives, Skin Grafting | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 98 | Blades Skin Grafting | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 99 | Retractors 25mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 100 | Retractors 50mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 101 | Retractors 160mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 102 | Retractors 40mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 103 | Retractors 70mm | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 104 | Retractors Morris | 200 | 3 | 2 | 3 | 2 | 1 | | | | 197 |
| 105 | Retractors Molleys | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 106 | Retractors Pozzis | 50 | | 1 | 1 | | | | | | 20 |
| 107 | Razor, Skin Grafting with metal hand | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 108 | Razor, Skin Grafting board | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 109 | Razor, Skin Grafting narrow | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 110 | Razor, Skin Grafting narrow blade | 100 | 9 | 2 | 2 | 1 | | | | | 91 |
| 111 | Forceps Kuesters | 30 | 3 | 2 | 1 | | | | | | 27 |
| 112 | Forceps Virchows | 30 | 3 | 2 | 1 | | | | | | 27 |
| 113 | Forceps Amussets | 30 | 3 | 2 | 1 | | | | | | 27 |
| 114 | Forceps 200mm | 30 | 3 | 2 | 1 | | | | | | 27 |
| 115 | Hammer, Metal hammer | 30 | 0 | 1 | 1 | | | | | | 30 |
| 116 | Hammer 28 oz | 30 | 0 | 1 | 1 | | | | | | 30 |
| 117 | Hammer 20mm | 30 | 0 | 1 | 1 | | | | | | 30 |
| 118 | Wrench, Post Morten | 30 | 0 | 1 | 1 | | | | | | 30 |
| 119 | Chisel, 20mm | 30 | 0 | 1 | 1 | | | | | | 30 |
| 120 | Chisel, 23mm | 30 | 0 | 1 | 1 | | | | | | 30 |
| 121 | Chisel, 14mm | 10 | 3 | 1 | | | | | | | 7 |
| 122 | Trephine Horseley's | 30 | 10 | 1 | 1 | | | | | | 20 |
| 123 | Trephine, set of 3 | 30 | 10 | 1 | 1 | | | | | | 20 |
| 124 | Trephine set of 4 | 30 | 10 | 1 | 1 | | | | | | 20 |
| 125 | Trephine Rowbothaims 3/4 | 30 | 10 | 1 | 1 | | | | | | 20 |
| 126 | Trephine Rowbathaims 1 | 30 | 10 | 1 | 1 | | | | | | 20 |
| 127 | Tenaculum 200mm | 30 | 10 | 1 | 1 | | | | | | 20 |
| 128 | Tenaculum 250mm | 30 | 10 | 1 | 1 | | | | | | 20 |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 129 | Forceps, Teales Vulsellum | 30 | 10 | 1 | 1 | | | | | | 20 |
| 130 | Tenaculum, double ended | 30 | 10 | 1 | 1 | | | | | | 20 |
| 131 | Forceps, Uterine Vulsellum | 30 | 10 | 1 | 1 | | | | | | 20 |
| 132 | Hook and shears | 30 | 10 | 1 | 1 | | | | | | 20 |
| 133 | Cornet, Lunds Skull | 10 | 3 | 1 | | | | | | | |
| 134 | Carafes | 500 | 500 | 2 | 3 | 6 | 3 | 2 | | | |
| 135 | Cup, feeding | 500 | 500 | 2 | 3 | 6 | 3 | 2 | | | |
| 136 | Male urinal | 500 | 500 | 2 | 3 | 6 | 3 | 2 | | | |
| 137 | Bed pans child | 2,000 | 8 | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 1992 |
| 138 | Bed pans adult | 600 | 4 | 4 | 4 | 8 | 2 | 4 | | | 596 |
| 139 | Drums sterilizing 340x240mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 140 | Drums sterilizing 340x140mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 141 | Drums sterilizing 290x145mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 142 | Drums, sterilizing 275x150mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 143 | Drums sterilizing 150x 100mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 144 | Drums sterilizing 240mmx160mm | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 145 | Drums sterilizing, square | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 146 | Drums sterilizing for gloves | 300 | 2 | 2 | 2 | 4 | 1 | 2 | | | 298 |
| 147 | Hurricane Lamps | 50 | | 1 | 1 | | | | | | |
| 148 | Scale, weighing | 20 | 0 | 1 | 1 | | | | | | 20 |
| 149 | Scale, infant 0-6kg | 50 | | 1 | 1 | | | | | | |
| 150 | Scale, infant 0-25kg | 40 | | 1 | 1 | | | | | | |
| 151 | Scale | 40 | | 1 | 1 | | | | | | |
| 152 | Jar Dressing .95l | 100 | 0 | 2 | 2 | 1 | one by 9 | | | | 50 |
| 153 | Jar, Forceps | 100 | 0 | 2 | 2 | 1 | one by 9 | | | | |
| 154 | Jar Dressing 21 | 100 | 0 | 2 | 2 | 1 | one by 9 | | | | |
| 155 | Buckets | 600 | 302 | 2 | 2 | 4 | 1 | 1 | | | 298 |
| 156 | Measure 500ml | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 157 | Measure 1000ml | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 158 | Measure medicine | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 159 | Measure medicine | 500 | 3 | 2 | 3 | 6 | 3 | 2 | | | 497 |
| 160 | Funnel, catheter | 250 | 83 | 2 | 3 | 2 | | 2 | | | 167 |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | Funnel, | 250 | 83 | 2 | 3 | 2 | | 2 | | | 167 |
| 162 | Mug, sputum | 600 | 302 | 2 | 2 | 4 | 1 | 1 | | | 298 |
| 163 | Recuscitator set, infant | 20 | 0 | 1 | 1 | | | | | | 20 |
| 164 | Regulator, oxygen | 60 | 2 | 1 | | | 1 | | | | 58 |
| 165 | Key and spanner | 60 | 2 | 1 | | | 1 | | | | 58 |
| 166 | Resuscitator, Manual, adults | 1,000 | 23 | 2 | | 17 | 2 | 2 | | | 977 |
| 167 | Resuscitator, Manual infant | 1,000 | 23 | 2 | | 17 | 2 | 2 | | | 977 |
| 168 | Dilators | 100 | 0 | 2 | 2 | 1 | one by 9 | | | | 100 |
| 169 | Splint set multipurpose | 10 | 3 | 1 | | | | | | | 7 |
| 170 | Vacuum Extractors | 100 | 0 | 1 | | 1 | 1 | | | | 100 |
| 171 | Torch Flashlight | 1,000 | 74 | 2 | 1 | 1 | 1 | 1 | 2 | | 926 |
| 172 | Splint, set femour | 25 | 5 | 1 | 1 | | | | | | 20 |
| 173 | Vacuum Extractor, manual | 20 | 0 | 1 | 1 | | | | | | 20 |
| 174 | Boots Surgeon 6 | 100 | 0 | 1 | | 1 | 1 | | | | 100 |
| 175 | Boots Surgeon 7 | 100 | 0 | 1 | | 1 | 1 | | | | 100 |
| 176 | Boots Surgeon 8 | 300 | | 2 | 2 | 4 | 1 | 2 | | | |
| 177 | Boots, Surgeon 9 | 300 | | 2 | 2 | 4 | 1 | 2 | | | |
| 178 | Boots Surgeon 10 | 300 | | 2 | 2 | 4 | 1 | 2 | | | |
| 179 | Receptacle, Soiled Dressing | 300 | | 2 | 2 | 4 | 1 | 2 | | | |
| 180 | Stand, Saline | 500 | | 10 | 20 | | | | | | |
| 181 | Diagnostic set | 10 | | 1 | | | | | | | |
| 182 | Laryngoscope | 10 | | 1 | | | | | | | |
| 274 | Strips, for testing | 52 | | 1 | | | | | | | 49 |
| 275 | Autoclave clinical | 100 | 0 | 1 | | 1 | 1 | | | | 100 |
| 276 | Autoclave dressing | 500 | 0 | 5 | | 5 | 5 | | | | 500 |
| 277 | Electro-surgical unit | 20 | 0 | 1 | 1 | | | | | | 20 |
| 278 | Wheel chairs | 50 | 0 | 1 | | | | | | | 50 |
| 279 | Sterilizer-20x20x45cm | 70 | 0 | 1 | | 1 | one by 12 | | | | 70 |
| 280 | Sterilizer-20x14x38cm | 70 | 0 | 1 | | 1 | one by 12 | | | | 70 |
| 281 | Sterilizer-90 litre | 70 | 0 | 1 | | 1 | one by 12 | | | | 70 |
| 282 | Refrigerator | 25 | 0 | 1 | | one by 1 | | | | | 25 |
| 283 | Operating light | 25 | 5 | 1 | 1 | one by 1 | | | | | 20 |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 284 | Incubabor baby | 10 | 0 | 1 | | one by 1 | | | | | 10 |
| 285 | Chairs | 350 | 15 | 7 | 3 | 3 | 2 | | | | 335 |
| 286 | Tables, office | 150 | 23 | 3 | 1 | 1 | 1 | | | | 127 |
| 287 | Beds, mobile | 200 | 0 | 10 | 10 | | | | | | 200 |
| 288 | Replacement castors | 400 | 0 | 20 | 20 | | | | | | 400 |
| 289 | Overbed table | 200 | 0 | 10 | 10 | | | | | | 200 |
| 290 | Bed mattress for item 3. | 200 | 0 | 10 | 10 | | | | | | 200 |
| 291 | Manual delivery beds | 20 | 6 | 2 | | | | | | | 14 |
| 292 | Mattresses for item 7 | 20 | 6 | 2 | | | | | | | 14 |
| 293 | Stretcher | 50 | 0 | 1 | | one by 4 | | | | | 50 |
| 294 | Stool, surgeon's | 50 | 0 | 1 | | one by 4 | | | | | 50 |
| 295 | Trolley, anaesthetic | 10 | 0 | 1 | one by 3 | | | | | | 10 |
| 296 | Tables operating | 15 | 0 | 1 | one by 8 | | | | | | 15 |
| 297 | Coach, Universal examination | 70 | 0 | 1 | | 1 | one by 12 | | | | 70 |
| 298 | Couches examination | 50 | 0 | 1 | | one by 4 | | | | | 50 |
| 299 | Cots baby with trolley | 70 | 0 | 2 | | 1 | one by 15 | | | | 70 |
| 300 | Screens, ward | 14 | 0 | 2 | | | | | | | 14 |
| 301 | Trolley medicine | 11 | 4 | 1 | | | | | | | 7 |
| 302 | Trolley instrument | 10 | 3 | 1 | | | | | | | 7 |
| 303 | Trolleys patient | 10 | 3 | 1 | | | | | | | 7 |
| 304 | Filing cabinets | 250 | 9 | 3 | 3 | 2 | 2 | | | | 241 |
| 305 | Anaesthetic machine | 20 | 0 | 1 | 1 | | | | | | 20 |
| 306 | Laboratory machine | 8 | 0 | 1 | | | | | | | 1 |
| 307 | Body cart | 36 | 0 | 1 | | | | | | | 36 |
| 308 | Autopsy saw | 3 | | | | | | | | | |
| 309 | Morgue Refrigeration system | 3 | | | | | | | | | |
| 310 | Hydraulic Body Tray Lifter | 3 | | | | | | | | | |
| 311 | Bed stools | 3000 | | 12 | 34 | 27 | 14 | | | | |
| 312 | Abdominal sheets | 20,000 | | 100 | 250 | 200 | 100 | | | | |
| 313 | Bed cover | 10,000 | | 50 | 125 | 100 | 50 | | | | |
| 314 | Bed sheets | 10,000 | | 50 | 125 | 100 | 50 | | | | |
| 315 | Blanket | 20000 | | 50 | 250 | 200 | 125 | | | | |

| CODE | ITEM NAME | Ordered | Balance | WB/NCPD(7) | PGHS(13) | DH(51) | SDH(42) | RHTC(6) | HC(400) | DISP(1400) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 316 | Canvas shoes | 5,000 | | 20 | 68 | 45 | 40 | | | | |
| 317 | Surgical cap | 3000 | | 25 | 41 | 30 | 18 | | | | |
| 318 | Surgical drape 1 x 1 m | 1500 | | 15 | 22 | 17 | 5 | | | | |
| 319 | Surgical drapes 1 x 1.5m | 1,500 | | 15 | 22 | 17 | 5 | | | | |
| 320 | Surgical gown medium | 1,500 | | 15 | 22 | 17 | 5 | | | | |
| 321 | Surgical Gown large | 1,500 | | 15 | 22 | 17 | 5 | | | | |
| 322 | Face Masks | 3,000 | | 25 | 41 | 30 | 18 | | | | |
| 323 | Hand towels | 3,000 | | 25 | 41 | 30 | 18 | | | | |
| 324 | Pillows | 5,000 | | 50 | 67 | 54 | 15 | | | | |
| 325 | Surgical trousers medium | 5,000 | 2006 | 25 | 41 | 30 | 18 | 0 | | | 2994 |
| 326 | . Surgical trousers large | 3,000 | | 25 | 41 | 30 | 18 | | | | |
| 327 | Shirts medium | 3,000 | | 25 | 41 | 30 | 18 | | | | |
| 328 | Shirts large | 3,000 | | 25 | 41 | 30 | 18 | | | | |
| 329 | Pillow cases | 10,000 | | 100 | 125 | 100 | 50 | | | | |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for NCPD Sites

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 1 | Speculum,Vaginal XL | 2 | 33 | Forceps sterilizer 270mm | 2 |
| 2 | Speculum, Vaginal L | 20 | 34 | Forceps, Dressing 200mm | 2 |
| 3 | Speculum, Vaginal M | 20 | 35 | Scissors Episiotomyu | 4 |
| 4 | Speculum, Vaginal SM | 2 | 36 | Forceps, Bryants | 4 |
| 5 | Sphygomamometer, Aneroid | 10 | 37 | Forceps, Artery 125mm | 4 |
| 6 | Stethoscope,Binaural | 10 | 38 | Forceps, Sinus 125mm | 2 |
| 7 | Stethoscope, Fetal | 4 | 39 | Forceps, Sinus 175mm | 2 |
| 8 | Thermometer,Clinical | 10 | 40 | Forceps, Allis | 2 |
| 9 | Sound, Uterine | 20 | 41 | Forceps, Nichel | 2 |
| 10 | Forceps Sponge-holding,200mm | 2 | 42 | Forceps, Tissue 200mm | 2 |
| 11 | Forceps, Sponge-holding 250mm | 20 | 43 | Forceps, Tissue 190mm | 2 |
| 12 | Forceps uterine | 20 | 44 | Forceps Cheatle | 4 |
| 13 | Forceps, Artery | 20 | 45 | Scissors, 175mm | 20 |
| 14 | Forceps, Dissecting 175mm | 20 | 46 | Scissors 140mm | 1 |
| 15 | Forceps, Dissecting 210mm | 2 | 47 | Scissors, ward | 4 |
| 16 | Forceps, Dissecting PJ,175mm | 2 | 48 | Scissors 230mm | 2 |
| 17 | Forceps, Dissecting 125mm | 2 | 49 | Scissors, 165mm | 2 |
| 18 | Forceps Dissecting 1x2, 225mm | 2 | 50 | Scissors 185mm | 2 |
| 19 | Forceps, Dissecting 225mm | 2 | 51 | cissors Dissecting 115mm | 2 |
| 20 | Forceps, Dissecting 125mm | 2 | 52 | Scissors Dissecting 125mm | 2 |
| 21 | Forceps, Dissecting 175mm | 2 | 53 | Scissors Dissecting 145 | 2 |
| 22 | Forceps, Dissecting 200mm | 2 | 54 | Scissors Dissecting 115mm | 2 |
| 23 | Forceps, Dissecting 175mm | 2 | 55 | Scissors Dissecting125mm | 2 |
| 24 | Forcepts Dissecting 220mm | 4 | 56 | Scissors Dissecting 145mm | 2 |
| 25 | Forceps Artery 200mm | 2 | 57 | Scissors Dissecting 115mm | 2 |
| 26 | Forceps Artery 125mm | 2 | 58 | Scissors Dissecting 125mm | 2 |
| 27 | Forceps Artery Hal. | 2 | 59 | Scissors Dissecting 145mm | 2 |
| 28 | Forceps Artery175mm | 2 | 60 | Scissors, Borne 160mm | 2 |
| 29 | Forceps Arery 125mm | 2 | 61 | Scissors, Borne 200mm | 2 |
| 30 | Forceps Korchers | 2 | 62 | Scissors, Borne 230mm | 2 |
| 31 | Forceps, Sterilizer 250mm | 2 | 63 | Scissors Bowel 210mm | 2 |
| 32 | Forceps Dissecting 200mm | 2 | 64 | Scissors, Bowel 250mm | 2 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for NCPD Sites

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 65 | Shear, Post Mortem | 1 | 97 | Knives, Skin Grafting | 2 |
| 66 | Scissors, Aufrechts | 1 | 98 | Blades Skin Grafting | 2 |
| 67 | Scissors Enucleation | 1 | 99 | Retractors 25mm | 2 |
| 68 | Scissors, Ligature/Dressing | 2 | 100 | Retractors 50mm | 2 |
| 69 | Scissors Mayos | 2 | 101 | Retractors 160mm | 2 |
| 70 | Scissors, Melzenbaum | 2 | 102 | Retractors 40mm | 2 |
| 71 | Needle Holder | 2 | 103 | Retractors 70mm | 2 |
| 72 | Kidney Dishes 300mm | 20 | 104 | Retractors Morris | 2 |
| 73 | Kidney Dishes 250mm | 20 | 105 | Retractors Molleys | 2 |
| 74 | Gallipot, Large | 20 | 106 | Retractors Pozzis | 1 |
| 75 | Gallipot Medium | 20 | 107 | Razor, Skin Grafting with metal h | 2 |
| 76 | Bowels, Lotion 150mm | 20 | 108 | Razor, Skin Grafting board | 2 |
| 77 | Bowels Lotion 250mm | 20 | 109 | Razor, Skin Grafting narrow | 2 |
| 78 | Basin, Plastic 20mm | 3 | 110 | Razor, Skin Grafting narrow blad | 2 |
| 79 | Basin Plastic 100mm | 3 | 111 | Forceps Kuesters | 2 |
| 80 | Tray, instruments | 3 | 112 | Forceps Virchows | 2 |
| 81 | Bin, Pedal Action | 10 | 113 | Forceps Amussets | 2 |
| 82 | Trays, Kidney 160mm | 2 | 114 | Forceps 200mm | 2 |
| 83 | Trays, Kidney 280mm | 2 | 115 | Hammer, Metal hammer | 1 |
| 84 | Kidney Dishes 175mm | 2 | 116 | Hammer 28 oz | 1 |
| 85 | Tray instruments 125mm | 2 | 117 | Hammer 20mm | 1 |
| 86 | Tray instruments 110mm | 2 | 118 | Wrench, Post Morten | 1 |
| 87 | Trays oblong 250mm | 2 | 119 | Chisel, 20mm | 1 |
| 88 | Trays, oblong 450mm | 2 | 120 | Chisel, 23mm | 1 |
| 89 | Tray, Oblong 300x 300mm | 2 | 121 | Chisel, 14mm | 1 |
| 90 | Trays, Oblong 300x 200mm | 2 | 122 | Trephine Horseley's | 1 |
| 91 | Trays, Oblong 320mm | 2 | 123 | Trephine, set of 3 | 1 |
| 92 | Safety Razor | 2 | 124 | Trephine set of 4 | 1 |
| 93 | Tongue Depressor | 2 | 125 | Trephine Rowbothaims 3/4 | 1 |
| 94 | Holders, Needle Bard | 2 | 126 | Trephine Rowbathaims 1 | 1 |
| 95 | Holders, Needle Sim's | 2 | 127 | Tenaculum 200mm | 1 |
| 96 | Holders, Needle Kilners | 2 | 128 | Tenaculum 250mm | 1 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for NCPD Sites

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 129 | Forceps, Teales Vulsellum | 1 | 161 | Funnel, | 2 |
| 130 | Tenaculum, double ended | 1 | 162 | Mug, sputum | 2 |
| 131 | Forceps, Uterine Vulsellum | 1 | 163 | Recuscitator set, infant | 1 |
| 132 | Hook and shears | 1 | 164 | Regulator, oxygen | 1 |
| 133 | Cornet, Lunds Skull | 1 | 165 | Key and spanner | 1 |
| 134 | Carafes | 2 | 166 | Resuscitator, Manual, adults | 2 |
| 135 | Cup, feeding | 2 | 167 | Resuscitator, Manual infant | 2 |
| 136 | Male urinal | 2 | 168 | Dilators | 2 |
| 137 | Bed pans child | 4 | 169 | Splint set multipurpose | 1 |
| 138 | Bed pans adult | 4 | 170 | Vacuum Extractors | 1 |
| 139 | Drums sterilizing 340x240mm | 2 | 171 | Torch Flashlight | 2 |
| 140 | Drums sterilizing 340x140mm | 2 | 172 | Splint, set femour | 1 |
| 141 | Drums sterilizing 290x145mm | 2 | 173 | Vacuum Extractor, manual | 1 |
| 142 | Drums, sterilizing 275x150mm | 2 | 174 | Boots Surgeon 6 | 1 |
| 143 | Drums sterilizing 150x 100mm | 2 | 175 | Boots Surgeon 7 | 1 |
| 144 | Drums sterilizing 240mmx160m | 2 | 176 | Boots Surgeon 8 | 2 |
| 145 | Drums sterilizing, square | 2 | 177 | Boots, Surgeon 9 | 2 |
| 146 | Drums sterilizing for gloves | 2 | 178 | Boots Surgeon 10 | 2 |
| 147 | Hurricane Lamps | 1 | 179 | Receptacle, Soiled Dressing | 2 |
| 148 | Scale, weighing | 1 | 180 | Stand, Saline | 10 |
| 149 | Scale, infant 0-6kg | 1 | 181 | Diagnostic set | 1 |
| 150 | Scale, infant 0-25kg | 1 | 182 | Laryngoscope | 1 |
| 151 | Scale | 1 | 274 | Strips, for testing | 1 |
| 152 | Jar Dressing .951 | 2 | 275 | Autoclave clinical | 1 |
| 153 | Jar, Forceps | 2 | 276 | Autoclave dressing | 5 |
| 154 | Jar Dressing 21 | 2 | 277 | Electro-surgical unit | 1 |
| 155 | Buckets | 2 | 278 | Wheel chairs | 1 |
| 156 | Measure 500ml | 2 | 279 | Sterilizer-20x20x45cm | 1 |
| 157 | Measure 1000ml | 2 | 280 | Sterilizer-20x14x38cm | 1 |
| 158 | Measure medicine | 2 | 281 | Sterilizer-90 litre | 1 |
| 159 | Measure medicine | 2 | 282 | Refrigerator | 1 |
| 160 | Funnel, catheter | 2 | 283 | Operating light | 1 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for NCPD Sites

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 284 | Incubabor baby | 1 | 316 | Canvas shoes | 20 |
| 285 | Chairs | 7 | 317 | Surgical cap | 25 |
| 286 | Tables, office | 3 | 318 | Surgical drape 1 x 1 m | 15 |
| 287 | Beds, mobile | 10 | 319 | Surgical drapes 1 x 1.5m | 15 |
| 288 | Replacement castors | 20 | 320 | Surgical gown medium | 15 |
| 289 | Overbed table | 10 | 321 | Surgical Gown large | 15 |
| 290 | Bed mattress for item 3. | 10 | 322 | Face Masks | 25 |
| 291 | Manual delivery beds | 2 | 323 | Hand towels | 25 |
| 292 | Mattresses for item 7 | 2 | 324 | Pillows | 50 |
| 293 | Stretcher | 1 | 325 | Surgical trousers medium | 25 |
| 294 | Stool, surgeon's | 1 | 326 | . Surgical trousers large | 25 |
| 295 | Trolley, anaesthetic | 1 | 327 | Shirts medium | 25 |
| 296 | Tables operating | 1 | 328 | Shirts large | 25 |
| 297 | Coach, Universal examination | 1 | 329 | Pillow cases | 100 |
| 298 | Couches examination | 1 | | | |
| 299 | Cots baby with trolley | 2 | | | |
| 300 | Screens, ward | 2 | | | |
| 301 | Trolley medicine | 1 | | | |
| 302 | Trolley instrument | 1 | | | |
| 303 | Trolleys patient | 1 | | | |
| 304 | Filing cabinets | 3 | | | |
| 305 | Anaesthetic machine | 1 | | | |
| 306 | Laboratory machine | 1 | | | |
| 307 | Body cart | 1 | | | |
| 308 | Autopsy saw | | | | |
| 309 | Morgue Refrigeration system | | | | |
| 310 | Hydraulic Body Tray Lifter | | | | |
| 311 | Bed stools | 12 | | | |
| 312 | Abdominal sheets | 100 | | | |
| 313 | Bed cover | 50 | | | |
| 314 | Bed sheets | 50 | | | |
| 315 | Blanket | 50 | | | |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

**LOGISTICS MANAGEMENT UNIT**
**DIVISION OF PRIMARY HEALTH CARE**
**NAIROBI**

## Sample Packing List for PGH's

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 1 | Speculum,Vaginal XL | 2 | 33 | Forceps sterilizer 270mm | 2 |
| 2 | Speculum, Vaginal L | 27 | 34 | Forceps, Dressing 200mm | 2 |
| 3 | Speculum, Vaginal M | 27 | 35 | Scissors Episiotomyu | 4 |
| 4 | Speculum, Vaginal SM | 2 | 36 | Forceps, Bryants | 4 |
| 5 | Sphygomamometer, Aneroid | 13 | 37 | Forceps, Artery 125mm | 4 |
| 6 | Stethoscope,Binaural | 13 | 38 | Forceps, Sinus 125mm | 2 |
| 7 | Stethoscope, Fetal | 5 | 39 | Forceps, Sinus 175mm | 3 |
| 8 | Thermometer,Clinical | 13 | 40 | Forceps, Allis | 2 |
| 9 | Sound, Uterine | 27 | 41 | Forceps, Nichel | 3 |
| 10 | Forceps Sponge-holding,200mm | 1 | 42 | Forceps, Tissue 200mm | 3 |
| 11 | Forceps, Sponge-holding 250mm | 27 | 43 | Forceps, Tissue 190mm | 3 |
| 12 | Forceps uterine | 27 | 44 | Forceps Cheatle | 5 |
| 13 | Forceps, Artery | 27 | 45 | Scissors, 175mm | 27 |
| 14 | Forceps, Dissecting 175mm | 27 | 46 | Scissors 140mm | 1 |
| 15 | Forceps, Dissecting 210mm | 3 | 47 | Scissors, ward | 5 |
| 16 | Forceps, Dissecting PJ,175mm | 3 | 48 | Scissors 230mm | 3 |
| 17 | Forceps, Dissecting 125mm | 3 | 49 | Scissors, 165mm | 2 |
| 18 | Forceps Dissecting 1x2, 225mm | 3 | 50 | Scissors 185mm | 3 |
| 19 | Forceps, Dissecting 225mm | 3 | 51 | cissors Dissecting 115mm | 2 |
| 20 | Forceps, Dissecting 125mm | 3 | 52 | Scissors Dissecting 125mm | 3 |
| 21 | Forceps, Dissecting 175mm | 3 | 53 | Scissors Dissecting 145 | 3 |
| 22 | Forceps, Dissecting 200mm | 3 | 54 | Scissors Dissecting 115mm | 3 |
| 23 | Forceps, Dissecting 175mm | 3 | 55 | Scissors Dissecting125mm | 3 |
| 24 | Forcepts Dissecting 220mm | 6 | 56 | Scissors Dissecting 145mm | 3 |
| 25 | Forceps Artery 200mm | 3 | 57 | Scissors Dissecting 115mm | 3 |
| 26 | Forceps Artery 125mm | 3 | 58 | Scissors Dissecting 125mm | 3 |
| 27 | Forceps Artery Hal. | 3 | 59 | Scissors Dissecting 145mm | 3 |
| 28 | Forceps Artery175mm | 3 | 60 | Scissors, Borne 160mm | 3 |
| 29 | Forceps Arery 125mm | 3 | 61 | Scissors, Borne 200mm | 3 |
| 30 | Forceps Korchers | 3 | 62 | Scissors, Borne 230mm | 3 |
| 31 | Forceps, Sterilizer 250mm | 2 | 63 | Scissors Bowel 210mm | 3 |
| 32 | Forceps Dissecting 200mm | 3 | 64 | Scissors, Bowel 250mm | 3 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

**LOGISTICS MANAGEMENT UNIT**
**DIVISION OF PRIMARY HEALTH CARE**
**NAIROBI**

## Sample Packing List for PGH's

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 65 | Shear, Post Mortem | 1 | 97 | Knives, Skin Grafting | 2 |
| 66 | Scissors, Aufrechts | 1 | 98 | Blades Skin Grafting | 2 |
| 67 | Scissors Enucleation | 1 | 99 | Retractors 25mm | 3 |
| 68 | Scissors, Ligature/Dressing | 2 | 100 | Retractors 50mm | 3 |
| 69 | Scissors Mayos | 2 | 101 | Retractors 160mm | 3 |
| 70 | Scissors, Melzenbaum | 3 | 102 | Retractors 40mm | 3 |
| 71 | Needle Holder | 3 | 103 | Retractors 70mm | 3 |
| 72 | Kidney Dishes 300mm | 27 | 104 | Retractors Morris | 3 |
| 73 | Kidney Dishes 250mm | 27 | 105 | Retractors Molleys | 2 |
| 74 | Gallipot, Large | 27 | 106 | Retractors Pozzis | 1 |
| 75 | Gallipot Medium | 27 | 107 | Razor, Skin Grafting with metal h | 2 |
| 76 | Bowels, Lotion 150mm | 27 | 108 | Razor, Skin Grafting board | 2 |
| 77 | Bowels Lotion 250mm | 27 | 109 | Razor, Skin Grafting narrow | 2 |
| 78 | Basin, Plastic 20mm | 2 | 110 | Razor, Skin Grafting narrow blad | 2 |
| 79 | Basin Plastic 100mm | 2 | 111 | Forceps Kuesters | 1 |
| 80 | Tray, instruments | 2 | 112 | Forceps Virchows | 1 |
| 81 | Bin, Pedal Action | 8 | 113 | Forceps Amussets | 1 |
| 82 | Trays, Kidney 160mm | 2 | 114 | Forceps 200mm | 1 |
| 83 | Trays, Kidney 280mm | 2 | 115 | Hammer, Metal hammer | 1 |
| 84 | Kidney Dishes 175mm | 2 | 116 | Hammer 28 oz | 1 |
| 85 | Tray instruments 125mm | 2 | 117 | Hammer 20mm | 1 |
| 86 | Tray instruments 110mm | 2 | 118 | Wrench, Post Morten | 1 |
| 87 | Trays oblong 250mm | 2 | 119 | Chisel, 20mm | 1 |
| 88 | Trays, oblong 450mm | 2 | 120 | Chisel, 23mm | 1 |
| 89 | Tray, Oblong 300x 300mm | 2 | 121 | Chisel, 14mm | |
| 90 | Trays, Oblong 300x 200mm | 2 | 122 | Trephine Horseley's | 1 |
| 91 | Trays, Oblong 320mm | 2 | 123 | Trephine, set of 3 | 1 |
| 92 | Safety Razor | 3 | 124 | Trephine set of 4 | 1 |
| 93 | Tongue Depressor | 3 | 125 | Trephine Rowbothaims 3/4 | 1 |
| 94 | Holders, Needle Bard | 2 | 126 | Trephine Rowbathaims 1 | 1 |
| 95 | Holders, Needle Sim's | 2 | 127 | Tenaculum 200mm | 1 |
| 96 | Holders, Needle Kilners | 2 | 128 | Tenaculum 250mm | 1 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for PGH's

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 129 | Forceps, Teales Vulsellum | 1 | 161 | Funnel, | 3 |
| 130 | Tenaculum, double ended | 1 | 162 | Mug, sputum | 2 |
| 131 | Forceps, Uterine Vulsellum | 1 | 163 | Recuscitator set, infant | 1 |
| 132 | Hook and shears | 1 | 164 | Regulator, oxygen | |
| 133 | Cornet, Lunds Skull | | 165 | Key and spanner | |
| 134 | Carafes | 3 | 166 | Resuscitator, Manual, adults | |
| 135 | Cup, feeding | 3 | 167 | Resuscitator, Manual infant | |
| 136 | Male urinal | 3 | 168 | Dilators | 2 |
| 137 | Bed pans child | 5 | 169 | Splint set multipurpose | |
| 138 | Bed pans adult | 4 | 170 | Vacuum Extractors | |
| 139 | Drums sterilizing 340x240mm | 2 | 171 | Torch Flashlight | 1 |
| 140 | Drums sterilizing 340x140mm | 2 | 172 | Splint, set femour | 1 |
| 141 | Drums sterilizing 290x145mm | 2 | 173 | Vacuum Extractor, manual | 1 |
| 142 | Drums, sterilizing 275x150mm | 2 | 174 | Boots Surgeon 6 | |
| 143 | Drums sterilizing 150x 100mm | 2 | 175 | Boots Surgeon 7 | |
| 144 | Drums sterilizing 240mmx160m | 2 | 176 | Boots Surgeon 8 | 2 |
| 145 | Drums sterilizing, square | 2 | 177 | Boots, Surgeon 9 | 2 |
| 146 | Drums sterilizing for gloves | 2 | 178 | Boots Surgeon 10 | 2 |
| 147 | Hurricane Lamps | 1 | 179 | Receptacle, Soiled Dressing | 2 |
| 148 | Scale, weighing | 1 | 180 | Stand, Saline | 20 |
| 149 | Scale, infant 0-6kg | 1 | 181 | Diagnostic set | |
| 150 | Scale, infant 0-25kg | 1 | 182 | Laryngoscope | |
| 151 | Scale | 1 | 274 | Strips, for testing | |
| 152 | Jar Dressing .95l | 2 | 275 | Autoclave clinical | |
| 153 | Jar, Forceps | 2 | 276 | Autoclave dressing | |
| 154 | Jar Dressing 21 | 2 | 277 | Electro-surgical unit | 1 |
| 155 | Buckets | 2 | 278 | Wheel chairs | |
| 156 | Measure 500ml | 3 | 279 | Sterilizer-20x20x45cm | |
| 157 | Measure 1000ml | 3 | 280 | Sterilizer-20x14x38cm | |
| 158 | Measure medicine | 3 | 281 | Sterilizer-90 litre | |
| 159 | Measure medicine | 3 | 282 | Refrigerator | |
| 160 | Funnel, catheter | 3 | 283 | Operating light | 1 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for PGH's

| Item No | Item | Amount |
|---|---|---|
| 284 | Incubabor baby | |
| 285 | Chairs | 3 |
| 286 | Tables, office | 1 |
| 287 | Beds, mobile | 10 |
| 288 | Replacement castors | 20 |
| 289 | Overbed table | 10 |
| 290 | Bed mattress for item 3. | 10 |
| 291 | Manual delivery beds | |
| 292 | Mattresses for item 7 | |
| 293 | Stretcher | |
| 294 | Stool, surgeon's | |
| 295 | Trolley, anaesthetic | one by 3 |
| 296 | Tables operating | one by 8 |
| 297 | Coach, Universal examination | |
| 298 | Couches examination | |
| 299 | Cots baby with trolley | |
| 300 | Screens, ward | |
| 301 | Trolley medicine | |
| 302 | Trolley instrument | |
| 303 | Trolleys patient | |
| 304 | Filing cabinets | 3 |
| 305 | Anaesthetic machine | 1 |
| 306 | Laboratory machine | |
| 307 | Body cart | |
| 308 | Autopsy saw | |
| 309 | Morgue Refrigeration system | |
| 310 | Hydraulic Body Tray Lifter | |
| 311 | Bed stools | 34 |
| 312 | Abdominal sheets | 250 |
| 313 | Bed cover | 125 |
| 314 | Bed sheets | 125 |
| 315 | Blanket | 250 |
| 316 | Canvas shoes | 68 |
| 317 | Surgical cap | 41 |
| 318 | Surgical drape 1 x 1 m | 22 |
| 319 | Surgical drapes 1 x 1.5m | 22 |
| 320 | Surgical gown medium | 22 |
| 321 | Surgical Gown large | 22 |
| 322 | Face Masks | 41 |
| 323 | Hand towels | 41 |
| 324 | Pillows | 67 |
| 325 | Surgical trousers medium | 41 |
| 326 | . Surgical trousers large | 41 |
| 327 | Shirts medium | 41 |
| 328 | Shirts large | 41 |
| 329 | Pillow cases | 125 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

**LOGISTICS MANAGEMENT UNIT**
**DIVISION OF PRIMARY HEALTH CARE**
**NAIROBI**

## Sample Packing List for District Hospitals

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 1 | Speculum,Vaginal XL | 1 | 33 | Forceps sterilizer 270mm | 4 |
| 2 | Speculum, Vaginal L | 20 | 34 | Forceps, Dressing 200mm | 1 |
| 3 | Speculum, Vaginal M | 20 | 35 | Scissors Episiotomyu | 8 |
| 4 | Speculum, Vaginal SM | 1 | 36 | Forceps, Bryants | 8 |
| 5 | Sphygomamometer, Aneroid | 10 | 37 | Forceps, Artery 125mm | 8 |
| 6 | Stethoscope,Binaural | 10 | 38 | Forceps, Sinus 125mm | 4 |
| 7 | Stethoscope, Fetal | 1 | 39 | Forceps, Sinus 175mm | 4 |
| 8 | Thermometer,Clinical | 10 | 40 | Forceps, Allis | 2 |
| 9 | Sound, Uterine | 20 | 41 | Forceps, Nichel | 4 |
| 10 | Forceps Sponge-holding,200mm | | 42 | Forceps, Tissue 200mm | 4 |
| 11 | Forceps, Sponge-holding 250mm | 20 | 43 | Forceps, Tissue 190mm | 4 |
| 12 | Forceps uterine | 20 | 44 | Forceps Cheatle | 1 |
| 13 | Forceps, Artery | 20 | 45 | Scissors, 175mm | 20 |
| 14 | Forceps, Dissecting 175mm | 20 | 46 | Scissors 140mm | 1 |
| 15 | Forceps, Dissecting 210mm | 1 | 47 | Scissors, ward | 1 |
| 16 | Forceps, Dissecting PJ,175mm | 6 | 48 | Scissors 230mm | 4 |
| 17 | Forceps, Dissecting 125mm | 6 | 49 | Scissors, 165mm | 4 |
| 18 | Forceps Dissecting 1x2, 225mm | 6 | 50 | Scissors 185mm | 2 |
| 19 | Forceps, Dissecting 225mm | 6 | 51 | cissors Dissecting 115mm | 4 |
| 20 | Forceps, Dissecting 125mm | 6 | 52 | Scissors Dissecting 125mm | 2 |
| 21 | Forceps, Dissecting 175mm | 6 | 53 | Scissors Dissecting 145 | 2 |
| 22 | Forceps, Dissecting 200mm | 6 | 54 | Scissors Dissecting 115mm | 2 |
| 23 | Forceps, Dissecting 175mm | 4 | 55 | Scissors Dissecting125mm | 2 |
| 24 | Forcepts Dissecting 220mm | 8 | 56 | Scissors Dissecting 145mm | 2 |
| 25 | Forceps Artery 200mm | 4 | 57 | Scissors Dissecting 115mm | 2 |
| 26 | Forceps Artery 125mm | 4 | 58 | Scissors Dissecting 125mm | 2 |
| 27 | Forceps Artery Hal. | 4 | 59 | Scissors Dissecting 145mm | 2 |
| 28 | Forceps Artery175mm | 4 | 60 | Scissors, Borne 160mm | 2 |
| 29 | Forceps Arery 125mm | 2 | 61 | Scissors, Borne 200mm | 2 |
| 30 | Forceps Korchers | 4 | 62 | Scissors, Borne 230mm | 2 |
| 31 | Forceps, Sterilizer 250mm | 4 | 63 | Scissors Bowel 210mm | 2 |
| 32 | Forceps Dissecting 200mm | 6 | 64 | Scissors, Bowel 250mm | 2 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

**LOGISTICS MANAGEMENT UNIT**
**DIVISION OF PRIMARY HEALTH CARE**
**NAIROBI**

## Sample Packing List for District Hospitals

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 65 | Shear, Post Mortem | 1 | 97 | Knives, Skin Grafting | 1 |
| 66 | Scissors, Aufrechts | 1 | 98 | Blades Skin Grafting | 1 |
| 67 | Scissors Enucleation | | 99 | Retractors 25mm | 2 |
| 68 | Scissors, Ligature/Dressing | 4 | 100 | Retractors 50mm | 2 |
| 69 | Scissors Mayos | 4 | 101 | Retractors 160mm | 2 |
| 70 | Scissors, Melzenbaum | 2 | 102 | Retractors 40mm | 2 |
| 71 | Needle Holder | 4 | 103 | Retractors 70mm | 2 |
| 72 | Kidney Dishes 300mm | 20 | 104 | Retractors Morris | 2 |
| 73 | Kidney Dishes 250mm | 20 | 105 | Retractors Molleys | 1 |
| 74 | Gallipot, Large | 20 | 106 | Retractors Pozzis | |
| 75 | Gallipot Medium | 20 | 107 | Razor, Skin Grafting with metal h | 1 |
| 76 | Bowels, Lotion 150mm | 20 | 108 | Razor, Skin Grafting board | 1 |
| 77 | Bowels Lotion 250mm | 20 | 109 | Razor, Skin Grafting narrow | 1 |
| 78 | Basin, Plastic 20mm | 2 | 110 | Razor, Skin Grafting narrow blad | 1 |
| 79 | Basin Plastic 100mm | 2 | 111 | Forceps Kuesters | |
| 80 | Tray, instruments | 2 | 112 | Forceps Virchows | |
| 81 | Bin, Pedal Action | 10 | 113 | Forceps Amussets | |
| 82 | Trays, Kidney 160mm | 1 | 114 | Forceps 200mm | |
| 83 | Trays, Kidney 280mm | 1 | 115 | Hammer, Metal hammer | |
| 84 | Kidney Dishes 175mm | 1 | 116 | Hammer 28 oz | |
| 85 | Tray instruments 125mm | 1 | 117 | Hammer 20mm | |
| 86 | Tray instruments 110mm | 4 | 118 | Wrench, Post Morten | |
| 87 | Trays oblong 250mm | 4 | 119 | Chisel, 20mm | |
| 88 | Trays, oblong 450mm | 1 | 120 | Chisel, 23mm | |
| 89 | Tray, Oblong 300x 300mm | 1 | 121 | Chisel, 14mm | |
| 90 | Trays, Oblong 300x 200mm | 1 | 122 | Trephine Horseley's | |
| 91 | Trays, Oblong 320mm | 1 | 123 | Trephine, set of 3 | |
| 92 | Safety Razor | 2 | 124 | Trephine set of 4 | |
| 93 | Tongue Depressor | 4 | 125 | Trephine Rowbothaims 3/4 | |
| 94 | Holders, Needle Bard | 4 | 126 | Trephine Rowbathaims 1 | |
| 95 | Holders, Needle Sim's | 4 | 127 | Tenaculum 200mm | |
| 96 | Holders, Needle Kilners | 4 | 128 | Tenaculum 250mm | |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

**LOGISTICS MANAGEMENT UNIT**
**DIVISION OF PRIMARY HEALTH CARE**
**NAIROBI**

## Sample Packing List for District Hospitals

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 129 | Forceps, Teales Vulsellum | | 161 | Funnel, | 2 |
| 130 | Tenaculum, double ended | | 162 | Mug, sputum | 4 |
| 131 | Forceps, Uterine Vulsellum | | 163 | Recuscitator set, infant | |
| 132 | Hook and shears | | 164 | Regulator, oxygen | |
| 133 | Cornet, Lunds Skull | | 165 | Key and spanner | |
| 134 | Carafes | 6 | 166 | Resuscitator, Manual, adults | 17 |
| 135 | Cup, feeding | 6 | 167 | Resuscitator, Manual infant | 17 |
| 136 | Male urinal | 6 | 168 | Dilators | 1 |
| 137 | Bed pans child | 1 | 169 | Splint set multipurpose | |
| 138 | Bed pans adult | 8 | 170 | Vacuum Extractors | 1 |
| 139 | Drums sterilizing 340x240mm | 4 | 171 | Torch Flashlight | 1 |
| 140 | Drums sterilizing 340x140mm | 4 | 172 | Splint, set femour | |
| 141 | Drums sterilizing 290x145mm | 4 | 173 | Vacuum Extractor, manual | |
| 142 | Drums, sterilizing 275x150mm | 4 | 174 | Boots Surgeon 6 | 1 |
| 143 | Drums sterilizing 150x 100mm | 4 | 175 | Boots Surgeon 7 | 1 |
| 144 | Drums sterilizing 240mmx160m | 4 | 176 | Boots Surgeon 8 | 4 |
| 145 | Drums sterilizing, square | 4 | 177 | Boots, Surgeon 9 | 4 |
| 146 | Drums sterilizing for gloves | 4 | 178 | Boots Surgeon 10 | 4 |
| 147 | Hurricane Lamps | | 179 | Receptacle, Soiled Dressing | 4 |
| 148 | Scale, weighing | | 180 | Stand, Saline | |
| 149 | Scale, infant 0-6kg | | 181 | Diagnostic set | |
| 150 | Scale, infant 0-25kg | | 182 | Laryngoscope | |
| 151 | Scale | | 274 | Strips, for testing | |
| 152 | Jar Dressing .95l | 1 | 275 | Autoclave clinical | 1 |
| 153 | Jar, Forceps | 1 | 276 | Autoclave dressing | 5 |
| 154 | Jar Dressing 21 | 1 | 277 | Electro-surgical unit | |
| 155 | Buckets | 4 | 278 | Wheel chairs | |
| 156 | Measure 500ml | 6 | 279 | Sterilizer-20x20x45cm | 1 |
| 157 | Measure 1000ml | 6 | 280 | Sterilizer-20x14x38cm | 1 |
| 158 | Measure medicine | 6 | 281 | Sterilizer-90 litre | 1 |
| 159 | Measure medicine | 6 | 282 | Refrigerator | one by 18 |
| 160 | Funnel, catheter | 2 | 283 | Operating light | one by 18 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for District Hospitals

| Item No | Item | Amount |
|---|---|---|
| 284 | Incubabor baby | one by 18 |
| 285 | Chairs | 3 |
| 286 | Tables, office | 1 |
| 287 | Beds, mobile | |
| 288 | Replacement castors | |
| 289 | Overbed table | |
| 290 | Bed mattress for item 3. | |
| 291 | Manual delivery beds | |
| 292 | Mattresses for item 7 | |
| 293 | Stretcher | one by 43 |
| 294 | Stool, surgeon's | one by 43 |
| 295 | Trolley, anaesthetic | |
| 296 | Tables operating | |
| 297 | Coach, Universal examination | 1 |
| 298 | Couches examination | one by 43 |
| 299 | Cots baby with trolley | 1 |
| 300 | Screens, ward | |
| 301 | Trolley medicine | |
| 302 | Trolley instrument | |
| 303 | Trolleys patient | |
| 304 | Filing cabinets | 2 |
| 305 | Anaesthetic machine | |
| 306 | Laboratory machine | |
| 307 | Body cart | |
| 308 | Autopsy saw | |
| 309 | Morgue Refrigeration system | |
| 310 | Hydraulic Body Tray Lifter | |
| 311 | Bed stools | 27 |
| 312 | Abdominal sheets | 200 |
| 313 | Bed cover | 100 |
| 314 | Bed sheets | 100 |
| 315 | Blanket | 200 |
| 316 | Canvas shoes | 45 |
| 317 | Surgical cap | 30 |
| 318 | Surgical drape 1 x 1 m | 17 |
| 319 | Surgical drapes 1 x 1.5m | 17 |
| 320 | Surgical gown medium | 17 |
| 321 | Surgical Gown large | 17 |
| 322 | Face Masks | 30 |
| 323 | Hand towels | 30 |
| 324 | Pillows | 54 |
| 325 | Surgical trousers medium | 30 |
| 326 | . Surgical trousers large | 30 |
| 327 | Shirts medium | 30 |
| 328 | Shirts large | 30 |
| 329 | Pillow cases | 100 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for Sub - District Hospitals

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 1 | Speculum,Vaginal XL | | 33 | Forceps sterilizer 270mm | 1 |
| 2 | Speculum, Vaginal L | 10 | 34 | Forceps, Dressing 200mm | |
| 3 | Speculum, Vaginal M | 10 | 35 | Scissors Episiotomyu | 2 |
| 4 | Speculum, Vaginal SM | | 36 | Forceps, Bryants | 2 |
| 5 | Sphygomamometer, Aneroid | 5 | 37 | Forceps, Artery 125mm | 2 |
| 6 | Stethoscope,Binaural | 5 | 38 | Forceps, Sinus 125mm | 1 |
| 7 | Stethoscope, Fetal | 1 | 39 | Forceps, Sinus 175mm | 2 |
| 8 | Thermometer,Clinical | 5 | 40 | Forceps, Allis | 2 |
| 9 | Sound, Uterine | 10 | 41 | Forceps, Nichel | 2 |
| 10 | Forceps Sponge-holding,200mm | | 42 | Forceps, Tissue 200mm | 2 |
| 11 | Forceps, Sponge-holding 250mm | 10 | 43 | Forceps, Tissue 190mm | 2 |
| 12 | Forceps uterine | 10 | 44 | Forceps Cheatle | 1 |
| 13 | Forceps, Artery | 10 | 45 | Scissors, 175mm | 10 |
| 14 | Forceps, Dissecting 175mm | 10 | 46 | Scissors 140mm | |
| 15 | Forceps, Dissecting 210mm | 1 | 47 | Scissors, ward | 1 |
| 16 | Forceps, Dissecting PJ,175mm | 3 | 48 | Scissors 230mm | 2 |
| 17 | Forceps, Dissecting 125mm | 3 | 49 | Scissors, 165mm | 1 |
| 18 | Forceps Dissecting 1x2, 225mm | 3 | 50 | Scissors 185mm | 1 |
| 19 | Forceps, Dissecting 225mm | 3 | 51 | cissors Dissecting 115mm | 1 |
| 20 | Forceps, Dissecting 125mm | 3 | 52 | Scissors Dissecting 125mm | 1 |
| 21 | Forceps, Dissecting 175mm | 3 | 53 | Scissors Dissecting 145 | 1 |
| 22 | Forceps, Dissecting 200mm | 3 | 54 | Scissors Dissecting 115mm | 1 |
| 23 | Forceps, Dissecting 175mm | 2 | 55 | Scissors Dissecting125mm | 1 |
| 24 | Forcepts Dissecting 220mm | 4 | 56 | Scissors Dissecting 145mm | 1 |
| 25 | Forceps Artery 200mm | 2 | 57 | Scissors Dissecting 115mm | 1 |
| 26 | Forceps Artery 125mm | 2 | 58 | Scissors Dissecting 125mm | 1 |
| 27 | Forceps Artery Hal. | 2 | 59 | Scissors Dissecting 145mm | 1 |
| 28 | Forceps Artery175mm | 2 | 60 | Scissors, Borne 160mm | 1 |
| 29 | Forceps Arery 125mm | | 61 | Scissors, Borne 200mm | 1 |
| 30 | Forceps Korchers | 2 | 62 | Scissors, Borne 230mm | 1 |
| 31 | Forceps, Sterilizer 250mm | 1 | 63 | Scissors Bowel 210mm | 1 |
| 32 | Forceps Dissecting 200mm | 3 | 64 | Scissors, Bowel 250mm | 1 |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for Sub - District Hospitals

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 65 | Shear, Post Mortem | | 97 | Knives, Skin Grafting | |
| 66 | Scissors, Aufrechts | | 98 | Blades Skin Grafting | |
| 67 | Scissors Enucleation | one by 40 | 99 | Retractors 25mm | 1 |
| 68 | Scissors, Ligature/Dressing | 1 | 100 | Retractors 50mm | 1 |
| 69 | Scissors Mayos | 1 | 101 | Retractors 160mm | 1 |
| 70 | Scissors, Melzenbaum | 1 | 102 | Retractors 40mm | 1 |
| 71 | Needle Holder | 2 | 103 | Retractors 70mm | 1 |
| 72 | Kidney Dishes 300mm | 10 | 104 | Retractors Morris | 1 |
| 73 | Kidney Dishes 250mm | 10 | 105 | Retractors Molleys | |
| 74 | Gallipot, Large | 10 | 106 | Retractors Pozzis | |
| 75 | Gallipot Medium | 10 | 107 | Razor, Skin Grafting with metal h | |
| 76 | Bowels, Lotion 150mm | 10 | 108 | Razor, Skin Grafting board | |
| 77 | Bowels Lotion 250mm | 10 | 109 | Razor, Skin Grafting narrow | |
| 78 | Basin, Plastic 20mm | 1 | 110 | Razor, Skin Grafting narrow blad | |
| 79 | Basin Plastic 100mm | 1 | 111 | Forceps Kuesters | |
| 80 | Tray, instruments | 1 | 112 | Forceps Virchows | |
| 81 | Bin, Pedal Action | 9 | 113 | Forceps Amussets | |
| 82 | Trays, Kidney 160mm | | 114 | Forceps 200mm | |
| 83 | Trays, Kidney 280mm | | 115 | Hammer, Metal hammer | |
| 84 | Kidney Dishes 175mm | | 116 | Hammer 28 oz | |
| 85 | Tray instruments 125mm | | 117 | Hammer 20mm | |
| 86 | Tray instruments 110mm | 1 | 118 | Wrench, Post Morten | |
| 87 | Trays oblong 250mm | 1 | 119 | Chisel, 20mm | |
| 88 | Trays, oblong 450mm | | 120 | Chisel, 23mm | |
| 89 | Tray, Oblong 300x 300mm | | 121 | Chisel, 14mm | |
| 90 | Trays, Oblong 300x 200mm | | 122 | Trephine Horseley's | |
| 91 | Trays, Oblong 320mm | | 123 | Trephine, set of 3 | |
| 92 | Safety Razor | 1 | 124 | Trephine set of 4 | |
| 93 | Tongue Depressor | 2 | 125 | Trephine Rowbothaims 3/4 | |
| 94 | Holders, Needle Bard | 1 | 126 | Trephine Rowbathaims 1 | |
| 95 | Holders, Needle Sim's | 1 | 127 | Tenaculum 200mm | |
| 96 | Holders, Needle Kilners | 1 | 128 | Tenaculum 250mm | |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for Sub - District Hospitals

| Item No | Item | Amount | Item No | Item | Amount |
|---|---|---|---|---|---|
| 129 | Forceps, Teales Vulsellum | | 161 | Funnel, | |
| 130 | Tenaculum, double ended | | 162 | Mug, sputum | 1 |
| 131 | Forceps, Uterine Vulsellum | | 163 | Recuscitator set, infant | |
| 132 | Hook and shears | | 164 | Regulator, oxygen | 1 |
| 133 | Cornet, Lunds Skull | | 165 | Key and spanner | 1 |
| 134 | Carafes | 3 | 166 | Resuscitator, Manual, adults | 2 |
| 135 | Cup, feeding | 3 | 167 | Resuscitator, Manual infant | 2 |
| 136 | Male urinal | 3 | 168 | Dilators | one by 9 |
| 137 | Bed pans child | 1 | 169 | Splint set multipurpose | |
| 138 | Bed pans adult | 2 | 170 | Vacuum Extractors | 1 |
| 139 | Drums sterilizing 340x240mm | 1 | 171 | Torch Flashlight | 1 |
| 140 | Drums sterilizing 340x140mm | 1 | 172 | Splint, set femour | |
| 141 | Drums sterilizing 290x145mm | 1 | 173 | Vacuum Extractor, manual | |
| 142 | Drums, sterilizing 275x150mm | 1 | 174 | Boots Surgeon 6 | 1 |
| 143 | Drums sterilizing 150x 100mm | 1 | 175 | Boots Surgeon 7 | 1 |
| 144 | Drums sterilizing 240mmx160m | 1 | 176 | Boots Surgeon 8 | 1 |
| 145 | Drums sterilizing, square | 1 | 177 | Boots, Surgeon 9 | 1 |
| 146 | Drums sterilizing for gloves | 1 | 178 | Boots Surgeon 10 | 1 |
| 147 | Hurricane Lamps | | 179 | Receptacle, Soiled Dressing | 1 |
| 148 | Scale, weighing | | 180 | Stand, Saline | |
| 149 | Scale, infant 0-6kg | | 181 | Diagnostic set | |
| 150 | Scale, infant 0-25kg | | 182 | Laryngoscope | |
| 151 | Scale | | 274 | Strips, for testing | |
| 152 | Jar Dressing .951 | one by 9 | 275 | Autoclave clinical | 1 |
| 153 | Jar, Forceps | one by 9 | 276 | Autoclave dressing | 5 |
| 154 | Jar Dressing 21 | one by 9 | 277 | Electro-surgical unit | |
| 155 | Buckets | 1 | 278 | Wheel chairs | |
| 156 | Measure 500ml | 3 | 279 | Sterilizer-20x20x45cm | one by 12 |
| 157 | Measure 1000ml | 3 | 280 | Sterilizer-20x14x38cm | one by 12 |
| 158 | Measure medicine | 3 | 281 | Sterilizer-90 litre | one by 12 |
| 159 | Measure medicine | 3 | 282 | Refrigerator | |
| 160 | Funnel, catheter | | 283 | Operating light | |

# ITEMS PROCURED UNDER WB CREDIT # KE-2110

LOGISTICS MANAGEMENT UNIT
DIVISION OF PRIMARY HEALTH CARE
NAIROBI

## Sample Packing List for Sub - District Hospitals

| Item No | Item | Amount |
|---|---|---|
| 284 | Incubabor baby | |
| 285 | Chairs | 2 |
| 286 | Tables, office | 1 |
| 287 | Beds, mobile | |
| 288 | Replacement castors | |
| 289 | Overbed table | |
| 290 | Bed mattress for item 3. | |
| 291 | Manual delivery beds | |
| 292 | Mattresses for item 7 | |
| 293 | Stretcher | |
| 294 | Stool, surgeon's | |
| 295 | Trolley, anaesthetic | |
| 296 | Tables operating | |
| 297 | Coach, Universal examination | one by 12 |
| 298 | Couches examination | |
| 299 | Cots baby with trolley | one by 15 |
| 300 | Screens, ward | |
| 301 | Trolley medicine | |
| 302 | Trolley instrument | |
| 303 | Trolleys patient | |
| 304 | Filing cabinets | 2 |
| 305 | Anaesthetic machine | |
| 306 | Laboratory machine | |
| 307 | Body cart | |
| 308 | Autopsy saw | |
| 309 | Morgue Refrigeration system | |
| 310 | Hydraulic Body Tray Lifter | |
| 311 | Bed stools | 14 |
| 312 | Abdominal sheets | 100 |
| 313 | Bed cover | 50 |
| 314 | Bed sheets | 50 |
| 315 | Blanket | 125 |
| 316 | Canvas shoes | 40 |
| 317 | Surgical cap | 18 |
| 318 | Surgical drape 1 x 1 m | 5 |
| 319 | Surgical drapes 1 x 1.5m | 5 |
| 320 | Surgical gown medium | 5 |
| 321 | Surgical Gown large | 5 |
| 322 | Face Masks | 18 |
| 323 | Hand towels | 18 |
| 324 | Pillows | 15 |
| 325 | Surgical trousers medium | 18 |
| 326 | . Surgical trousers large | 18 |
| 327 | Shirts medium | 18 |
| 328 | Shirts large | 18 |
| 329 | Pillow cases | 50 |

# Appendix VI

## Distribution of STI Drug Kits and HIV/AIDS Testing Reagents, HAPAC Project

## DISTRIBUTION OF STI AND HIV/AIDS TESTING REAGENT KITS
## JULY 1998 SUMMARY

| KIT TYPE | BEGINNING BALANCE | STOCKS RECEIVED | DISTRIBUTED | ENDING BALANCE | EXPIRY DATES |
|---|---|---|---|---|---|
| STI DRUGS | 1368 | 2 | 109 | 1261 | 2000-2002 |
| IMMUNOCOMB KITS | 0 | 500 | 191 | 309 | May-99 |
| RPR KITS | 133 | 0 | 104 | 29 | 2000/April |
| ORGANON | 109 | 0 | 52 | 57 | Nov.98/March 99 |

### SOURCE

**Field distribution reports, physical stock at the MSCU and bin card records '98.**

## DISTRIBUTION OF STI DRUG KITS : JULY 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES |
|---|---|---|---|---|
| **30-Jun-98** | **BEGINNING BALANCE** | **MSCU** | **1384** | **0** |
| **10-Jun-98** | **ADJUSTMENT/ ERRO** | MSCU | | **-20** |
| 1-Jul-98 | Muhoroni S. Dispensar | Kisumu | 0 | 2 |
| 1-Jul-98 | Makindu Dispensary | Makueni | 0 | 1 |
| 1-Jul-98 | Muhoroni RHT centre | Kisumu | 0 | 1 |
| 1-Jul-98 | Sangorota Dispensary | Kisumu | 0 | 1 |
| 1-Jul-98 | Bonde Dispensary | Kisumu | 0 | 1 |
| 1-Jul-98 | Pap Onditi Dispensary | Kisumu | 0 | 2 |
| 1-Jul-98 | Kusa Health Centre | Kisumu | 0 | 1 |
| 1-Jul-98 | Masogo Health Centre | Kisumu | 0 | 1 |
| 1-Jul-98 | Bodi Dispensary | Kisumu | 0 | 2 |
| 1-Jul-98 | Manyuanda Heath cent | Kisumu | 0 | 1 |
| 1-Jul-98 | Nduru Kadero Dispens | Kisumu | 0 | 2 |
| 1-Jul-98 | Kombewa Health Centr | Kisumu | 0 | 2 |
| 1-Jul-98 | Ratta Dispensary | Kisumu | 0 | 1 |
| 1-Jul-98 | Miranga Health Centre | Kisumu | 0 | 2 |
| 2-Jul-98 | Lake Basin DA Clinic | Kisumu | 0 | 1 |
| 2-Jul-98 | F.P.A.K Clinic (Men) | Kisumu | 0 | 1 |
| 2-Jul-98 | Kibigori Dispensary | Kisumu | 0 | 1 |
| 2-Jul-98 | Hongongosa Dispensar | Kisumu | 0 | 1 |
| 2-Jul-98 | Nyalenda Dispensary | Kisumu | 0 | 2 |
| 2-Jul-98 | Town Hall Clinic | Kisumu | 0 | 1 |
| 2-Jul-98 | Nyahera Health Centre | Kisumu | 0 | 1 |
| 2-Jul-98 | Ober Kamoth H/Centre | Kisumu | 0 | 1 |
| 3-Jul-98 | Mosque Dispensary | Kisumu | 0 | 1 |
| 3-Jul-98 | Kisumu D. Hospital | Kisumu | 0 | 4 |
| 3-Jul-98 | Lumumba Health Centr | Kisumu | 0 | 5 |
| 3-Jul-98 | Nyanza PG Hospital | Kisumu | 0 | 3 |
| 3-Jul-98 | FPAK (F) Clinic | Kisumu | 0 | 1 |
| 10-Jul-98 | Ruiru Health Centre | Thika | 0 | 1 |
| 16-Jul-98 | Gilgil Hospital | Nakuru | 0 | 2 |
| 20-Jul-98 | Naitiri Health Centre | Bungoma | 0 | 2 |
| 20-Jul-98 | Ndalu Health Centre | Bungoma | 0 | 2 |
| 20-Jul-98 | Kimilili Health Centre | Bungoma | 0 | 1 |
| 20-Jul-98 | Mkomani Society. Clinic | Mombasa | 0 | 2 |
| 20-Jul-98 | Coast PG Hospital | Mombasa | 0 | 6 |
| 20-Jul-98 | Ganjoni STC Clinic | Mombasa | 0 | 2 |
| 20-Jul-98 | Magongo Health Centre | Mombasa | 0 | 1 |
| 20-Jul-98 | Nangina Dispensary | Busia | 0 | 1 |
| 20-Jul-98 | Sio Port Health Centre | Busia | 0 | 1 |
| 20-Jul-98 | Port Victoria Hospital | Busia | 0 | 2 |
| 20-Jul-98 | Mukhobola Health Cent | Busia | 0 | 1 |
| 21-Jul-98 | Kisauni Health Centre | Mombasa | 0 | 1 |
| 21-Jul-98 | Bumula Health Centre | Busia | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| 21-Jul-98 | Malakisi Health Centre | Busia | 0 | 2 |
| 21-Jul-98 | Chwele Health Centre | Busia | 0 | 1 |
| 21-Jul-98 | Amukura Health Centre | Busia | 0 | 1 |
| 21-Jul-98 | Angurai Health Centre | Busia | 0 | 1 |
| 21-Jul-98 | Moding Health Centre | Busia | 0 | 1 |
| 21-Jul-98 | Kocholia Hospital | Busia | 0 | 1 |
| 21-Jul-98 | Mvita Health Centre | Mombasa | 0 | 1 |
| 21-Jul-98 | Mkomani Bomu Clinic | Mombasa | 0 | 3 |
| 22-Jul-98 | Sirisia Health Centre | Busia | 0 | 1 |
| 22-Jul-98 | Cheptais Health Centre | Busia | 0 | 1 |
| 22-Jul-98 | Nabuku Dispensary | Busia | 0 | 1 |
| 22-Jul-98 | Buduta Dispensary | Busia | 0 | 1 |
| 22-Jul-98 | Khunyangu H Centre | Busia | 0 | 1 |
| 22-Jul-98 | F.P.A.K. Mombasa Clini | Mombasa | 0 | 1 |
| 22-Jul-98 | Port Reitz Hospital | Mombasa | 0 | 3 |
| 23-Jul-98 | Kapsakwony D. Hospita | Mt. Elgon | 0 | 1 |
| 23-Jul-98 | Bumala B Health Centr | Busia | 0 | 1 |
| 23-Jul-98 | Nambale D. Hospital | Busia | 0 | 1 |
| 23-Jul-98 | Kwale D. Hospital | Kwale | 0 | 1 |
| 23-Jul-98 | Tiwi RHT Centre | Kwale | 0 | 1 |
| 24-Jul-98 | Bokoli Health Centre | Bungoma | 0 | 1 |
| 24-Jul-98 | Bungoma D. Hospital | Bungoma | 0 | 2 |
| 24-Jul-98 | Webuye Health Centre | Bungoma | 0 | 1 |
| 24-Jul-98 | Busia District Hospital | Busia | 0 | 2 |
| 24-Jul-98 | Alupe Hospital | Busia | 0 | 1 |
| 24-Jul-98 | Matayos Health Centre | Busia | 0 | 1 |
| 24-Jul-98 | Msambweni D. Hospital | Mombasa | 0 | 3 |
| 27-Jul-98 | Thika D. Hospital | Thika | 0 | 2 |
| 28-Jul-98 | WOFAK Clinic | Nairobi | 0 | 1 |
| 28-Jul-98 | Kibera comm. Self Help | Nairobi | 0 | 1 |
| 28-Jul-98 | WITHDRAWN | TO MSCU | 0 | 6 |

| | |
|---|---|
| **Beginning Balance July 98** | 1368 |
| **Total Receipts July 98:** | 2 |
| **Total Issues July 98:** | 109 |
| **Ending Balance July 98:** | **1261** |

## DISTRIBUTION OF IMMUNOCOMB KITS: JULY 1998 Direct from MSCU.

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| July-98 | Beginning Balance | MSCU | | 0 |
| 22-Jul-98 | UNAIDS/NASCOP | Nairobi | 100 | 0 |
| 22-Jul-98 | Narok DH | Narok | 0 | 5 |
| 22-Jul-98 | Msambweni Hospital | Mombasa | 0 | 10 |
| 23-Jul-98 | Nandi D. Hospital | Nandi | 0 | 4 |
| 23-Jul-98 | Thika DH | Thika | 0 | 8 |
| 24-Jul-98 | Gatundu Hospital | Gatundu | 0 | 4 |
| 24-Jul-98 | Kisii D. Hospital | Kisii | 0 | 10 |
| 27-Jul-98 | Nanyuki D. Hospital | Nyanyuki | 0 | 4 |
| 28-Jul-98 | Pumwani Hospital | Nairobi | 0 | 5 |
| 29-Jul-98 | Nyeri PG Hospital | Nyeri | 0 | 3 |
| 30-Jul-98 | Machakos D. Hospital | Machakos | 0 | 4 |
| 30-Jul-98 | Kiambu DH | Kiambu | 0 | 4 |
| 31-Jul-98 | Forces Memmorial | Nairobi | 0 | 4 |
| 31-Jul-98 | Mbagathi D. Hospital | Nairobi | 0 | 4 |
| 31-Jul-98 | Nyamira D. Hospital | Kisii | 0 | 4 |
| | | | | |

## DISTRIBUTION OF IMMUNOCOMB KITS: JULY 1998 Direct from NASCOP.

| | | | | |
|---|---|---|---|---|
| 22-Jun-98 | UNAIDS/NASCOP | Nairobi | 500 | 0 |
| 30-Jun-98 | Makindu D. Hospital | Kisumu | 0 | 5 |
| 30-Jun-98 | Migori D. Hospital | Migori | 0 | 5 |
| 1-Jul-98 | Serology | Nairobi | 0 | 5 |
| 1-Jul-98 | Nakuru D. Hospital | Nakuru | 0 | 2 |
| 2-Jul-98 | Kerugoya D. Hospital | Muranga | 0 | 5 |
| 3-Jul-98 | Moi voi D. Hospital | Taveta | 0 | 5 |
| 3-Jul-98 | Nyeri PG Hospital | Nyeri | 0 | 3 |
| 6-Jul-98 | Nyahururu Hospital | Nyahururu | 0 | 5 |
| 6-Jul-98 | Loitoktok D. Hospital | Kajiado | 0 | 3 |
| 9-Jul-98 | Mwingi D. Hospital | Mwingi | 0 | 4 |
| 10-Jul-98 | Webuye D. Hospital | Webuye | 0 | 5 |
| 12-Jul-98 | Olkalau D. Hospital | Kajiado | 0 | 5 |
| 13-Jul-98 | Chuka Hospital | Meru | 0 | 3 |
| 14-Jul-98 | Nakuru D. Hospital | Nakuru | 0 | 5 |
| 15-Jul-98 | Embu D. Hospital | Embu | 0 | 5 |
| 16-Jul-98 | Meru D. Hospital | Meru | 0 | 5 |
| 17-Jul-98 | Gatundu D. Hospital | Gatundu | 0 | 3 |
| 17-Jul-98 | Iten Hospital | Keiyo | 0 | 3 |
| 17-Jul-98 | Rachuonyo D. Hospital | Rachuonyo | 0 | 2 |
| 17-Jul-98 | Eldoret D. Hospital | Eldoret | 0 | 6 |
| 17-Jul-98 | Nyamira D. Hospital | Kisii | 0 | 5 |
| 20-Jul-98 | Kapenguria Hospital | W/Pokot | 0 | 3 |
| 20-Jul-98 | Serology | Nairobi | 0 | 2 |
| 20-Jul-98 | Garisa D. Hospital | Garisa | 0 | 10 |
| 20-Jul-98 | Kehancha D. Hospital | Kuria | 0 | 5 |
| 20-Jul-98 | A F M. H. | Nairobi | 0 | 5 |
| 22-Jul-98 | Nandi Hills Hospital | Nandi | 0 | 4 |
| 22-Jul-98 | Transfer to MSCU Stores | Nairobi | 0 | 100 |

| | |
|---|---|
| **Beginning balance at NASCOP June 98:** | **500** |
| **Beginning balance at MSCU June 98:** | **0** |
| **Transfer from NASCOP to MSCU July 98:** | **100** |
| **Total Issues from MSCU July 98:** | **73** |
| Total Issues from NASCOP July 98: | 118 |
| **Ending balance at MSCU July 98:** | 23 |
| **Ending balance at NASCOP July 98:** | 282 |

## DISTRIBUTI OF RPR: JULY 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | 0 |
| | **Beginning Balance** | MSCU/Nairobi | **160** | 0 |
| 29-Jun-98 | Nyeri PG Hospital | Nyeri | 0 | 6 |
| 30-Jun-98 | Kiambu D Hospital | Kiambu | 0 | 4 |
| 31-Jun-98 | Forces Memmorial | Nairobi | 0 | 4 |
| 31-Jun-98 | Mbagathi D. Hospital | Nairobi | 0 | 3 |
| 1-Jul-98 | Nakuru PG Hospital | Nakuru | 0 | 5 |
| 1-Jul-98 | Migori District Hospital | Migori | 0 | 5 |
| 3-Jul-98 | Nyeri PG Hospital | Nyeri | 0 | 2 |
| 10-Jul-98 | Webuye Hospital | Webuye | 0 | 3 |
| 10-Jul-98 | MSCU/Damaged | Nairobi | 0 | 1 |
| 11-Jul-98 | Nyamira D Hospital | Nyamira | 0 | 2 |
| 17-Jul-98 | STC Casino | Nairobi | 0 | 8 |
| 22-Jul-98 | Narok D. Hospital | Narok | 0 | 4 |
| 22-Jul-98 | Coast PG Hospital | Mombasa | 0 | 4 |
| 22-Jul-98 | Nandi D Hospital | Nandi | 0 | 3 |
| 23-Jul-98 | Thika D Hospital | Thika | 0 | 3 |
| 23-Jul-98 | Isiolo D Hospital | Isiolo | 0 | 3 |
| 23-Jul-98 | Busia D Hospital | Busia | 0 | 3 |
| 24-Jul-98 | N.P.H.L.S Nairobi | Nairobi | 0 | 5 |
| 24-Jul-98 | Gatundu Hospital | Gatundu | 0 | 1 |
| 24-Jul-98 | Kisii D Hospital | Kisii | 0 | 3 |
| 27-Jul-98 | Nanyuki D Hospital | Nanyuki | 0 | 5 |
| 28-Jul-98 | Pumwani Hospital | Nairobi | 0 | 10 |
| 29-Jul-98 | Nyeri PG Hospital | Nyeri | 0 | 6 |
| 30-Jul-98 | Kiambu D Hospital | Kiambu | 0 | 4 |
| 31-Jul-98 | Forces Memmorial | Nairobi | 0 | 4 |
| 31-Jul-98 | Mbagathi D. Hospital | Nairobi | 0 | 3 |
| | | | | |

| | |
|---|---|
| **Beginning Balance:July 1998** | 160 |
| **Total Issues:June 1998** | 104 |
| **Ending Balance: 31 July 98** | 56 |

## DISTRIBUTION OF ORGANON JULY 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | |
| 30-06-98 | Beginning Balance | MSCU | 109 | 0 |
| | | | | |
| 1-Jul-98 | Nakuru PG Hospital | Nakuru | 0 | 4 |
| 3-Jul-98 | Nyeri PG Hospital · | Nyeri | 0 | 3 |
| 17-Jul-98 | STC Casino | Nairobi | 0 | 4 |
| 22-Jul-98 | Coast PG Hospital | Mombasa | 0 | 5 |
| 23-Jul-98 | Thika DH | Thika | 0 | 2 |
| 24-Jul-98 | NPHLS - NAIROBI | Nairobi | 0 | 25 |
| 24-Jul-98 | Kisii D. Hospital | Kisii | 0 | 2 |
| 27-Jul-98 | Nanyuki D Hospita | Nanyuki | 0 | 1 |
| 29-Jul-98 | Nyeri PG Hospital | Nyeri | 0 | 6 |

| | |
|---|---|
| Beginning Balance: 1st July 98 | 109 |
| Total Issues : July 98 | 52 |
| Total receipts in July 98 | 0 |
| Ending Balance: 31st July 98 | 57 |

# DISTRIBUTION OF STI DRUGS AND HIV/AIDS TESTING REAGENT KITS
## AUGUST 1998 SUMMARY

| KIT TYPE | BEGINNING BALANCE | STOCKS RECEIVED | DISTRIBUTED | ENDING BALANCE | EXPIRY DATES |
|---|---|---|---|---|---|
| STI DRUGS | 1261 | 0 | 136 | 1125 | 2000-2002 |
| IMMUNOCOMB KITS | 309 | 0 | 153 | 156 | May-99 |
| RPR KITS | 29 | 0 | 29 | 0 | 2000/April |
| ORGANON | 57 | 0 | 37 | 20 | Nov.98/March 99 |

SOURCE

**Field distribution reports, physical stock at the MSCU and bin card records '98.**

NOTE

(i) For immunocomb, see detailed distribution list as distribution is currently,. done from MSCU and NASCOP warehouses simultaneneously.

(ii)Adjustments are normally made to the records when there is a returned kit, damage,customisation or mathematical error was made in a previous record or a late entry.

## DISTRIBUTION OF STI DRUG KITS : AUGUST 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES |
|---|---|---|---|---|
| **1-Aug-98** | **BEGINNING BALANCE** | **MSCU** | **1261** | **0** |
| **3-Aug-98** | **Bukura HC** | Kakamega | 0 | 1 |
| 3-Aug-98 | Butere HC | Kakamega | 0 | 2 |
| 3-Aug-98 | Manyala HC | Kakamega | 0 | 3 |
| 3-Aug-98 | Vihiga HC | Vihiga | 0 | 1 |
| 3-Aug-98 | Tigoi HC | Vihiga | 0 | 1 |
| 03_Aug-98 | Esirambatsi HC | Vihiga | 0 | 1 |
| 3-Aug-98 | Mbale DH | Vihiga | 0 | 1 |
| 3-Aug-98 | Huruma HC | Uasin Gishu | 0 | 1 |
| 3-Aug-98 | Eldoret-FPAK | Uasin Gishu | 0 | 1 |
| 3-Aug-98 | MNT&R(OPD) | Uasin Gishu | 0 | 2 |
| 3-Aug-98 | MNT&R(MCH) | Uasin Gishu | 0 | 1 |
| 3-Aug-98 | Kapsiwon Disp | Nandi | 0 | 1 |
| 4-Aug-98 | Lyanaginga HC | Vihiga | 0 | 1 |
| 4-Aug-98 | Emuhaya | Vihiga | 0 | 1 |
| 4-Aug-98 | Ipali HC | Vihiga | 0 | 1 |
| 4-Aug-98 | Iguhu HC | Vihiga | 0 | 1 |
| 4-Aug-98 | Makunga HC | Kakamega | 0 | 2 |
| 4-Aug-98 | Kapsoas HC | Uasin Gishu | 0 | 1 |
| 4-Aug-98 | Pioneer HC | Uasin Gishu | 0 | 1 |
| 5-Aug-98 | Givudimbuli HC | Vihiga | 0 | 1 |
| 5-Aug-98 | Enzaro HC | Vihiga | 0 | 1 |
| 5-Aug-98 | Mabusi HC | Bungoma | 0 | 1 |
| 5-Aug-98 | Hamisi HC | Vihiga | 0 | 1 |
| 5-Aug-98 | Kapsakwony HC | Bungoma | 0 | 2 |
| 5-Aug-98 | Webuye SDH | Bungoma | 0 | 2 |
| 5-Aug-98 | Bungoma DH | Bungoma | 0 | 2 |
| 6-Aug-98 | Lumakanda HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Kakamega PGH | Kakamega | 0 | 3 |
| 6-Aug-98 | Mabusi HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Sabatia HC | Vihiga | 0 | 1 |
| 6-Aug-98 | Ekwanda Disp, | Vihiga | 0 | 1 |
| 6-Aug-98 | Khwisero HC | Vihiga | 0 | 1 |
| 6-Aug-98 | Matungu HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Navakholo HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Bushiri HC | Kakamega | 0 | 1 |
| 7-Aug-98 | Busia DH | Mombasa | 0 | 1 |
| 7-Aug-98 | Alupe Hosp. | Mombasa | 0 | 1 |
| 7-Aug-98 | Ileho HC | Kakamega | 0 | 1 |
| 7-Aug-98 | Shamakhubu HC | Kakamega | 0 | 1 |
| 7-Aug-98 | Malava HC | Kakamega | 0 | 3 |
| 7-Aug-98 | Kakamega FPAK M | Kakamega | 0 | 1 |
| 13-Aug-98 | Garissa DH | Garissa | 0 | 2 |
| 18-Aug-98 | Meru FPAK | Meru | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| 18-Aug-98 | Ishiara SDH | Meru | 0 | 3 |
| 18-Aug-98 | Kandara HC | Muranga | 0 | 1 |
| 18-Aug-98 | Makuyu HC | Muranga | 0 | 1 |
| 18-Aug-98 | Gakoe Disp | Muranga | 0 | 1 |
| 18-Aug-98 | Ruiru HC | Thika | 0 | 1 |
| 19-Aug-98 | Kangema Hc | Muranga | 0 | 2 |
| 19-Aug-98 | Muriranjas SDH | Mombasa | 0 | 3 |
| 19-Aug-98 | Kigumo HC | Mombasa | 0 | 1 |
| 19-Aug-98 | Sabasaba HC | Muranga | 0 | 1 |
| 19-Aug-98 | Siakago HC | Muranga | 0 | 2 |
| 19-Aug-98 | Kiritiri HC | Muranga | 0 | 1 |
| 19-Aug-98 | Kiambere HC | Muranga | 0 | 1 |
| 19-Aug-98 | Igegania HC | Muranga | 0 | 1 |
| 20-Aug-98 | Muranga DH | Muranga | 0 | 4 |
| 20-Aug-98 | Kirogo HC | Muranga | 0 | 1 |
| 20-Aug-98 | Maragwa HC | Muranga | 0 | 2 |
| 20-Aug-98 | Karurumo RHTC | Muranga | 0 | 2 |
| 20-Aug-98 | Nembure HC | Muranga | 0 | 1 |
| 20-Aug-98 | Kirwara HC | Muranga | 0 | 1 |
| 20-Aug-98 | Embu PGH | Embu | 0 | 4 |
| 21-Aug-98 | Kianjokoma | Muranga | 0 | 1 |
| 21-Aug-98 | Munyu HC | Bungoma | 0 | 2 |
| 21-Aug-98 | Ngoliba HC | Bungoma | 0 | 1 |
| 21-Aug-98 | NYS-Yatta | Busia | 0 | 2 |
| 21-Aug-98 | Kibugu HC | Busia | 0 | 1 |
| 21-Aug-98 | Embu Prison Disp. | Busia | 0 | 1 |
| 21-Aug-98 | Embu FPAK | Mombasa | 0 | 3 |
| 21-Aug-98 | Thika DH | Thika | 0 | 2 |
| 21-Aug-98 | FPAK-Thika | Thika | 0 | 1 |
| 21-Aug-98 | Gatundu Hosp. | Thika | 0 | 3 |
| 21-Aug-98 | Gatunyu HC | Thika | 0 | 1 |
| 25-Aug-98 | STC Casino | Nairobi | 0 | 7 |
| 25-Aug-98 | Mbagathi DH | Nairobi | 0 | 1 |
| 25-Aug-98 | Ngong Rd HC | Nairobi | 0 | 1 |
| 26-Aug-98 | Oserian Flow. Clinic | Nakuru | 0 | 1 |
| 26-Aug-98 | Sher Agency Clinic | Nakuru | 0 | 1 |
| 26-Aug-98 | Juja Farm Disp. | Thika | 0 | 1 |
| 26-Aug-98 | Kitui DH | Kitui | 0 | 3 |
| 27-Aug-98 | Gethumbuini Coffee cli | Thika | 0 | 1 |
| 27-Aug-98 | Kitui DH | Kitui | 0 | 1 |
| 27-Aug-98 | Mchana C.E. Disp. | Thika | 0 | 1 |
| 27-Aug-98 | Mwingi DH | Kitui | 0 | 2 |
| 28-Aug-98 | Muthale HBC Clinic | Kitui | 0 | 1 |
| 27-Aug-98 | FPAK- Ribeiro | Nairobi | 0 | 1 |
| 27-Aug-98 | APTC Embakasi | Nairobi | 0 | 1 |

| | | |
|---|---|---|
| Beginning Balance: | August 98 | 1261 |
| Total Issues | : August 98 | 136 |
| Receipts | : August 98 | 0 |
| Ending Balance | : August 98 | 1125 |

## DISTRIBUTION OF IMMUNOCOMB KITS : AUGUST

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS BALANCES | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| August-98 | Beginning Balance | MSCU | 27 | 0 |
| 4-Aug-98 | Kabarnet DH | Baringo | 0 | 5 |
| 10-Aug-98 | NASCOP/UNAIDS | Nairobi | 150 | 0 |
| 10-Aug-98 | NPHLS | Nairobi | 0 | 10 |
| 10-Aug-98 | A.Forces Mem. Hosp. | Nairobi | 0 | 7 |
| 11-Aug-98 | Kathiani SDH | Machakos | 0 | 5 |
| 13-Aug-98 | Kakamega PGH | Kakamega | 0 | 10 |
| 14-Aug-98 | Nyeri PG Hospital | Nyeri | 0 | 4 |
| 18-Aug-98 | Mwingi DH | Kitui | 0 | 10 |
| 20-Aug-98 | Kisii DH | Kisii | 0 | 10 |
| 21-Aug-98 | Naivasha DH | Nakuru | 0 | 5 |
| 24-Aug-98 | Lodwar DH | Turkana | 0 | 10 |
| 25-Aug-98 | Makindu SDH | Makueni | 0 | 4 |
| 27-Aug-98 | Nyanza PGH | Kisumu | 0 | 10 |
| | | | | |
| | | | | |
| | | | | |

## DISTRIBUTION OF IMMUNOCOMB KITS: AUGUST 1998 Direct from NASCOP.

| | | | | |
|---|---|---|---|---|
| 27-Jul-98 | Beginning Balance | NASCOP STO | 282 | 0 |
| 27-Jul-98 | Bungoma DH | Bungoma | 0 | 5 |
| 29-Jul-98 | PWAL | Nairobi | 0 | 4 |
| 29-Jul-98 | Muranga DH | Muranga | 0 | 2 |
| 30-Jul-98 | Kitale DH | T/Nzoia | 0 | 5 |
| 30-Jul-98 | Kisumu PGH | Kisumu | 0 | 3 |
| 3-Aug-98 | PWAL | Nairobi | 0 | 6 |
| 5-Aug-98 | Kisumu PGH | Kisumu | 0 | 4 |
| 7-Aug-98 | Busia DH | Busia | 0 | 10 |
| 7-Aug-98 | Rachuonyo D. Hospital | H/Bay | 0 | 5 |
| 7-Aug-98 | Makueni DH | Machakos | 0 | 4 |
| 10-Aug-98 | MSCU | Nairobi | 0 | 150 |
| 20-Aug-98 | Embu D. Hospital | Embu | 0 | 5 |
| 24-Aug-98 | Kapenguria DH | | 0 | 5 |
| 27-Aug-98 | Taveta DH | T/Taveta | 0 | 5 |

| | |
|---|---|
| **Beginning balance:NASCOP-August 98** | **282** |
| **Beginning balance at MSCU August 98:** | **27** |
| **Transfer from NASCOP to MSCU August** | **150** |
| **Total Issues from MSCU August 98:** | **90** |
| Total Issues from NASCOPAugust 98: | 63 |
| **Ending balance at MSCU Aug-98** | 87 |
| **Ending balance at NASCOPAugust 98:** | 69 |

## DISTRIBUTION OF RPR AUGUST 1998

| DATE | NAME OF FACILITY | DISTRICT | BALANCES RECEIPTS | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | 0 |
| **1-Aug-98** | **Beginning Balance** | **MSCU/Nairobi** | **29** | **0** |
| 4-Aug-98 | Kabarnet DH | Baringo | 0 | 2 |
| 4-Aug-98 | Muranga DH | Muranga | 0 | 5 |
| 6-Aug-98 | Casino STC | Nairobi | 0 | 10 |
| 6-Aug-98 | Kangundo SDH | Machakos | 0 | 2 |
| 10-Aug-98 | NPHLS | Nairobi | 0 | 10 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | **Beginning Balance August 98** | | **29** | |
| | **Receipts in August 98** | | **0** | |
| | **Issues in August 98** | | **29** | |
| | **Ending Balance in August 98** | | **0** | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## DISTRIBUTION OF ORGANON : AUGUST 98

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS BALANCE | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | |
| August-98 | Beginning Balance | MSCU | 57 | 0 |
| | | | | |
| 4-Aug-98 | Muranga DH | Muranga | 0 | 4 |
| 6-Aug-98 | Kangundo SDH | Machakos | 0 | 2 |
| 10-Aug-98 | NPHLS - NAIROBI | Nairobi | 0 | 15 |
| 10-Aug-98 | A. Forces Mem. Hosp | Nairobi | 0 | 5 |
| 11-Aug-98 | Kathiani SDH | Machakos | 0 | 2 |
| 14-Aug-98 | Nyeri PG Hospital | Nyeri | 0 | 4 |
| 27-Aug-98 | Nyanza PGH | Kisumu | 0 | 5 |
| | | | | |
| | | | | |

| | | |
|---|---|---|
| Beginning Balance A | Aug-98 | 57 |
| Total issues August 98 | | 37 |
| Receipts August 98 | | 0 |
| Ending Balance August 98 | | 20 |

## DISTRIBUTION OF STI DRUGS AND HIV/AIDS TESTING REAGENT KITS
## SEPTEMBER 1998 SUMMARY

| KIT TYPE | BEGINNING BALANCE | STOCKS RECEIVED | DISTRIBUTED | ENDING BALANCE | EXPIRY DATES |
|---|---|---|---|---|---|
| STI DRUGS | 1125 | 0 | 245 | 880 | 2000-2002 |
| IMMUNOCOMB KITS | 156 | 0 | 60 | 96 | May-99 |
| RPR KITS | 0 | 269 | 72 | 197 | 2000/April |
| ORGANON | 20 | 0 | 18 | 2 | Nov.98/March 99 |
| ABBOTT | 0 | 1440 | 0 | 1440 | 10-Jan-99 |
| CAPILLUS | 0 | 1 | 1 | 0 | |

### SOURCE

**Field distribution reports, physical stock at the MSCU and bin card records '98.**

## DISTRIBUTION OF STI KITS:SEPT S: SEPTEMBER 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES |
|---|---|---|---|---|
| **27-Aug-98** | **BEGINNING BALANCE** | **MSCU** | **1125** | **0** |
| 31-Aug-98 | Gakawa Disp. | Nyeri | 0 | 2 |
| 31-Aug-98 | Naro Moru HC | Nyeri | 0 | 1 |
| 31-Aug-98 | Warazo HC | Nyeri | 0 | 1 |
| 1-Sep-98 | GK Prison Disp. | Nyeri | 0 | 1 |
| 1-Sep-98 | Mugunda Disp. | Nyeri | 0 | 1 |
| 1-Sep-98 | Endarasha HC | Nyeri | 0 | 2 |
| 1-Sep-98 | Othaya HC | Nyeri | 0 | 3 |
| 1-Sep-98 | Karima HC | Nyeri | 0 | 1 |
| 1-Sep-98 | Witima HC | Nyeri | 0 | 1 |
| 1-Sep-98 | Gichiche HC | Nyeri | 0 | 2 |
| 1-Sep-98 | Kariko Disp | Nyeri | 0 | 1 |
| 1-Sep-98 | Masii HC | Machakos | 0 | 1 |
| 1-Sep-98 | Machakos DH | Machakos | 0 | 2 |
| 1-Sep-98 | Muthetheni HC | Machakos | 0 | 1 |
| 2-Sep-98 | Wandumbi Disp | Nyeri | 0 | 2 |
| 2-Sep-98 | Kininga HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Kihuyo HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Town HC | Nyeri | 0 | 2 |
| 2-Sep-98 | Ruruguti HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Karuoko HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Mitaboni HC | Machakos | 0 | 1 |
| 3-Sep-98 | Mukurweni Hosp | Nyeri | 0 | 3 |
| 3-Sep-98 | Aguthi Disp | Nyeri | 0 | 1 |
| 3-Sep-98 | Wamagana HC | Nyeri | 0 | 2 |
| 3-Sep-98 | Karatina SDH | Nyeri | 0 | 3 |
| 3-Sep-98 | Ngorano RHDC | Nyeri | 0 | 1 |
| 3-Sep-98 | Karaba HC | Nyeri | 0 | 1 |
| 3-Sep-98 | Matu RHDC | Nyeri | 0 | 1 |
| 3-Sep-98 | Kathiani SDH | Machakos | 0 | 2 |
| 4-Sep-98 | Kiganjo Disp | Nyeri | 0 | 1 |
| 4-Sep-98 | Kangundo SDH | Machakos | 0 | 1 |
| 4-Sep-98 | Katangi HC | Machakos | 0 | 1 |
| 4-Sep-98 | Nyeri PGH | Nyeri | 0 | 5 |
| 7-Sep-98 | Naivasha DH | Nakuru | 0 | 2 |
| 8-Sep-98 | Eldama Ravine SDH | Baringo | 0 | 3 |
| 8-Sep-98 | Tenges RHDC | Baringo | 0 | 1 |
| 8-Sep-98 | Olenguruone HC | Baringo | 0 | 1 |
| 8-Sep-98 | Jamji Med. Centre | Kericho | 0 | 1 |
| 8-Sep-98 | Sotik Tea Clinic | Kericho | 0 | 1 |
| 8-Sep-98 | Sotik Highland Disp | Kericho | 0 | 1 |
| 8-Sep-98 | Molo SDH | Nakuru | 0 | 1 |
| 8-Sep-98 | Elburgon SDH | Nakuru | 0 | 1 |
| 9-Sep-98 | Kabartonjo RHDC | Baringo | 0 | 1 |

## DISTRIBUTION OF STI DRUGS AND HIV/AIDS TESTING REAGENT KITS
## AUGUST 1998 SUMMARY

| KIT TYPE | BEGINNING BALANCE | STOCKS RECEIVED | DISTRIBUTED | ENDING BALANCE | EXPIRY DATES |
|---|---|---|---|---|---|
| STI DRUGS | 1261 | 0 | 136 | 1125 | 2000-2002 |
| IMMUNOCOMB KITS | 309 | 0 | 153 | 156 | May-99 |
| RPR KITS | 29 | 0 | 29 | 0 | 2000/April |
| ORGANON | 57 | 0 | 37 | 20 | Nov.98/March 99 |

SOURCE

**Field distribution reports, physical stock at the MSCU and bin card records '98.**

NOTE

(i) For immunocomb, see detailed distribution list as distribution is currently,. done from MSCU and NASCOP warehouses simultaneneously.

(ii)Adjustments are normally made to the records when there is a returned kit, damage,customisation or mathematical error was made in a previous record or a late entry.

## DISTRIBUTION OF STI DRUG KITS : AUGUST 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES |
|---|---|---|---|---|
| **1-Aug-98** | **BEGINNING BALANCE** | **MSCU** | **1261** | **0** |
| **3-Aug-98** | **Bukura HC** | Kakamega | 0 | **1** |
| 3-Aug-98 | Butere HC | Kakamega | 0 | 2 |
| 3-Aug-98 | Manyala HC | Kakamega | 0 | 3 |
| 3-Aug-98 | Vihiga HC | Vihiga | 0 | 1 |
| 3-Aug-98 | Tigoi HC | Vihiga | 0 | 1 |
| 03_Aug-98 | Esirambatsi HC | Vihiga | 0 | 1 |
| 3-Aug-98 | Mbale DH | Vihiga | 0 | 1 |
| 3-Aug-98 | Huruma HC | Uasin Gishu | 0 | 1 |
| 3-Aug-98 | Eldoret-FPAK | Uasin Gishu | 0 | 1 |
| 3-Aug-98 | MNT&R(OPD) | Uasin Gishu | 0 | 2 |
| 3-Aug-98 | MNT&R(MCH) | Uasin Gishu | 0 | 1 |
| 3-Aug-98 | Kapsiwon Disp | Nandi | 0 | 1 |
| 4-Aug-98 | Lyanaginga HC | Vihiga | 0 | 1 |
| 4-Aug-98 | Emuhaya | Vihiga | 0 | 1 |
| 4-Aug-98 | Ipali HC | Vihiga | 0 | 1 |
| 4-Aug-98 | Iguhu HC | Vihiga | 0 | 1 |
| 4-Aug-98 | Makunga HC | Kakamega | 0 | 2 |
| 4-Aug-98 | Kapsoas HC | Uasin Gishu | 0 | 1 |
| 4-Aug-98 | Pioneer HC | Uasin Gishu | 0 | 1 |
| 5-Aug-98 | Givudimbuli HC | Vihiga | 0 | 1 |
| 5-Aug-98 | Enzaro HC | Vihiga | 0 | 1 |
| 5-Aug-98 | Mabusi HC | Bungoma | 0 | 1 |
| 5-Aug-98 | Hamisi HC | Vihiga | 0 | 1 |
| 5-Aug-98 | Kapsakwony HC | Bungoma | 0 | 2 |
| 5-Aug-98 | Webuye SDH | Bungoma | 0 | 2 |
| 5-Aug-98 | Bungoma DH | Bungoma | 0 | 2 |
| 6-Aug-98 | Lumakanda HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Kakamega PGH | Kakamega | 0 | 3 |
| 6-Aug-98 | Mabusi HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Sabatia HC | Vihiga | 0 | 1 |
| 6-Aug-98 | Ekwanda Disp, | Vihiga | 0 | 1 |
| 6-Aug-98 | Khwisero HC | Vihiga | 0 | 1 |
| 6-Aug-98 | Matungu HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Navakholo HC | Kakamega | 0 | 1 |
| 6-Aug-98 | Bushiri HC | Kakamega | 0 | 1 |
| 7-Aug-98 | Busia DH | Mombasa | 0 | 1 |
| 7-Aug-98 | Alupe Hosp. | Mombasa | 0 | 1 |
| 7-Aug-98 | Ileho HC | Kakamega | 0 | 1 |
| 7-Aug-98 | Shamakhubu HC | Kakamega | 0 | 1 |
| 7-Aug-98 | Malava HC | Kakamega | 0 | 3 |
| 7-Aug-98 | Kakamega FPAK M | Kakamega | 0 | 1 |
| 13-Aug-98 | Garissa DH | Garissa | 0 | 2 |
| 18-Aug-98 | Meru FPAK | Meru | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| 18-Aug-98 | Ishiara SDH | Meru | 0 | 3 |
| 18-Aug-98 | Kandara HC | Muranga | 0 | 1 |
| 18-Aug-98 | Makuyu HC | Muranga | 0 | 1 |
| 18-Aug-98 | Gakoe Disp | Muranga | 0 | 1 |
| 18-Aug-98 | Ruiru HC | Thika | 0 | 1 |
| 19-Aug-98 | Kangema Hc | Muranga | 0 | 2 |
| 19-Aug-98 | Muriranjas SDH | Mombasa | 0 | 3 |
| 19-Aug-98 | Kigumo HC | Mombasa | 0 | 1 |
| 19-Aug-98 | Sabasaba HC | Muranga | 0 | 1 |
| 19-Aug-98 | Siakago HC | Muranga | 0 | 2 |
| 19-Aug-98 | Kiritiri HC | Muranga | 0 | 1 |
| 19-Aug-98 | Kiambere HC | Muranga | 0 | 1 |
| 19-Aug-98 | Igegania HC | Muranga | 0 | 1 |
| 20-Aug-98 | Muranga DH | Muranga | 0 | 4 |
| 20-Aug-98 | Kirogo HC | Muranga | 0 | 1 |
| 20-Aug-98 | Maragwa HC | Muranga | 0 | 2 |
| 20-Aug-98 | Karurumo RHTC | Muranga | 0 | 2 |
| 20-Aug-98 | Nembure HC | Muranga | 0 | 1 |
| 20-Aug-98 | Kirwara HC | Muranga | 0 | 1 |
| 20-Aug-98 | Embu PGH | Embu | 0 | 4 |
| 21-Aug-98 | Kianjokoma | Muranga | 0 | 1 |
| 21-Aug-98 | Munyu HC | Bungoma | 0 | 2 |
| 21-Aug-98 | Ngoliba HC | Bungoma | 0 | 1 |
| 21-Aug-98 | NYS-Yatta | Busia | 0 | 2 |
| 21-Aug-98 | Kibugu HC | Busia | 0 | 1 |
| 21-Aug-98 | Embu Prison Disp. | Busia | 0 | 1 |
| 21-Aug-98 | Embu FPAK | Mombasa | 0 | 3 |
| 21-Aug-98 | Thika DH | Thika | 0 | 2 |
| 21-Aug-98 | FPAK-Thika | Thika | 0 | 1 |
| 21-Aug-98 | Gatundu Hosp. | Thika | 0 | 3 |
| 21-Aug-98 | Gatunyu HC | Thika | 0 | 1 |
| 25-Aug-98 | STC Casino | Nairobi | 0 | 7 |
| 25-Aug-98 | Mbagathi DH | Nairobi | 0 | 1 |
| 25-Aug-98 | Ngong Rd HC | Nairobi | 0 | 1 |
| 26-Aug-98 | Oserian Flow. Clinic | Nakuru | 0 | 1 |
| 26-Aug-98 | Sher Agency Clinic | Nakuru | 0 | 1 |
| 26-Aug-98 | Juja Farm Disp. | Thika | 0 | 1 |
| 26-Aug-98 | Kitui DH | Kitui | 0 | 3 |
| 27-Aug-98 | Gethumbuini Coffee cli | Thika | 0 | 1 |
| 27-Aug-98 | Kitui DH | Kitui | 0 | 1 |
| 27-Aug-98 | Mchana C.E. Disp. | Thika | 0 | 1 |
| 27-Aug-98 | Mwingi DH | Kitui | 0 | 2 |
| 28-Aug-98 | Muthale HBC Clinic | Kitui | 0 | 1 |
| 27-Aug-98 | FPAK- Ribeiro | Nairobi | 0 | 1 |
| 27-Aug-98 | APTC Embakasi | Nairobi | 0 | 1 |

| | | |
|---|---|---|
| Beginning Balance: | August 98 | 1261 |
| Total Issues | : August 98 | 136 |
| Receipts | : August 98 | 0 |
| Ending Balance | : August 98 | 1125 |

## DISTRIBUTION OF IMMUNOCOMB KITS : AUGUST

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS BALANCES | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| August-98 | Beginning Balance | MSCU | 27 | 0 |
| 4-Aug-98 | Kabarnet DH | Baringo | 0 | 5 |
| 10-Aug-98 | NASCOP/UNAIDS | Nairobi | 150 | 0 |
| 10-Aug-98 | NPHLS | Nairobi | 0 | 10 |
| 10-Aug-98 | A.Forces Mem. Hosp. | Nairobi | 0 | 7 |
| 11-Aug-98 | Kathiani SDH | Machakos | 0 | 5 |
| 13-Aug-98 | Kakamega PGH | Kakamega | 0 | 10 |
| 14-Aug-98 | Nyeri PG Hospital | Nyeri | 0 | 4 |
| 18-Aug-98 | Mwingi DH | Kitui | 0 | 10 |
| 20-Aug-98 | Kisii DH | Kisii | 0 | 10 |
| 21-Aug-98 | Naivasha DH | Nakuru | 0 | 5 |
| 24-Aug-98 | Lodwar DH | Turkana | 0 | 10 |
| 25-Aug-98 | Makindu SDH | Makueni | 0 | 4 |
| 27-Aug-98 | Nyanza PGH | Kisumu | 0 | 10 |
| | | | | |
| | | | | |
| | | | | |

## DISTRIBUTION OF IMMUNOCOMB KITS: AUGUST 1998 Direct from NASCOP.

| | | | | |
|---|---|---|---|---|
| 27-Jul-98 | Beginning Balance | NASCOP STO | 282 | 0 |
| 27-Jul-98 | Bungoma DH | Bungoma | 0 | 5 |
| 29-Jul-98 | PWAL | Nairobi | 0 | 4 |
| 29-Jul-98 | Muranga DH | Muranga | 0 | 2 |
| 30-Jul-98 | Kitale DH | T/Nzoia | 0 | 5 |
| 30-Jul-98 | Kisumu PGH | Kisumu | 0 | 3 |
| 3-Aug-98 | PWAL | Nairobi | 0 | 6 |
| 5-Aug-98 | Kisumu PGH | Kisumu | 0 | 4 |
| 7-Aug-98 | Busia DH | Busia | 0 | 10 |
| 7-Aug-98 | Rachuonyo D. Hospital | H/Bay | 0 | 5 |
| 7-Aug-98 | Makueni DH | Machakos | 0 | 4 |
| 10-Aug-98 | MSCU | Nairobi | 0 | 150 |
| 20-Aug-98 | Embu D. Hospital | Embu | 0 | 5 |
| 24-Aug-98 | Kapenguria DH | | 0 | 5 |
| 27-Aug-98 | Taveta DH | T/Taveta | 0 | 5 |

| | |
|---|---|
| **Beginning balance:NASCOP-August 98** | **282** |
| **Beginning balance at MSCU August 98:** | **27** |
| **Transfer from NASCOP to MSCU August** | **150** |
| **Total Issues from MSCU August 98:** | **90** |
| Total Issues from NASCOPAugust 98: | 63 |
| **Ending balance at MSCU Aug-98** | 87 |
| **Ending balance at NASCOPAugust 98:** | 69 |

## DISTRIBUTION OF RPR AUGUST 1998

| DATE | NAME OF FACILITY | DISTRICT | BALANCES RECEIPTS | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | 0 |
| **1-Aug-98** | **Beginning Balance** | **MSCU/Nairobi** | **29** | **0** |
| 4-Aug-98 | Kabarnet DH | Baringo | 0 | 2 |
| 4-Aug-98 | Muranga DH | Muranga | 0 | 5 |
| 6-Aug-98 | Casino STC | Nairobi | 0 | 10 |
| 6-Aug-98 | Kangundo SDH | Machakos | 0 | 2 |
| 10-Aug-98 | NPHLS | Nairobi | 0 | 10 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | **Beginning Balance August 98** | | **29** | |
| | **Receipts in August 98** | | **0** | |
| | **Issues in August 98** | | **29** | |
| | **Ending Balance in August 98** | | **0** | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## DISTRIBUTION OF ORGANON : AUGUST 98

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS BALANCE | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | |
| August-98 | Beginning Balance | MSCU | 57 | 0 |
| | | | | |
| 4-Aug-98 | Muranga DH | Muranga | 0 | 4 |
| 6-Aug-98 | Kangundo SDH | Machakos | 0 | 2 |
| 10-Aug-98 | NPHLS - NAIROBI | Nairobi | 0 | 15 |
| 10-Aug-98 | A. Forces Mem. Hosp | Nairobi | 0 | 5 |
| 11-Aug-98 | Kathiani SDH | Machakos | 0 | 2 |
| 14-Aug-98 | Nyeri PG Hospital | Nyeri | 0 | 4 |
| 27-Aug-98 | Nyanza PGH | Kisumu | 0 | 5 |
| | | | | |
| | | | | |

| | | |
|---|---|---|
| Beginning Balance A | Aug-98 | 57 |
| Total issues August 98 | | 37 |
| Receipts August 98 | | 0 |
| Ending Balance August 98 | | 20 |

## DISTRIBUTION OF STI DRUGS AND HIV/AIDS TESTING REAGENT KITS
## SEPTEMBER 1998 SUMMARY

| KIT TYPE | BEGINNING BALANCE | STOCKS RECEIVED | DISTRIBUTED | ENDING BALANCE | EXPIRY DATES |
|---|---|---|---|---|---|
| STI DRUGS | 1125 | 0 | 245 | 880 | 2000-2002 |
| IMMUNOCOMB KITS | 156 | 0 | 60 | 96 | May-99 |
| RPR KITS | 0 | 269 | 72 | 197 | 2000/April |
| ORGANON | 20 | 0 | 18 | 2 | Nov.98/March 99 |
| ABBOTT | 0 | 1440 | 0 | 1440 | 10-Jan-99 |
| CAPILLUS | 0 | 1 | 1 | 0 | |

**SOURCE**

**Field distribution reports, physical stock at the MSCU and bin card records '98.**

## DISTRIBUTION OF STI KITS:SEPT S: SEPTEMBER 1998

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS | ISSUES |
|---|---|---|---|---|
| **27-Aug-98** | **BEGINNING BALANCE** | **MSCU** | **1125** | **0** |
| 31-Aug-98 | Gakawa Disp. | Nyeri | 0 | 2 |
| 31-Aug-98 | Naro Moru HC | Nyeri | 0 | 1 |
| 31-Aug-98 | Warazo HC | Nyeri | 0 | 1 |
| 1-Sep-98 | GK Prison Disp. | Nyeri | 0 | 1 |
| 1-Sep-98 | Mugunda Disp. | Nyeri | 0 | 1 |
| 1-Sep-98 | Endarasha HC | Nyeri | 0 | 2 |
| 1-Sep-98 | Othaya HC | Nyeri | 0 | 3 |
| 1-Sep-98 | Karima HC | Nyeri | 0 | 1 |
| 1-Sep-98 | Witima HC | Nyeri | 0 | 1 |
| 1-Sep-98 | Gichiche HC | Nyeri | 0 | 2 |
| 1-Sep-98 | Kariko Disp | Nyeri | 0 | 1 |
| 1-Sep-98 | Masii HC | Machakos | 0 | 1 |
| 1-Sep-98 | Machakos DH | Machakos | 0 | 2 |
| 1-Sep-98 | Muthetheni HC | Machakos | 0 | 1 |
| 2-Sep-98 | Wandumbi Disp | Nyeri | 0 | 2 |
| 2-Sep-98 | Kininga HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Kihuyo HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Town HC | Nyeri | 0 | 2 |
| 2-Sep-98 | Ruruguti HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Karuoko HC | Nyeri | 0 | 1 |
| 2-Sep-98 | Mitaboni HC | Machakos | 0 | 1 |
| 3-Sep-98 | Mukurweni Hosp | Nyeri | 0 | 3 |
| 3-Sep-98 | Aguthi Disp | Nyeri | 0 | 1 |
| 3-Sep-98 | Wamagana HC | Nyeri | 0 | 2 |
| 3-Sep-98 | Karatina SDH | Nyeri | 0 | 3 |
| 3-Sep-98 | Ngorano RHDC | Nyeri | 0 | 1 |
| 3-Sep-98 | Karaba HC | Nyeri | 0 | 1 |
| 3-Sep-98 | Matu RHDC | Nyeri | 0 | 1 |
| 3-Sep-98 | Kathiani SDH | Machakos | 0 | 2 |
| 4-Sep-98 | Kiganjo Disp | Nyeri | 0 | 1 |
| 4-Sep-98 | Kangundo SDH | Machakos | 0 | 1 |
| 4-Sep-98 | Katangi HC | Machakos | 0 | 1 |
| 4-Sep-98 | Nyeri PGH | Nyeri | 0 | 5 |
| 7-Sep-98 | Naivasha DH | Nakuru | 0 | 2 |
| 8-Sep-98 | Eldama Ravine SDH | Baringo | 0 | 3 |
| 8-Sep-98 | Tenges RHDC | Baringo | 0 | 1 |
| 8-Sep-98 | Olenguruone HC | Baringo | 0 | 1 |
| 8-Sep-98 | Jamji Med. Centre | Kericho | 0 | 1 |
| 8-Sep-98 | Sotik Tea Clinic | Kericho | 0 | 1 |
| 8-Sep-98 | Sotik Highland Disp | Kericho | 0 | 1 |
| 8-Sep-98 | Molo SDH | Nakuru | 0 | 1 |
| 8-Sep-98 | Elburgon SDH | Nakuru | 0 | 1 |
| 9-Sep-98 | Kabartonjo RHDC | Baringo | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| 9-Sep-98 | Upper Solai HC | Nakuru | 0 | 1 |
| 9-Sep-98 | Bahati HC | Nakuru | 0 | 1 |
| 9-Sep-98 | Subukia HC | Nakuru | 0 | 2 |
| 9-Sep-98 | Dundori HC | Nakuru | 0 | 1 |
| 9-Sep-98 | Mogotio HC | Nakuru | 0 | 1 |
| 9-Sep-98 | Moi NRTH-Eldoret | Uasin Gishu | 0 | 3 |
| 10-Sep-98 | Kabarak HC | Baringo | 0 | 1 |
| 10-Sep-98 | Rongai HC | Nakuru | 0 | 1 |
| 10-Sep-98 | FPAK(M) Nakuru | Nakuru | 0 | 1 |
| 10-Sep-98 | Industrial Area HC | Nakuru | 0 | 1 |
| 10-Sep-98 | Kapkures Disp | Baringo | 0 | 1 |
| 10-Sep-98 | FPAK(F) Nakuru | Nakuru | 0 | 1 |
| 10-Sep-98 | GSU HQ Clinic | Nairobi | 0 | 1 |
| 10-Sep-98 | Kabarnet DH | Baringo | 0 | 1 |
| 10-Sep-98 | Marigat HC | Baringo | 0 | 1 |
| 10-Sep-98 | Mau Narok HC | Nakuru | 0 | 1 |
| 10-Sep-98 | Njoro HC | Nakuru | 0 | 1 |
| 10-Sep-98 | Nakuru West Clinic | Nakuru | 0 | 1 |
| 10-Sep-98 | Langa langa Hc | Nakuru | 0 | 3 |
| 10-Sep-98 | Bondeni Clinic | Nakuru | 0 | 1 |
| 11-Sep-98 | Naivasha M. Pris. Hosp | Nakuru | 0 | 1 |
| 11-Sep-98 | Gigil Anti-Stock T.clinic | Nakuru | 0 | 1 |
| 11-Sep-98 | PGH-Nakuru | Nakuru | 0 | 4 |
| 11-Sep-98 | Gilgil Hosp | Nakuru | 0 | 2 |
| 11-Sep-98 | Kabatini Disp | Nakuru | 0 | 1 |
| 11-Sep-98 | Banita Disp | Nakuru | 0 | 1 |
| 14-Sep-98 | Lanet Disp | Nakuru | 0 | 2 |
| 14-Sep-98 | Ober Kamoth Disp | Homabay | 0 | 1 |
| 14-Sep-98 | Rangwe HC | Homabay | 0 | 1 |
| 14-Sep-98 | Magina HC | Homabay | 0 | 1 |
| 14-Sep-98 | Ombo Kachieng HC | Homabay | 0 | 1 |
| 14-Sep-98 | NYS Lambwe Clinic | Homabay | 0 | 1 |
| 14-Sep-98 | Nyadenda Disp | Homabay | 0 | 1 |
| 14-Sep-98 | Magunga Disp | Homabay | 0 | 1 |
| 14-Sep-98 | Got Kojowi HC | Homabay | 0 | 1 |
| 14-Sep-98 | Ndhiwa HC | Homabay | 0 | 1 |
| 14-Sep-98 | Rwambwa HC | Homabay | 0 | 1 |
| 14-Sep-98 | Hawinga HC | Siaya | 0 | 1 |
| 14-Sep-98 | Siaya DH | Siaya | 0 | 3 |
| 15-Sep-98 | DOD Health Services | Nairobi | 0 | 10 |
| 15-Sep-98 | Suba DH | Homabay | 0 | 2 |
| 15-Sep-98 | Ogongo HC | Homabay | 0 | 1 |
| 15-Sep-98 | Sena HC | Homabay | 0 | 1 |
| 15-Sep-98 | Kitare HC | Homabay | 0 | 1 |
| 15-Sep-98 | Tom Mboya HC | Homabay | 0 | 1 |
| 15-Sep-98 | Ponge Disp | Homabay | 0 | 1 |
| 15-Sep-98 | Mbita HC | Homabay | 0 | 2 |
| 15-Sep-98 | Lambwe Forest Disp | Homabay | 0 | 1 |
| 15-Sep-98 | Malela Disp | Homabay | 0 | 1 |
| 15-Sep-98 | Usao Disp | Homabay | 0 | 1 |
| 15-Sep-98 | Marenyo Disp | Siaya | 0 | 1 |
| 15-Sep-98 | Yala SDH | Siaya | 0 | 2 |
| 15-Sep-98 | Nyawara HC | Siaya | 0 | 1 |
| 15-Sep-98 | Malanga HC | Siaya | 0 | 1 |
| 15-Sep-98 | Ndere HC | Siaya | 0 | 1 |
| 15-Sep-98 | Ramula HC | Siaya | 0 | 1 |
| 15-Sep-98 | Got Agulu HC | Siaya | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| 16-Sep-98 | Othoro HC | Siaya | 0 | 1 |
| 16-Sep-98 | Kabondo HC | Siaya | 0 | 1 |
| 16-Sep-98 | Miriu HC | Siaya | 0 | 1 |
| 16-Sep-98 | Sino Disp | Siaya | 0 | 1 |
| 16-Sep-98 | Kendu SDH | Siaya | 0 | 1 |
| 16-Sep-98 | Ober Disp | Homabay | 0 | 2 |
| 16-Sep-98 | Manyuanda HC | Siaya | 0 | 1 |
| 16-Sep-98 | Akala Disp | Siaya | 0 | 1 |
| 17-Sep-98 | Nyagoro HC | Homabay | 0 | 1 |
| 17-Sep-98 | Marindi HC | Homabay | 0 | 1 |
| 17-Sep-98 | Ndiru HC | Homabay | 0 | 1 |
| 17-Sep-98 | Pala HC | Homabay | 0 | 1 |
| 17-Sep-98 | Kandiege HC | Homabay | 0 | 1 |
| 17-Sep-98 | Homaline HC | Homabay | 0 | 1 |
| 17-Sep-98 | Rachuonyo DH | Homabay | 0 | 3 |
| 17-Sep-98 | Homahills HC | Homabay | 0 | 1 |
| 17-Sep-98 | Sigomere HC | Siaya | 0 | 1 |
| 17-Sep-98 | Ambira HC | Siaya | 0 | 1 |
| 17-Sep-98 | Ukwala HC | Siaya | 0 | 1 |
| 18-Sep-98 | Homabay DH | Homabay | 0 | 1 |
| 18-Sep-98 | GK Homabay prison | Homabay | 0 | 1 |
| 18-Sep-98 | Ogande CPK Disp | Homabay | 0 | 1 |
| 18-Sep-98 | Olando Disp | Homabay | 0 | 2 |
| 18-Sep-98 | Adiedo Disp | Homabay | 0 | 2 |
| 18-Sep-98 | Bondo SDH | Siaya | 0 | 2 |
| 21-Sep-98 | Kajire HC | Taita Taveta | 0 | 1 |
| 21-Sep-98 | Kasigao HC | Taita Taveta | 0 | 1 |
| 21-Sep-98 | Nyamache HC | Kisii | 0 | 2 |
| 21-Sep-98 | Kenyenya HC | Kisii | 0 | 1 |
| 21-Sep-98 | Magena Disp | Kisii | 0 | 1 |
| 21-Sep-98 | Ogembe HC | Kisii | | 3 |
| 21-Sep-98 | MTC Clinic | Nairobi | 0 | 1 |
| 21-Sep-98 | Tausa Disp | Taita Taveta | 0 | 1 |
| 21-Sep-98 | Ghazi Disp | Taita Taveta | 0 | 1 |
| 21-Sep-98 | Mwambirwa HC | Taita Taveta | 0 | 1 |
| 22-Sep-98 | Mgange Disp | Taita Taveta | 0 | 1 |
| 22-Sep-98 | Moi Voi DH | Taita Taveta | 0 | 2 |
| 22-Sep-98 | Bura Disp | Taita Taveta | 0 | 2 |
| 22-Sep-98 | Kisii DH | Kisii | 0 | 5 |
| 22-Sep-98 | Keumbu HC | Kisii | 0 | 1 |
| 22-Sep-98 | Masimba HC | Kisii | 0 | 2 |
| 22-Sep-98 | Gesusu HC | Kisii | 0 | 1 |
| 22-Sep-98 | Msau Disp | Taita Taveta | 0 | 1 |
| 22-Sep-98 | Shelemba Disp | Kisii | 0 | 1 |
| 22-Sep-98 | Manyani Disp | Kisii | 0 | 1 |
| 23-Sep-98 | Kishushe Disp | Kisii | 0 | 1 |
| 23-Sep-98 | Nyache HC | Kisii | 0 | 1 |
| 23-Sep-98 | Saghaigu Disp | Taita Taveta | 0 | 1 |
| 23-Sep-98 | Werugha Disp | Taita Taveta | 0 | 1 |
| 23-Sep-98 | Mwanda HC | Kisii | 0 | 1 |
| 23-Sep-98 | Nyacheki HC | Kisii | 0 | 1 |
| 23-Sep-98 | Mageche Disp | Kisii | 0 | 1 |
| 23-Sep-98 | Nduru HC | Kisii | 0 | 2 |
| 24-Sep-98 | Wesu SDH | Taita Taveta | 0 | 2 |
| 24-Sep-98 | Malani HC | Taita Taveta | 0 | 1 |
| 24-Sep-98 | Isecha Disp | Kisii | 0 | 1 |
| 24-Sep-98 | FPAK Kisii Clinic | Kisii | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| 24-Sep-98 | Riotachi HC | Kisii | 0 | 1 |
| 24-Sep-98 | Wundanyi HC | Taita Taveta | 0 | 1 |
| 24-Sep-98 | Taveta DH | Taita Taveta | 0 | 2 |
| 25-Sep-98 | Matta Disp | Taita Taveta | 0 | 1 |
| 25-Sep-98 | Kitobo Disp | Taita Taveta | 0 | 1 |
| 25-Sep-98 | Iyabe Disp | Kisii | 0 | 2 |
| 25-Sep-98 | Riana HC | Kisii | 0 | 1 |
| 25-Sep-98 | Njukini Disp | Taita Taveta | 0 | 1 |
| 25-Sep-98 | Chala Disp | Taita Taveta | 0 | 1 |
| 27-Sep-98 | Mwatate HC | Taita Taveta | 0 | 2 |
| 28-Sep-98 | STC Casino clinic | Nairobi | 0 | 7 |
| 29-Sep-98 | Makadara HC | Nairobi | 0 | 2 |

| | | |
|---|---|---|
| **Beginning Balance:** | **September, 98** | **1125** |
| **Total Issues** | **: September, 98** | **245** |
| **Receipts** | **: September, 98** | **0** |
| **Ending Balance** | **: September, 98** | **880** |

## DISTRIBUTION OF IMMUNOCOMB KITS: SEPTEMBER 1998 Direct from MSCU.

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS BALANCES | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| August-98 | Beginning Balance | MSCU | 57 | 0 |
| 10-Aug-98 | Adjust. NASCOP STORES | Nairobi | 30 | 0 |
| 11-Aug-98 | Adjust.Kathiani Hosp. Issue | Machakos | 3 | 0 |
| 1-Sep-98 | Beginning Balance | MSCU | 90 | 0 |
| 2-Sep-98 | Kisii DH | Kisii | 0 | 5 |
| 2-Sep-98 | Malindi DH | Malindi | 0 | 5 |
| 3-Sep-98 | Mandera DH | Mandera | 0 | 6 |
| 3-Sep-98 | Embu PGH | Embu | 0 | 4 |
| 8-Sep-98 | Karatina SDH | Nyeri | 0 | 3 |
| 8-Sep-98 | Kerugoya DH | Kerugoya | 0 | 2 |
| 11-Sep-98 | Kathiani SDH | Machakos | 0 | 0 |
| 14-Sep-98 | Mombasa PGH | Mombasa | 0 | 5 |
| 15-Sep-98 | DOD Health Services | Nairobi | 0 | 10 |
| 17-Sep-98 | Karurumo RHDC | Embu | 0 | 2 |
| 21-Sep-98 | Pumwani Mat. Hosp | Nairobi | 0 | 4 |
| 22-Sep-98 | Siaya DH | Siaya | 0 | 2 |
| 23-Sep-98 | Mbagathi DH | Nairobi | 0 | 2 |
| 23-Sep-98 | Homabay DH | Homabay | 0 | 3 |
| 23-Sep-98 | Meru DH | Meru | 0 | 2 |
| 23-Sep-98 | MEDS | Nairobi | 0 | 3 |
| 24-Sep-98 | Webuye SDH | Bungoma | 0 | 2 |

| | |
|---|---|
| **Beginning balance:NASCOPSeptember,** | **66** |
| **Beginning balance at MSCUSeptember,** | **90** |
| **Transfer from NASCOP to MSCUSeptem** | **0** |
| **Total Issues from MSCUSeptember, 98** | **60** |
| **Total Issues from NASCOPSeptember, 9** | **0** |
| **Ending balance at MSCUSeptember,98** | **30** |
| **Ending balance at NASCOPSeptember, 9** | **66** |

## DISTRIBUTION OF RPR : SEPTEMBER 98.

| DATE | NAME OF FACILITY | DISTRICT | BALANCES RECEIPTS | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | 0 |
| **1-Sep-98** | **Beginning Balance** | **MSCU STORE** | **0** | **0** |
| **3-Sep-98** | **BADC/STD Unit** | **Afya House** | **20** | **0** |
| **3-Sep-98** | **New Balance** | **MSCU STORE** | **20** | **0** |
| 3-Sep-98 | Embu PGH | Embu | 0 | 3 |
| 3-Sep-98 | Mandera DH | Mandera | 0 | 2 |
| 8-Sep-98 | Karatina DH | Nyeri | 0 | 3 |
| 8-Sep-98 | Kerugoya DH | Kerugoya | 0 | 2 |
| **11-Sep-98** | **BADC/STD Unit** | **Afya House** | **249** | **0** |
| **11-Sep-98** | **New Balance** | **MSCU STORE** | **259** | **0** |
| 14-Sep-98 | Coast PGH | Mombasa | 0 | 4 |
| 15-Sep-98 | DOD Health Services | Nairobi | 0 | 5 |
| 17-Sep-98 | Karurumo RHDC | Embu | 0 | 2 |
| 21-Sep-98 | Pumwani Mat. Hosp. | Nairobi | 0 | 5 |
| 22-Sep-98 | Siaya DH | Siaya | 0 | 3 |
| 23-Sep-98 | Mbagathi DH | Nairobi | 0 | 5 |
| 23-Sep-98 | Homabay DH | Homabay | 0 | 2 |
| 23-Sep-98 | Meru DH | Meru | 0 | 5 |
| 24-Sep-98 | Mwingi DH | Kitui | 9 | 3 |
| 24-Sep-98 | NPHL | Nairobi | 0 | 10 |
| 25-Sep-98 | Webuye DH | Bungoma | 0 | 3 |
| 25-Sep-98 | STC Casino | Nairobi | 0 | 15 |
| | | | | |
| | | | | |
| | | | | |
| | **Beginning BalanceSeptember, 98** | | **0** | |
| | **Receipts in September, 98** | | **269** | |
| | **Issues in September, 98** | | **72** | |
| | **Ending Balance inSeptember, 98** | | **197** | |

## DISTRIBUTION OF ORGANON :SEPTEMBER 98

| DATE | NAME OF FACILITY | DISTRICT | RECEIPTS BALANCE | ISSUES (NO OF KITS) |
|---|---|---|---|---|
| | | | | |
| September-98 | Beginning Balance | MSCU | 20 | 0 |
| | | | | |
| 1-Sep-98 | NPHLS - NAIROBI | Nairobi | 0 | 5 |
| 2-Sep-98 | Malindi DH | Malindi | 0 | 3 |
| 14-Sep-98 | Coast PGH | Mombasa | 0 | 5 |
| 17-Sep-98 | Karurumo RHDC | Embu | 0 | 4 |
| 24-Sep-98 | NPHL- NAIROBI | Nairobi | 0 | 1 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | |
|---|---|
| Beginning BalanceSe Sept.98 | 20 |
| Total issuesSeptember, 98 | 18 |
| Receipts September, 98 | 0 |
| Ending Balance September, 98 | 2 |

# Appendix VII

## Estimated Total Number of STI Cases Treated Through August 1998

## AVERAGE MONTHLY STI CASES TREATED AT GOK HIV/STD SITES
## DFID - SUPPORTED STD/HIV/AIDS PREVENTIVE SUPPLIES PROJECT

LOGISTICS MANAGEMENT UNIT,
DPHC, OCT, 1998

# Appendix VIII

## MSCU Restructuring: Composition of Steering Committee and Task Force, Together with the Terms of Reference

## Composition of the Steering Committee

**Members**

| | |
|---|---|
| Prof. Julius Meme | Director of Medical Services / Chairman |
| Dr. M. W. Gachara | RLI coordinator-FPLM /Secretary |
| Mr. J. G. Kibera | Deputy Secretary, Officer-in-Charge / MSCU |
| Mr. S. M. Kuguru | Deputy Secretary / Finance and Administration MOH |
| Dr. K. Chebet | Provincial Medical Officer / Rift Valley Province |
| Dr. R.O. Muga | Provincial Medical Officer / Nyanza Province |
| Dr. S.K. Shariff | Provincial Medical Officer Coast Province |
| Mr. J. E. Ongwae | Director, Civil Service Reform |
| Dr. W. O. Wanyanga | Chairman /Pharmaceutical Society of Kenya |
| Ms. Jerusha Karuthiru | USAID / Kenya |
| Mrs. M. A. Edebe | Supplies services Treasury -Ministry of Finance |
| Dr. Rogers Atebe | Pharmacist / DAWA pharmaceuticals |
| Ms. Rhoda Lopokoiyit | Division of Nursing MOH / HQ |
| Mr. Birger Fredriksson | DANISH Embassy |
| Mr.S.K Mathang'a | Under Secretary / MSCU |

- **Terms of reference**

1. The steering committee is answerable to the Minister of Health through the Permanent Secretary;

2. The steering committee is responsible for directing the change process of MSCU pending the establishment of the Board of Management;

3. The Task Force will provide the Secretariat to the Steering Committee;

4. The steering Committee will link this specific area of reform with the overall civil service reform process.

5. The steering Committee will approve the Plan of Action for the change process developed by the Task Force and will monitor the progress of implementation;

6. The Steering Committee will promote the change process within the Government as well as other interested parties. It will among other things advocate for the adoption of the Legal Notice and the Cabinet Memorandum and establishment of the Board of Management.

## Composition of the Task Force

**Members**

| | |
|---|---|
| Mr. J.G. Kibera | Deputy Secretary/Officer –in- charge MSCU/ Chairman |
| Dr. M.W. Gachara | RLI coordinator /FPLM / Secretary |
| Dr. K.C.Koskei | Chief Pharmacist Ministry of Health |
| Dr. E. Larson | Health Sector Support Program / DANIDA |
| Dr. C.K. Kandie | Deputy Chief Pharmacist -MSCU |
| Mr. S.K. Mathang'a | Under Secretary / MSCU) |
| Prof. P. Nyarango | Consultant/HESSP |
| Mr. S.K.M.Chepsiror | Principal Supplies Officer - MSCU |
| Mr. E.K. Ndubi | Senior Pharmaceutical Technologist - MSCU |
| Dr. Jane Masiga | Pharmacist/Mission for Essential Drugs Supplies |
| Mrs I.A.Oduogi | Assistant Chief Nursing Officer -MSCU |
| Ms L. Ciugu | Senior Assistant Secretary - MSCU |

- **Terms of Reference**

1. The Task Force is answerable to the Director of Medical Services on technical issues and to the Permanent Secretary on administrative issues.

2. The Task Force will develop a Plan of Action (POA) on the change process for consideration by the steering Committee.

This POA will include the following:

- Elaboration of the draft legal notice and the cabinet memorandum based on the consensus findings and recommendations of the Mbagathi conference of 7-10 June 1998. These documents will highlight the composition as well as the roles and responsibilities of the Board of Management of the new MSCU;

- The preparatory steps for the development of a business plan for the new MSCU by detailing of the various components of the future Organization that needs to be analyzed and /or developed. In addition, the functioning of MSCU during the transitional period will be described;

- Pending the appointment of the Board of Management, which as its first responsibility will supervise the development of the business plan in its totality, some specific components of the business plan will be looked into including ;

  - The development of a component of a computerized management information system and a computerized inventory control system;

  - The quantification of (national) requirement and the resulting capitalization requirements at all levels of the drug supply pipeline.

# Appendix IX

## Computer Foundation's Course: Training Manual

# Computer Foundations Course

## Training Workbook

**Prepared by:**

FPLM

Family Planning Logistics Management Project

**Logistics Management unit**
**P.O. Box 46566**
**TEL: 727210/713322**
**Fax: 713323**
**E-Mail: rli@form-net.com**

**September 1998**

# Introduction to Windows 95

## Training Workbook
(Revised Edition)

Prepared by:

Logistics Management unit
P.O. Box 46566
TEL: 727210/713322
Fax: 713323
E-Mail: rli@form-net.com

September 1998

## How this Manual is organized

This manual is designed for the beginner in Windows 95. It can also serve as a basic reference guide as you continue to familiarize yourself with Windows 95. The layout has been split into several Chapters each addressing specific important topics which you as a beginner must know about before you are on your own. It is by no means a conclusive coach but it will serve the purpose of ensuring you can work with files and relate well to application packages that use Windows 95 as their operating medium.

Your tutor will be able to explain to you where you will not understand and he will emphasize on certain areas of the manual so that you gain confidence at the soonest. Your proficiency though will depend highly on practice and ability to learn the commands. This way you will find yourself getting to appreciate Windows more.

Special care has been taken to ensure that this manual is user friendly.
This workbook is a supplementary text to the concepts you will cover during the course. The language is simple and any technical terms that are referred to are simplified in terms that reach out to you as a beginner. It is hoped that by the time you have gone through the exercises you'll have mastered the basics and hence feel more comfortable with the program.

Chapter headings, Important instructions, figure illustrations and Menus are in **Bold** or both **Bold** and ***Italics***. Explanatory text is in normal typeface. Throughout the workbook when the word 'Click' is used it means 'Click the left button on the mouse' unless, otherwise stated

# INTRODUCTION TO WINDOWS 95

## The different Parts of a Computer

1. **The screen (also referred to as the Visual Display Unit VDU)**

The screen shows you what you are typing for ease of editing and formatting. When you use the computer to process some data or call a file in the computer, the output of the processing is displayed on the screen

2. **The Central Processing Unit (CPU in short)**

The CPU as the name suggests is the place where the instructions fed into the computer are carried out.

3. **The Keyboard**

We use the keyboard to communicate with the computer. The computer keyboard is very much like the typewriter keyboard in that it has the same standard layout (The QWERTY layout). It is however slightly different in several aspects. It has two sets of keypads – the Alphanumeric and the Numeric keypads. The alphanumeric keypad contains three types of characters, **the alphabetic (a to z), Numeric (0 to 9) and special characters (e.g. @ & " %etc).** There are also some keys within the alphanumeric keypad that have more than one character displayed on them (e.g. the keys displaying the greater than sign and the question mark). For purposes of this training we will refer to them as **dual–purpose keys**. Such keys when punched without the shift key pressed output the lower character and display the upper one when pressed in conjunction with the shift key. The Numeric keypad is limited to mathematical functions when the Numlock key is activated. Other Important keys include: -

**i) The Backspace Key**

This key **deletes backwards** any character to its left (or immediately in front of it). Do not confuse it with the Delete key discussed herebelow.

**ii) The Delete Key**

This key **deletes forwards** any character to its right (or immediately after it).

iii) **The Tab Key**

This key is usually used for spacing particularly with regard to Documents. By default the tab space is five characters which can still be increased. When deleting the tabs are deleted as if they were one character.

iii) **The Caps Lock Key**

Once activated this key enables all the alphabetical characters to appear in block form (capital) once typed.

iii) **The Shift Key**

This key is usually combined with the 'Dual-purpose keys in order to get the character displayed on the top of such keys. If used with the **function keys** (F1 through' F12) this combination may be a shortcut to some program command.

**iii) The Spacebar Key**

This key is usually used in documents to space words. It works horizontally.

v) **The Enter Key**

This key is used to finish the typed text into the computer. It acts as a "Vertical" spacebar by virtue of the fact that once pressed; it goes one row down.

**4. The Mouse**

The mouse is one of the many new additions and advantages Windows 95 has over the older Operating system. It is basically a pointing device that eases a user's over-reliance on the keyboard. Put simply it makes you work with greater ease.

**5. The Printer**

The printer is an output device connected to your computer via a printer cable. When you want to have the work you are doing on the screen in paper (Hardcopy) you use the Print command which enables the computer to send this work to the printer.

# Floppy Disk

A thin flexible magnetic-coated disk contained in a rigid or semi-rigid protective jacket. It provides computer users with a cheap high-capacity direct-access backing store.
It is contained within an envelope, which is coated in its exterior to provide a cleaning action.
The envelope has a number of apertures for the drive spindle, index hole to signal the start of a sector and a write-inhibit notch.(See the illustration below)

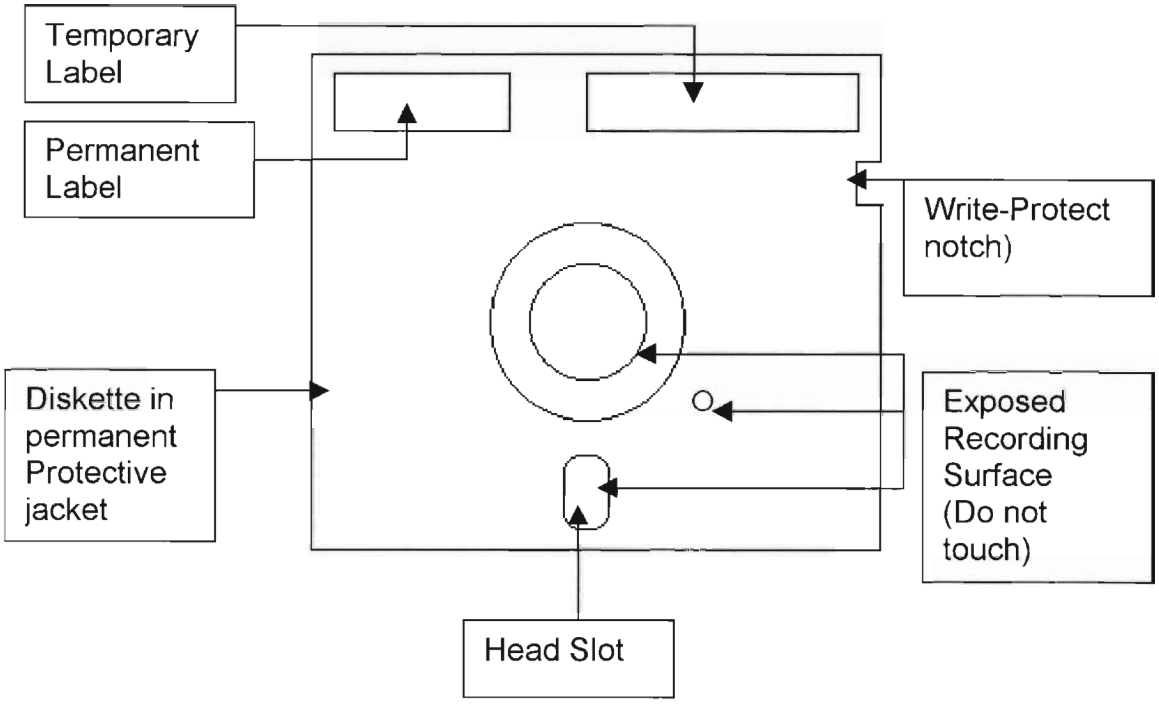


**Fig 1 A Sample Floppy Disk( 5 ¼ inch size)**

# Hard Disk

A direct Access storage device with a rigid Magnetic disk. This device comes as standard in all modern computers.

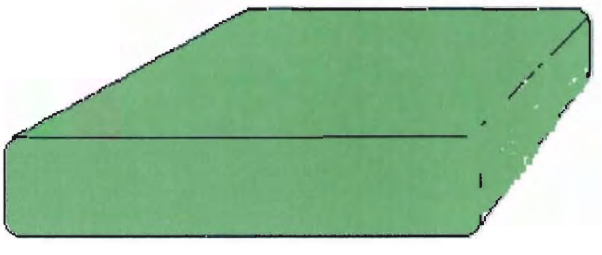

**Fig 2 A Sample Harddisk**

# Input Device

A device by which data is entered into a computer. Examples in this case are:

a). Keyboard
b). Mouse

# Output Device

A device that can receive data from a computer system. Examples are:

a). Printer
b). Monitor

Storage Device

A unit into which data can be entered, retained and later retrieved. Examples are:

a). Diskette
b). Magnetic Tape
c). Compact Disk (CD-ROM)
d). Hard Disk

# Software and Hardware

Our computers are pieces of equipment that are designed to help us work reliably and fast. The attributes that make computers useful to us are: -

1. Speedy processing
2. Accuracy and reliability
3. Compact storage i.e. ability to store a lot of information in a small space.

The various parts of our computer are referred to ***as hardware.*** These enable us to enter data into our computers, see the output to a command, print out our work and store and process this work. For this to happen, some instructions have to be given to the computer. These instructions should be understood by the computer. This is made possible by software that is referred to as programs. As the name suggests, a program is a set of ordered instructions that are followed to enable us get useful work from our computers.

The first kind of software in our machines is called ***System software.*** This controls the various hardware parts and 'avails' them to us when we need them. System software also acts on our requirements or "commands" as we give them. It also controls the various programs that we use to achieve a particular kind of work i.e. application software. Because we cannot use it directly to do our work, system software is a facilitator. Windows is a system software. It is the software that takes control of our machines just after we switch it on.

The second type of software is the ***Application Software***. This is the software we use to type letters, do calculations, draw pictures etc. This software is limited by application. The software we use for drawing cannot be used for our calculations and vice versa. We must be clear about what we want to use before we choose an application software to use.
Our machines can work even without application software but we will not be able to do much with it.

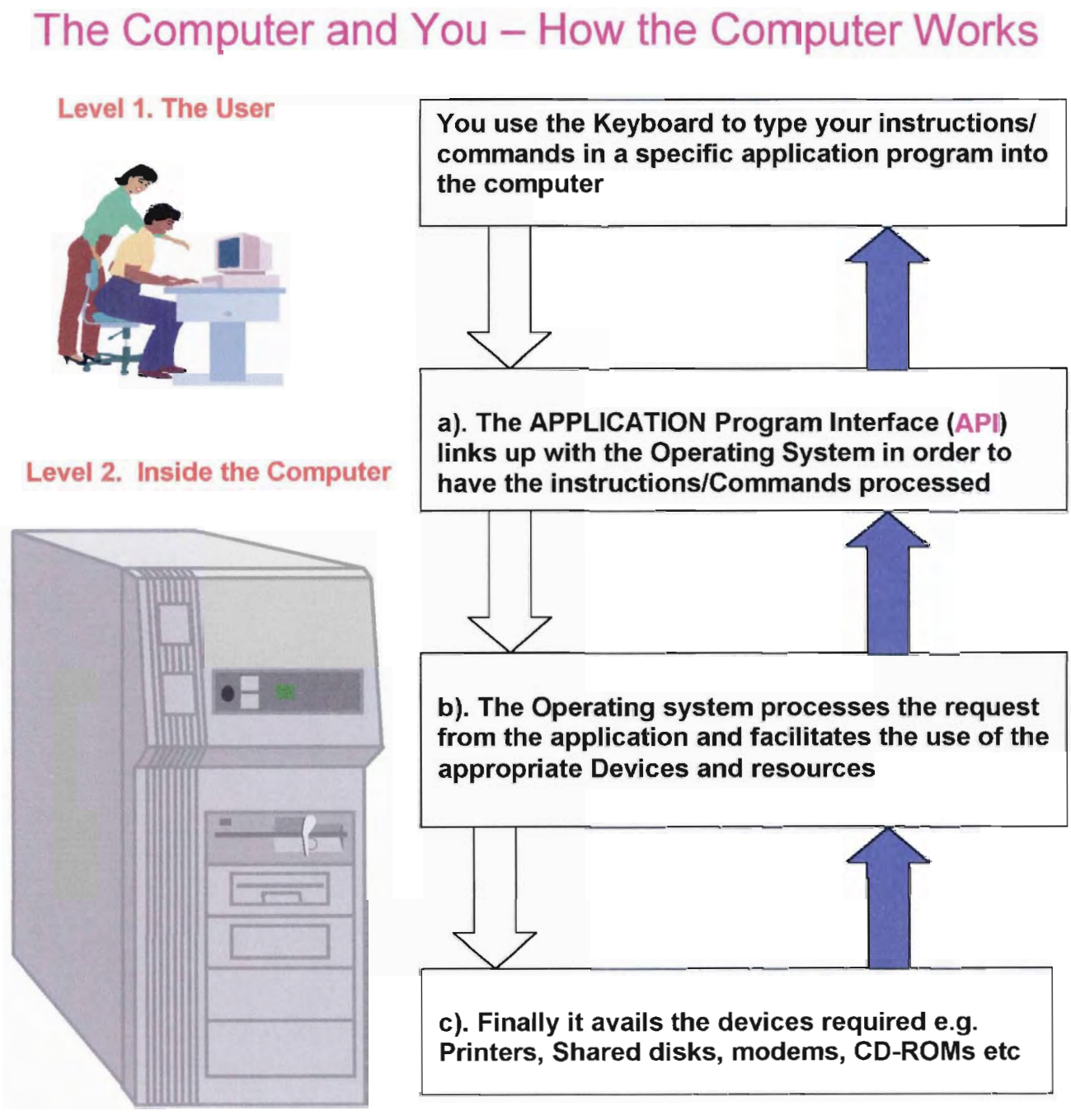


**Figure 3 How the Computer works**

## The Desktop Metaphor

A major concept in the development of windows and your use of the product is the Desktop. Windows attempts to imitate a typical desktop as closely as possible, not only in the way it looks, but also in the way you work with it. You probably work on several projects at the same time, use some "tools of the trade", like the phone, a calculator etc. Windows is designed to mimic these activities with electronic tools. In the process the resulting notes, documents and other information you produce are centralized into your computers filing system.

On switching on your computer and depending on how your computer is set up, various items appear on your ***Desktop***. When you start windows this is the first screen we get

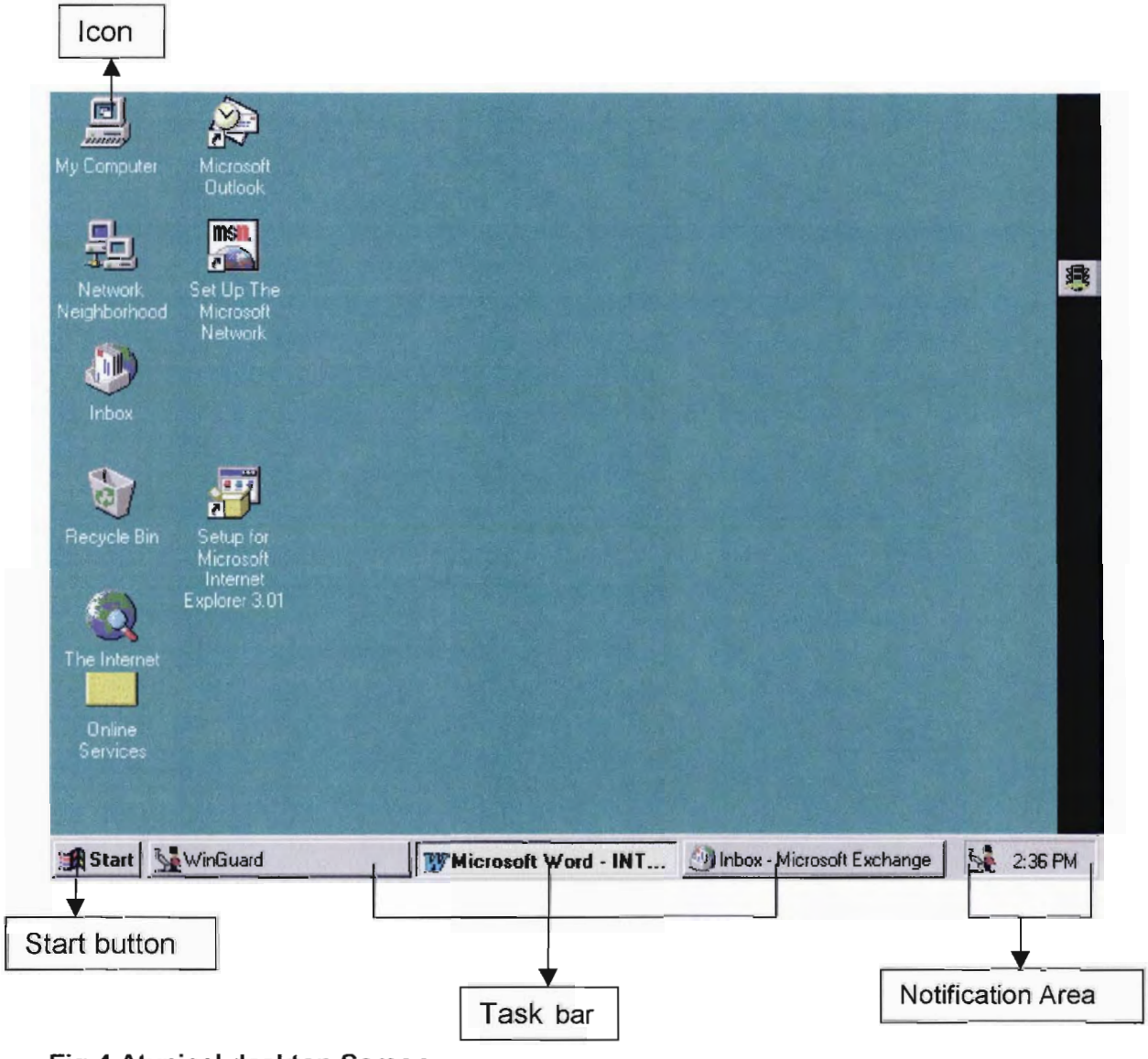


**Fig 4 Atypical desktop Screen**

The Icons are miniature visual representations of minimized windows, Applications, documents or tools of the trade like My computer, the recycle bin, Inbox etc.
If there is a program running, it is shown on the taskbar i.e. each program is referred to as a task. In windows we start accessing the various tools by clicking (using the left mouse button) on the start button. This is like the central point to all the resources in our machines. From here we can get programs, documents, locate files and shut down our machines. An overview of each command is shown below this diagram.

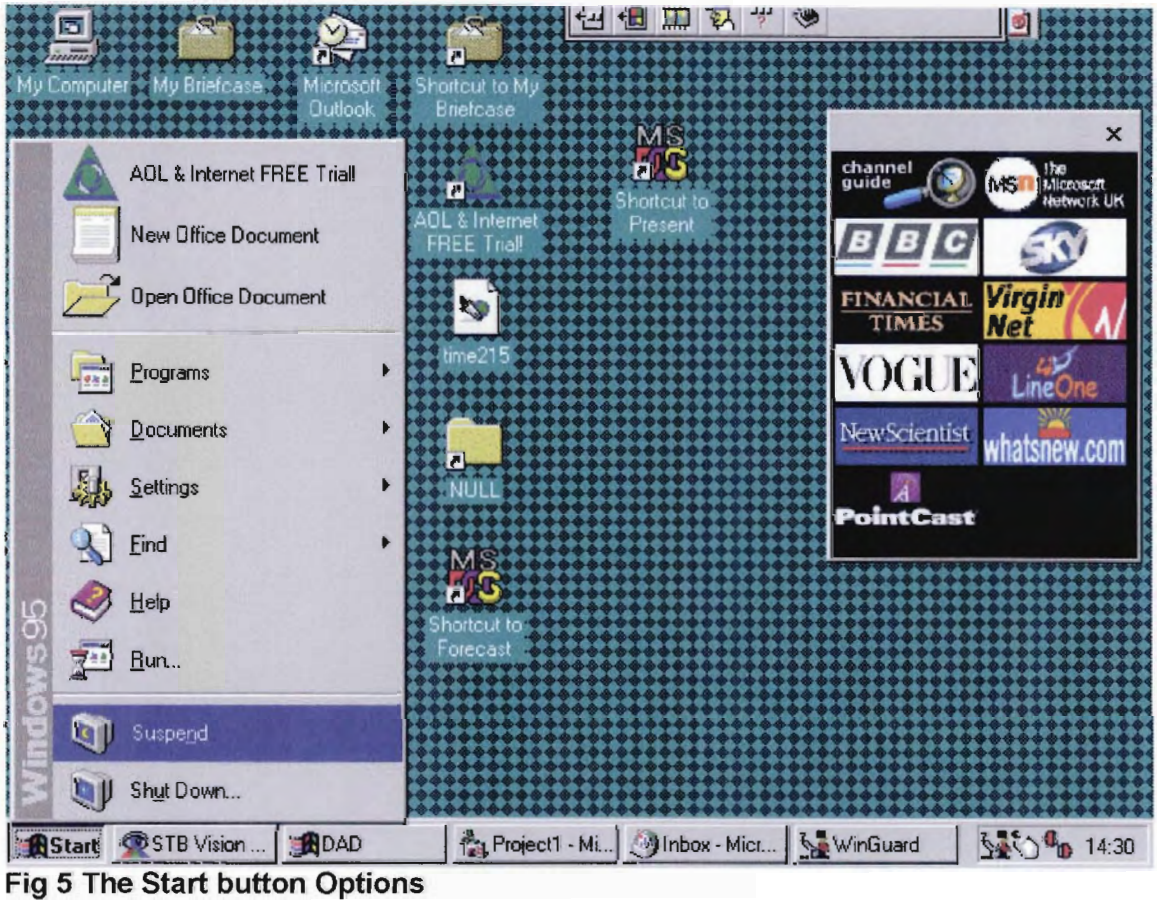

**Fig 5 The Start button Options**

| This Command | Does this |
|---|---|
| Programs | Displays a list of programs you can start |
| Documents | Displays a list of documents that you've opened previously |
| Settings | Displays a list of system components for which can change settings. |
| Find | Enables you to find a folder, file, shared computer, or mail message |
| Help | Starts help. You can use the help contents, Index, or other Tabs to find out how to do a task in windows. |
| Run | Starts a program or opens a folder when you type an MS-DOS command. |
| Shutdown | Shuts down or restarts your computer, or logs you off. |

## Exercise 1 – Using the mouse to understand mouse terminology

There are certain terms used when using the mouse, which are important to know now that you are beginning to use the computer. These include: -

1. **Point** – To point the mouse is to move it until the pointer is over the target
2. **Highlight** – To highlight is to choose. On the start button, this is done by moving the mouse, to the desired option or choice. A highlighted option has a blue band on it.
3. **Click** – This is to start a highlighted option (conventionally it refers to clicking the left mouse button)

## Exercise 2 - Starting the Calculator program

1. Point at the ***start*** button and click
2. Highlight ***Programs*** and more options are shown
3. Of these additional options (Cascading menu), select ***Accessories*** which contains the calculator.
4. Highlight ***Calculator*** and click on it to start it.

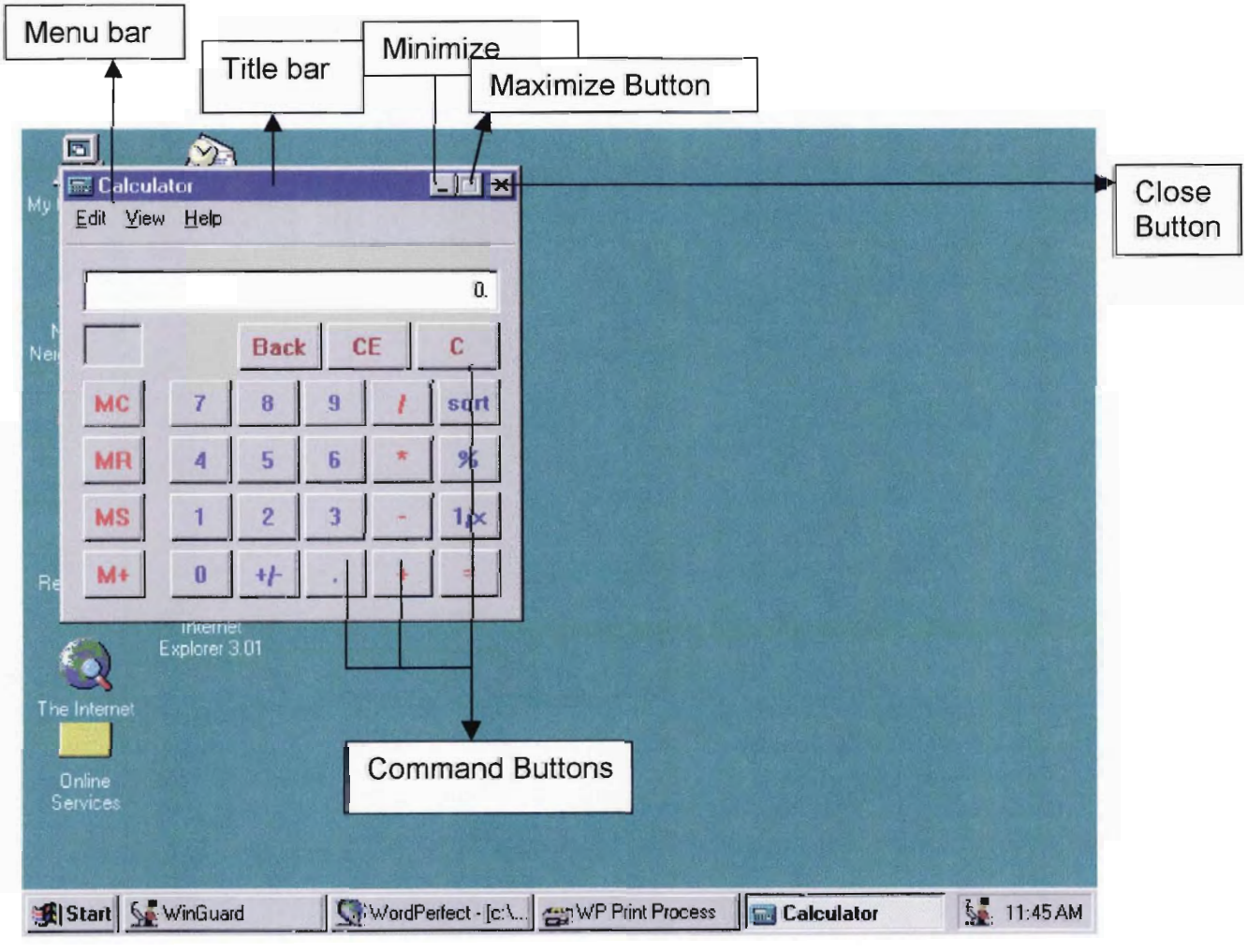


**Fig 6 Using the Calculator Program**

Lets us now use the calculator program and understand additional terms that are used in Windows.

**Window**
When a window is running, it occupies a space on the screen which we refer to as a Window.
**Drag and Drop**
To Drag and drop is to move an object to a new position. In windows, we drag and drop by pointing on the object and holding the mouse button and finally moving it to a new position.

**The Title Bar**
The title bar describes the program running or it identifies the window. It is always at the top of the program window. You can drag the title bar to move the window to a new position.

**The Menu Bar**
The program menu gives us options or commands that can be used when the program is running. To select a command, point at the option in the menu and click. This will give more options in what is called the "drop down menu". If the option we want is listed on the menu we click on it to select it. To save us the trouble of having to select commands this way, Windows programs have the frequently used commands represented by Command buttons.

**Command Buttons**
In windows, commands are represented by buttons. If we point at these buttons and click once, the command is carried out for us as is demonstrated in the following practical example: -

- Click on the number 5
- Click on the multiplication sign
- Click on the number 2
- Click on the equals sign

**Maximize Button**
We can maximize an application when we want it to occupy the whole of our computer screen thus making it all we can see on the screen

**Minimize Button**
When we click on the minimize button the program window disappears from the Screen. It has not stopped running but it now runs in the background.
All minimized programs are displayed on the task bar. You can activate them By clicking on their icons

**Close (or Cancel) Button**
When we finish using a program, we need to close it. We use the close button to do this. To use the program again we need to restart it.

**Customizing the Desktop**

To suit the preferences of every individual, in Windows 95 it is possible to change the:

1. Background colours of the desktop

2. Screen saver and its settings
3. Appearance of windows and dialog boxes
4. Screen settings

In order to do so, click the right mouse button anywhere on the desktop away from any icon or the taskbar, and then click properties from the menu that appears.

**Exercise 4 – Setting Background Colors**

1. Click on the start button
2. Click on the settings button
3. Click on the Control Panel button
4. Double click on the Display button
5. Click on the background tab shown below
6. We can use either pattern or Wallpaper to decorate the desktop. Select pattern or wallpaper from the given lists. If the pattern does not appear on the Preview screen, make sure that (none) is selected in the wallpaper list.
7. Click on the Apply button. The background changes according to your selection.

**Exercise 5 – Setting the Screen Saver**

1. Click on the Screen saver
2. In the list of the screen saver area, click the screensaver you want to use
3. To customize the screen saver, click settings.
4. Click on the apply button

The screen saver starts if your computer is idle for the number of minutes specified in the wait box. To clear the screen saver after it has started, move your mouse or press any key.

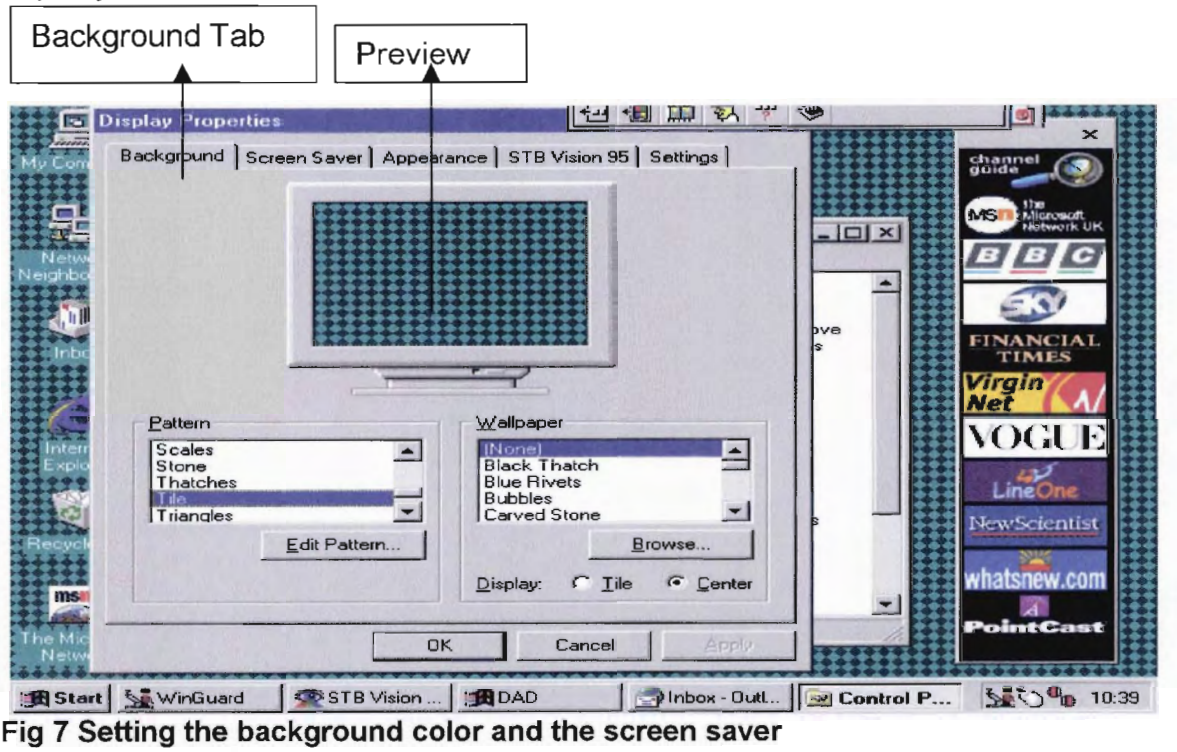


**Fig 7 Setting the background color and the screen saver**

# RUNNING APPLICATIONS IN WINDOWS 95

Programs in Windows 95 are organized in folders. To start a program click on the start button, point to the folder that contains the program you want, and then click on the program. Start word pad by following these instructions: -

**Exercise 3 – Starting Word pad**

1. Click on the start button
2. Point to programs
3. Point to accessories
4. Click on word pad .Your screen should show the following sequence

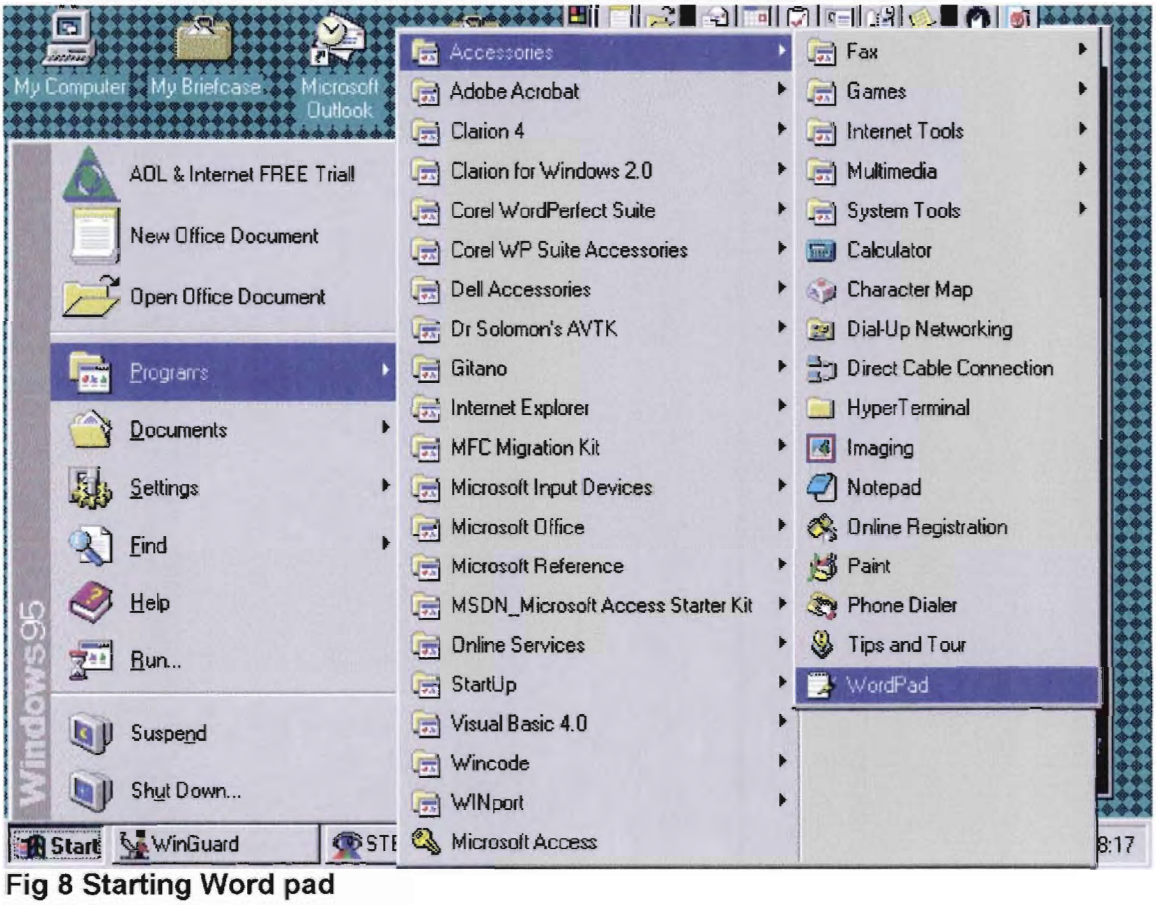

**Fig 8 Starting Word pad**

**Writing and Editing in Notepad**

There is nothing complicated here just start typing. You can use all of the keys on the keyboard, including TAB, BACKSPACE, and the direction keys.

**The Word Wrap Option**.
Notepad window can be resized as you see fit, but even with the window at its maximum width, the text may jump to the left when you type up against the right window wall. If this is inconveniencing you can choose wrap text by selecting the word

wrap option on the edit menu. This will cause the text you type to jump down to the next line when you hit the right window wall. If you are in the middle of typing a word that does not fit notepad moves the whole word to the next line.
If word wrap is off you can type up to 160 characters in width.

**File Naming in Windows**
Windows 95 and its applications can accommodate a filename of up to 256 characters. You can even use spaces, e.g. The Old Fox Document. This allows more meaningful names to files.

**Copy and Paste**
These options are used to **duplicate** text from one location to another within the same or to a different application. To copy text from one location to another, you use the copy and paste options from the Menu or the Toolbar. From the Menu bar, choose the **Edit** menu and there you will find the two options. If you use the Toolbar, choose the **copy** and **paste** icons.
Before you can move or duplicate text or data, you need to select the text first otherwise the options will not be available. When you choose copy after blocking the desired contents, the highlighted block is copied to an area called the clipboard. This is an area that temporarily holds the text until another block of text is copied or cut thereby replacing the previous one. While this highlighted block is on the clipboard you can paste it as many times as you want

**Cut and Paste**
These options are used to **move** text from one location to another within the same or to a different application. To cut text from one location to another, you use the cut and paste options from the Menu or the Toolbar. From the Menu bar, choose the **Edit** menu and there you will find the two options. If you use the Toolbar, choose the **Cut** and **paste** icons.

**Creating Folders**

Your files, programs and objects are stored in folders. Folders allow us to organize our work by having together the programs we use and the documents we create.
Folders are the equivalent of directories in the earlier version of Windows and Dos and can also have other folders in them.
To create a folder within a folder, you first open the **Parent folder** by double clicking on it. Upon installation windows creates five default folders, namely:

- My Computer
- Network Neighborhood
- Inbox
- Recycle bin
- The Microsoft Network

## Exercise 6 Creating a folder

1. Point to any part of the windows opening screen and click on the right mouse button. The part you point should not have any icons or folders. You should get the following options:

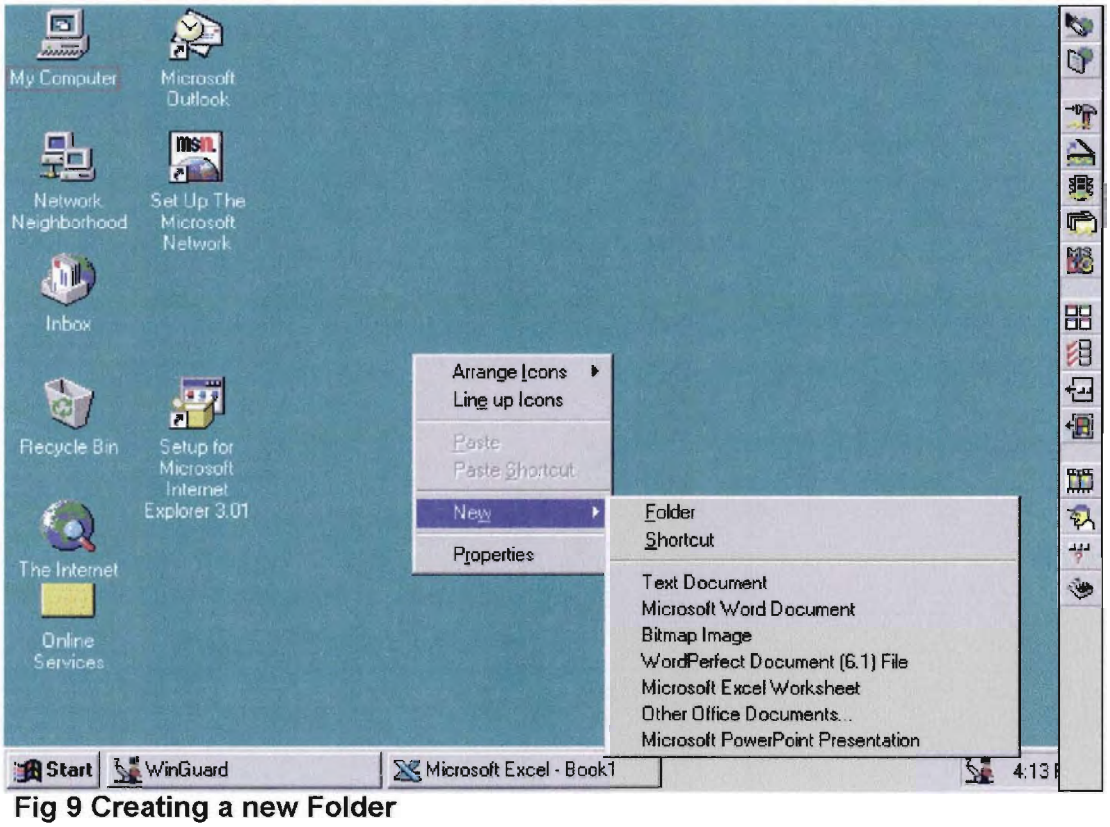


**Fig 9 Creating a new Folder**

2. Select the option "New"
3. Select "Folder"

By default the folder will appear given the name "New Folder' below the icon. To change the name, select it and type in a name e.g. "My folder".

## Creating Shortcuts

A shortcut in Windows gives fast access to a program or a file. It reduces the steps we have to go through if we use the start button. A Shortcut can be on the Desktop or to avoid a clustered desktop within folders. To create a shortcut within the folder we open the folder first.

## Exercise 7 - Creating Shortcuts

Repeat steps 1 to 2 above and after the new option select "Shortcut". This starts the Create shortcut Wizard. The shortcut wizard is meant to guide you through the steps necessary to create the shortcut. At this stage you click on the browse button to help you pick out the program whose shortcut you want to create.
The browse window lists all folders and files available in our computers, representing Folders as Yellow folders and files with icons next to them.

If your program is on a particular folder, then you must open that folder to be able to select it. Once this is done select the Open button which now takes you back to the wizard. You can now proceed to the next step by clicking on the "Next" button.
At this step you can now type in the shortcut description which will be displayed beneath the shortcuts icon. When you are through you click on the "Finnish" button.

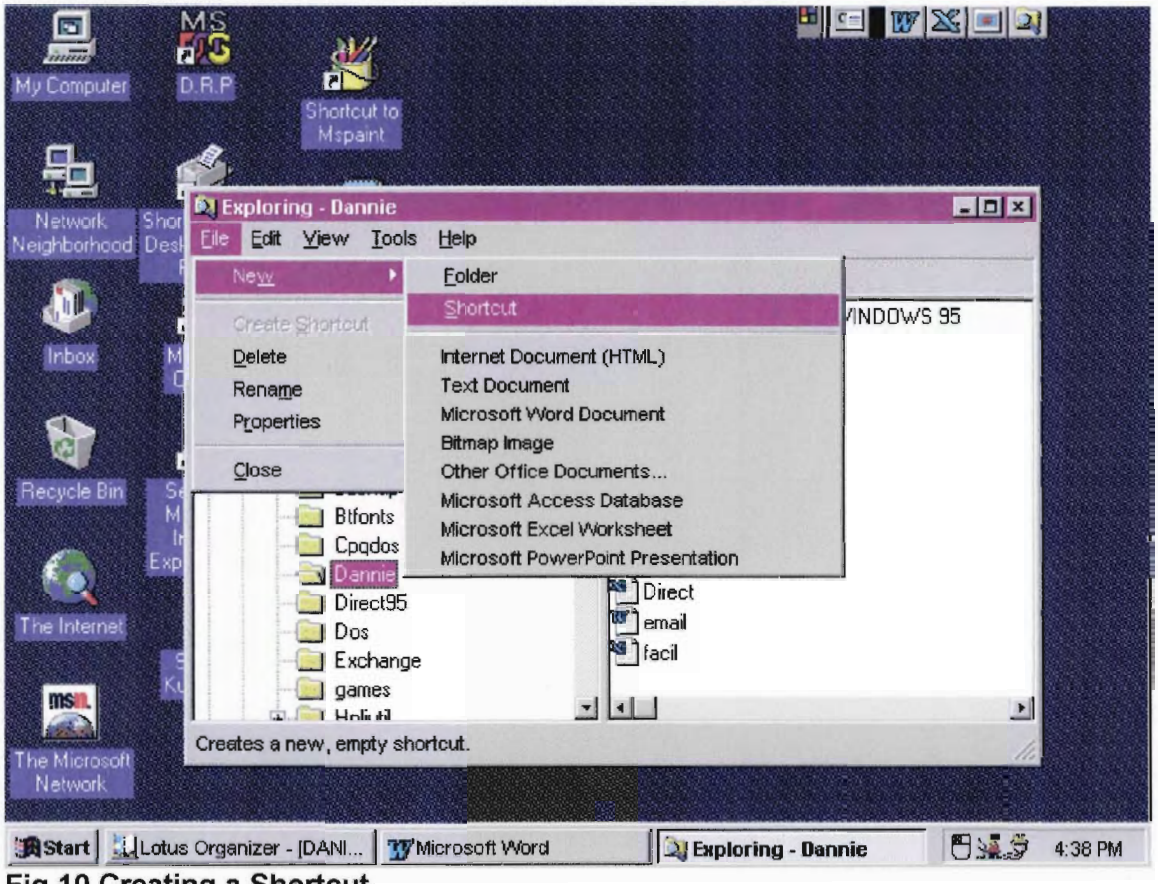

**Fig 10 Creating a Shortcut**

### Working with the Recycle bin

In windows, if you no longer need a file, folder, object or program you simply delete it. But what about if your action was a mistake?
Fortunately in windows there is the Recycle bin where anything deleted is stored. We can recover such deleted files from the recycle bin. It is good practice to rid the recycle bin of what we are sure we will not need to recover after all.

### Exercise 8 - Emptying the Recycle Bin

1. Double click on the "**Recycle Bin**" icon on your desktop
2. A list of all deleted items is shown in the recycle bin window
3. To **Restore** an item, highlight it first and select **Restore** from the file Menu (if you are highlighting many items at once hold down the **CTRL** or **SHIFT** keys on the keyboard)
4 To delete highlight the item and select **Delete**
5 To empty the bin select "**Empty Recycle Bin**"

## Setting Date and Time

Each time we save a file in our machines, Windows records the date and time this was done. We refer to this as the "Date and time stamp". This information is important in letting us know the most current version of a file or even what to discard. This is however not possible when the date and time settings are not correct.
We can however do this by using the "Settings" option on the start button and clicking on the Control Panel to see the following screen:

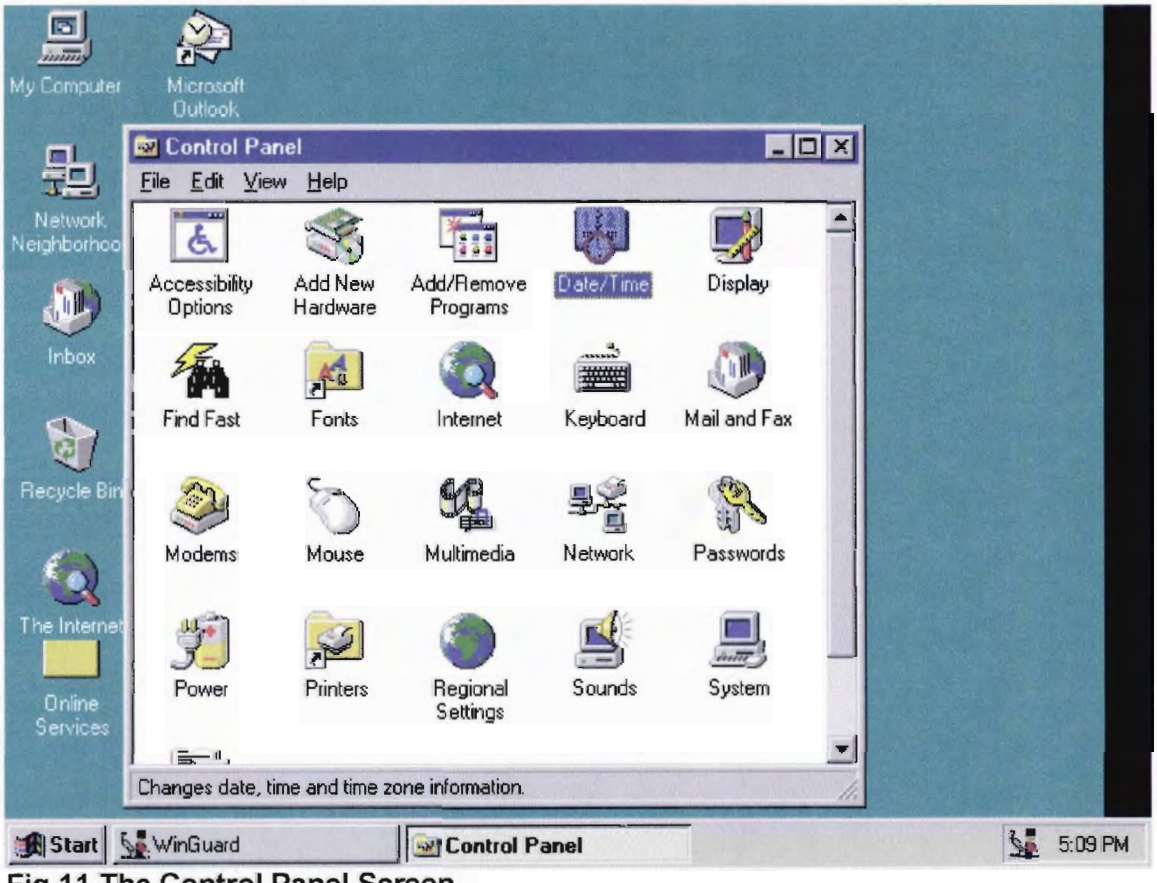


**Fig 11 The Control Panel Screen**

## Exercise 9 – Setting Date and Time

Double click the Date/Time icon to get the window which will enable us to change the settings. Your screen should now look like this:

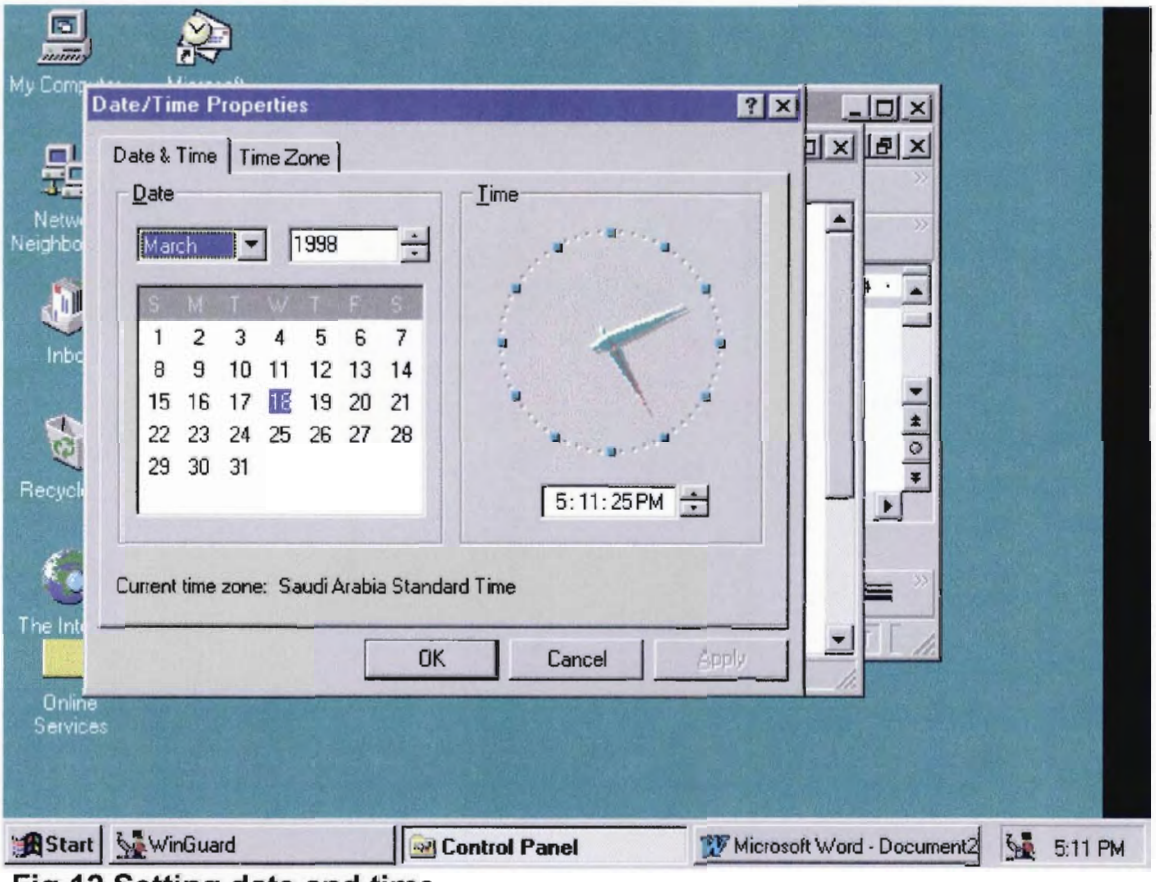


**Fig 12 Setting date and time**

To set the time, simply select the "Date & time" tab and click on the date. To set the time, highlight the part of time you want to adjust e.g. hour part and use the reset buttons to either increase or decrease the value.

### Using Windows Explorer

In Windows Explorer, you can see both the heirachy of folders on your computer and all files and folders in each selected folder. This is especially helpful for copying and moving files. You open the folder that you want to move or copy, and then drag it to the folder you want to put it in.

**Exercise 10 – Using Windows Explorer to see the hierachy of folders on a disk drive.**

- Click the start button
- Point to Programs, and then click Windows Explorer
- Click a folder on the left side of the window to display its contents on the right
- Click the plus signs (+) to display more folders
- Click on the Minus signs (-) to collapse the branch

- To quickly open a folder and display its sub-folders, double click the folder on the left side of the window.

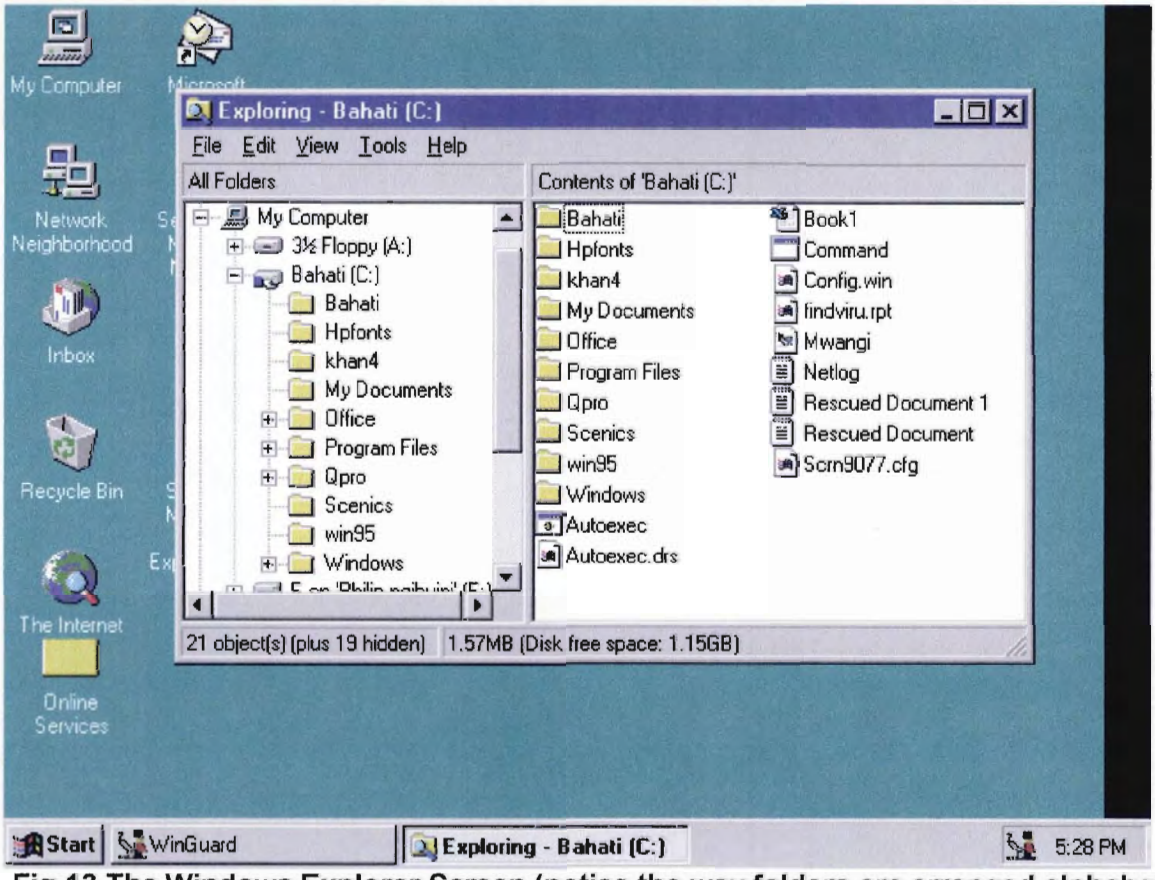


**Fig 13 The Windows Explorer Screen (notice the way folders are arranged alphabetically)**

# Manipulating Files

### Selecting Multiple Files for an operation

A file must be highlighted before an operation such as copy can be performed on it. You can use the techniques described here to select more than one file for an operation. Files may be selected as a **contiguous** group, in which the files are next to each other, or as a **non-contiguous** group, in which files are scattered in the window.

### Exercise 11 - Selecting Files In A contiguous Group

1. Click on the first in the group, the anchor file.
2. Hold down the shift key.
3. Click on the last file in the group.

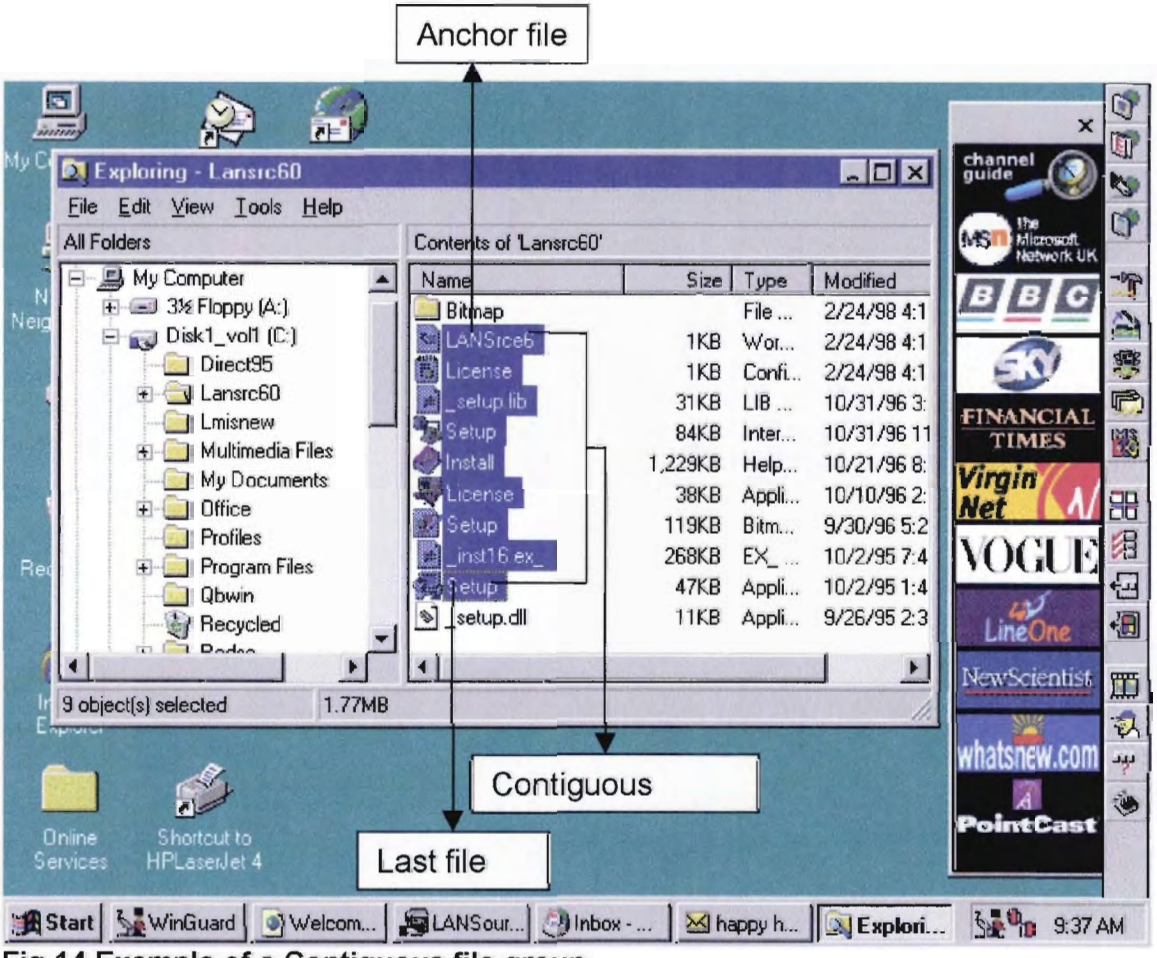


**Fig 14 Example of a Contiguous file group**

## Exercise 12 - Selecting a non-Contiguous group

In a non-contiguous group the files are scattered. Click on the file you want highlighted as you press the **CTRL** key to bridge your selections

**Fig 15 Example of a Non-Contiguous file group**

# File Operations

## a). Copying Files

### Exercise 13 – Copying Files

i). To copy files from one folder to another

1. **Open** the source folder (where you are copying from)
2. **Select the files** using any of the file selecting techniques mentioned above
3. Click on the Edit menu and Select **Copy**
4. Click on the Destination folder (where you want to copy to)
5. Select **Paste** from the Edit menu.

ii). Using the **Drag and Drop** method

1. Having selected your files in the source folder
2. Hold down the right mouse button
3. Drag the files and drop them on your destination folder.
4. Select the **Copy Here** option on the menu that appears

## Moving files

i). To Move files from one folder to another

**Exercise 14 – Moving Files**

6. **Open** the source folder (where you are copying from)
7. **Select the files** using any of the file selecting techniques mentioned above
8. Click on the Edit menu and Select **Cut**
9. Click on the Destination folder (where you want to copy to)
10. Select **Paste** from the Edit menu.

ii). Using the **Drag and Drop** method

5. Having selected your files in the source folder
6. Hold down the right mouse button
7. Drag the files and drop them on your destination folder.
8. Select the **Move Here** option on the menu that appears

**Working with Diskettes**

When you acquire new disks, you need to prepare them for use on your computer by formatting the Disks.
To Format your diskettes use the following procedure:

**Exercise 15 – Formatting a Diskette**

1. Insert the diskette to be formatted into drive "A"
2. Double click on the My Computer icon to open it
3. Click once to select the floppy drive [A:] folder
4. Choose Format from the File Menu
5. Click on Start in the following Dialog Window.

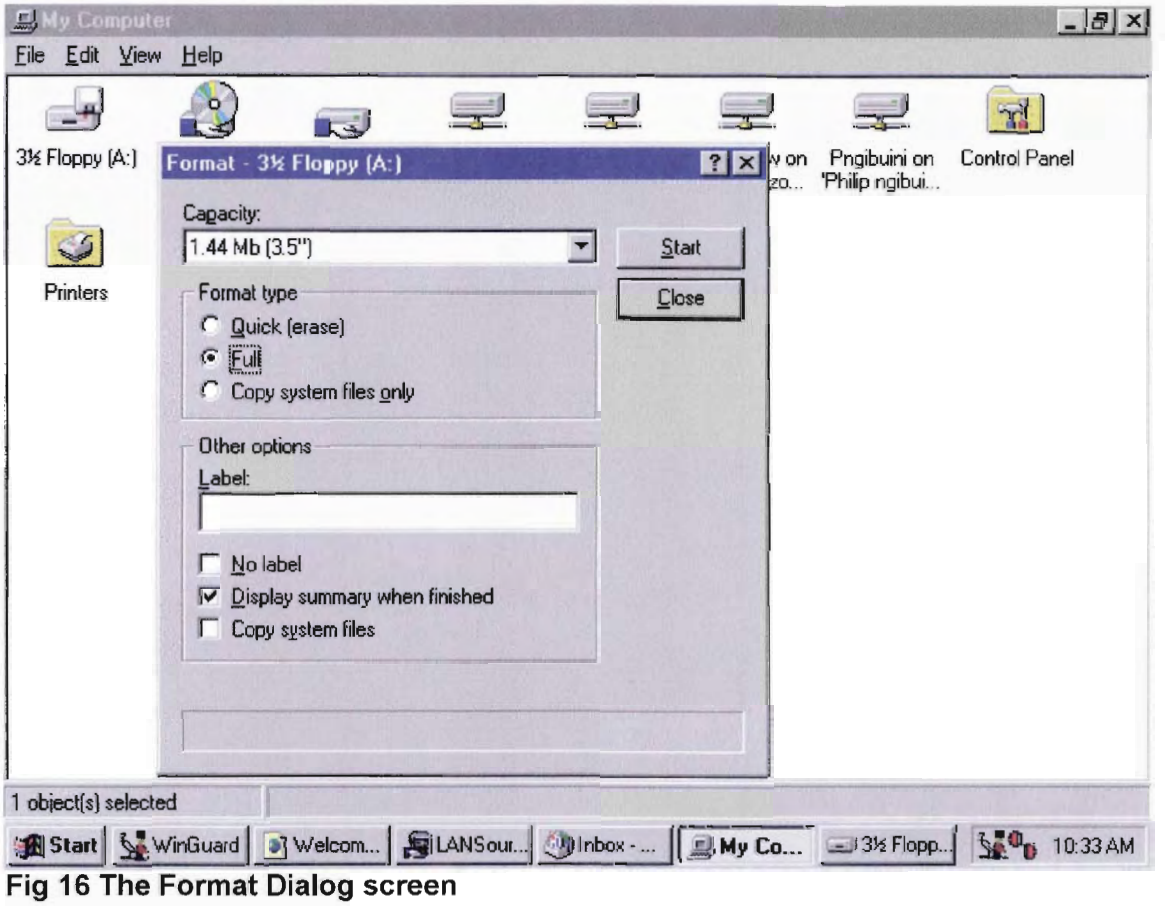

**Fig 16 The Format Dialog screen**

**Note:** Do not attempt this process on the Hard disk (Drive C:). Such an action would lead to your clearing the whole software in your computer meaning you will lose all your files never to get them back.

## Finding Files and Folders

The Windows95 Find feature enables you to search for files on your machine or find other machines that are logged on the network. This last option will only work if you are in the same workgroup in the network. Find also allows you to save the search criteria and the results of the search, making it unnecessary to recreate searches from scratch.

### Exercise 16 – Finding Files and Folders

1. To run the Find feature click on the start button
2. Point to Find
3. Select Files or Folders

**Fig 17: Using the Find option**

The windows 95 feature searches using any of the following criteria:

- Filename
- Time parameters including modification dates
- Size
- Text contents of the file

Click on the appropriate tab to enter your search criteria, then click on the **Find Now** button. This means that find can locate a file even if the user is not sure about the files' exact location or name.

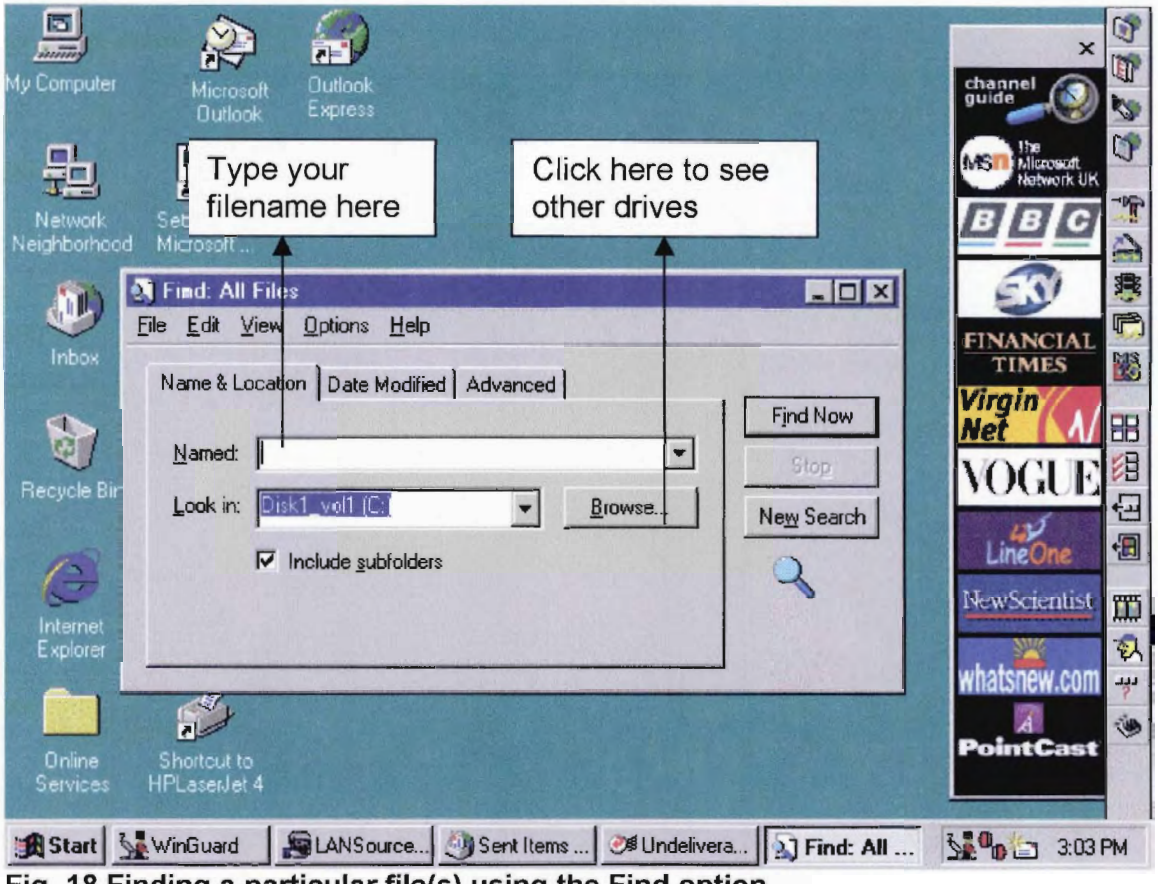

**Fig. 18 Finding a particular file(s) using the Find option**

# The Network Connection In Windows 95

Unlike its predecessor the Disk Operating System (DOS), Windows 95 can allow you to access files on computers linked together in a network.

A network can be defined as two or more computers connected together by a cable so that they can exchange or share information and devices. There are basically Two types of Networks. These are: -

a). **The Local Area Network - LAN**
b). **The Wide Area Network - WAN**

Every computer connected to the network is said to be **on the network**.
Networks are often called LAN's (**L**ocal **A**rea **N**etwork(s)). When a computer is turned on and is able to access the network, the computer is said to be **Online** and when it is unable to access the network we say it is **offline**.

Networks are beneficial in a number of ways: -

a). You can Share Files and file locations (also called Folders or Directories)

b). You can share programs

c). You can share resources e.g. Printers, Modems, Compact Disk Drives (CD-ROMs) etc

The items to be shared across the network **must** first be shared. This is something your System Administrator will do for you. Here are a few tips though.

**To Share a Folder (Directory)**: -

1. Click on the start button.
2. Select Programs
3. Select Windows Explorer
4. Click on the folder you want to share
5. Click using the right mouse button and select Sharing
6. Type in the name you want to share it as
7. On the Access Type click on Full

Your Folder is now shared.

In a LAN, there are two main types of network relationships

a). **Peer to Peer Network**

This is a type of network where each computer looks upon all others on the network as peers (equals) rather than looking at some computers (those with the special network Operating system) as though they are more important (better) than others. In a peer to peer network, a computer can function as a client and server.

**b). Client / Server Network**

In this type of network the computer that contains the disk drives, printer and other resources shared with other computers is called a **server.** Any other computer on the network hooked onto the server but not a server is called a **workstation.** This workstation makes requests to use the shared resources on the server using a Network Operating System e.g. Novell, WindowsNT etc. In this way, we say it is a **Client**.

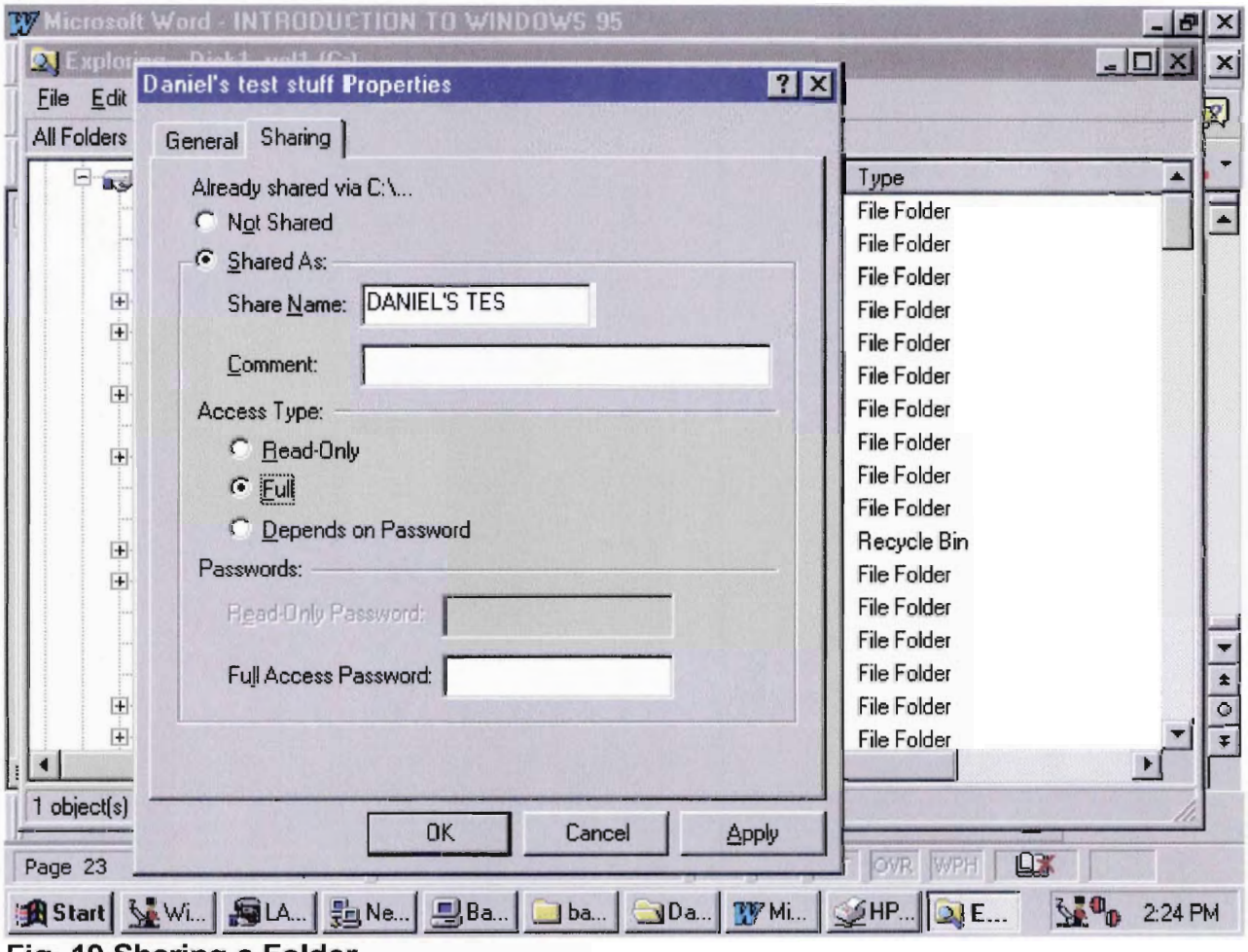


**Fig. 19 Sharing a Folder**

Your administrator will be able to share the resources for you. Make sure you do not share any resource without his/her consent. You could use the wrong options and complicate things for yourself and other innocent users.

**This is the Last Page of this Manual**

# Microsoft Excel for Windows

## Training Workbook

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**September 1998**

**How this Manual is organized**

This manual is designed for the beginner in Microsoft Excel. It can also serve as a reference guide as you continue to familiarize yourself with Excel. The layout has been split into several chapters each addressing specific important topics which you as a beginner must know about before you are on your own. It is by no means a conclusive coach but it will serve the purpose of ensuring you can create your initial worksheets with fewer hassles. Your tutor will be able to explain to you where you will not understand and he will emphasize on certain areas of the manual so that you gain confidence at the soonest.
Your proficiency though will depend highly on practice and ability to learn the commands. This way you will find yourself getting to appreciate Excel more as you discover that there is more to it than just Columns and Rows. Special care has been taken to ensure that this manual is user friendly.
The language is simple and any technical terms that are referred to are simplified in terms that reach out to you as a beginner. It is hoped that by the time you have gone through the exercises you'll have mastered the basics and hence feel more comfortable with the program. Chapter headings, Important instructions, figure illustrations and Menus are in Bold or both Bold and Italics. Explanatory text is in normal typeface.

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Personal Computers can run a wide variety of software that can help you to organize your personal life as well as your business. One of the most common types of software are application programs called spreadsheets. Spreadsheets are Number-crunchers. They calculate all kinds of different data for you and even display and print their results in a variety of graphical forms as in pie charts, and bar graphs for example.
You can use a spreadsheet like Microsoft Excel; to prepare your monthly accounts, make out a balance sheet, make sales projections using the data already keyed in etc.
You will recall that in our study of Windows95 we learnt that spreadsheets are part of the application software supported by (or running on) windows95.
Excel is a very 'user-friendly' package, a fact you will gladly appreciate.
In the course of our study you will constantly be amazed by the astonishingly sophisticated functions the program can perform on your data and how easy, it is to tell Excel to carry out these functions. Welcome to the world of spreadsheets and in particular Microsoft Excel for Windows95

# Spreadsheets – an Overview

**What is a spreadsheet?**
At it's most basic, an electronic spreadsheet is a little more than a glorified calculator that computes columns and rows of numbers, which of course is very useful for financial record keeping. Before the coming of computers, such record keeping was done by hand in ledger sheets. This method though necessary was very laborious and needles to say, largely unreliable.
When bookkeepers made an error or a miscalculation, every other calculation depending on those numbers was thrown off. If the mistake was ever found, everything had to be checked, and then corrections made – all with only the help of a pencil, an eraser, and (if you were lucky) an adding machine.
Spreadsheets like Excel simplify this tedious process in a big way.
Mistakes are now easier to correct; you just erase them on the screen and type the correct numbers before you run any calculations. They have the added advantage of extending their functions beyond plain number-crunching and financial forecasting. You can use them for complicated mathematical modeling, sophisticated statistical analysis and advanced accounting. Greater still they can also function as databases.
You can use a spreadsheet to organize your finances, balance your chequebook, and computerize your address book among several other uses. Simply stated your imagination may be the only limit as to what you can do with your spreadsheet.

**How is information organized in a spreadsheet?**

The numerical or other data you plug into a spreadsheet is organized in the form of a table (called a **worksheet**). The worksheet's grid consists of **numbered rows** and **lettered columns**. Each box on the grid is called a **cell** and is referred to by the letter of its column and the number of it's row - for example, **A1, F6, J136** etc.
Excel also lets you give each cell a name (a cell name) so that you can remember what the information in the cell refers to.
At a broader level, each excel worksheet is a part of a workbook. A workbook is a Microsoft Excel file containing one or more (work) sheets usually labeled as "sheet1", "sheet2" etc. Each

worksheet is a "Page" in the workbook. The standard displayed sheets per workbook are sixteen though they can be increased or decreased. This kind of arrangement makes it extremely simple to collect worksheets on the same workbook in a single place for easy reference. Let us look at the various parts of a worksheet as shown below

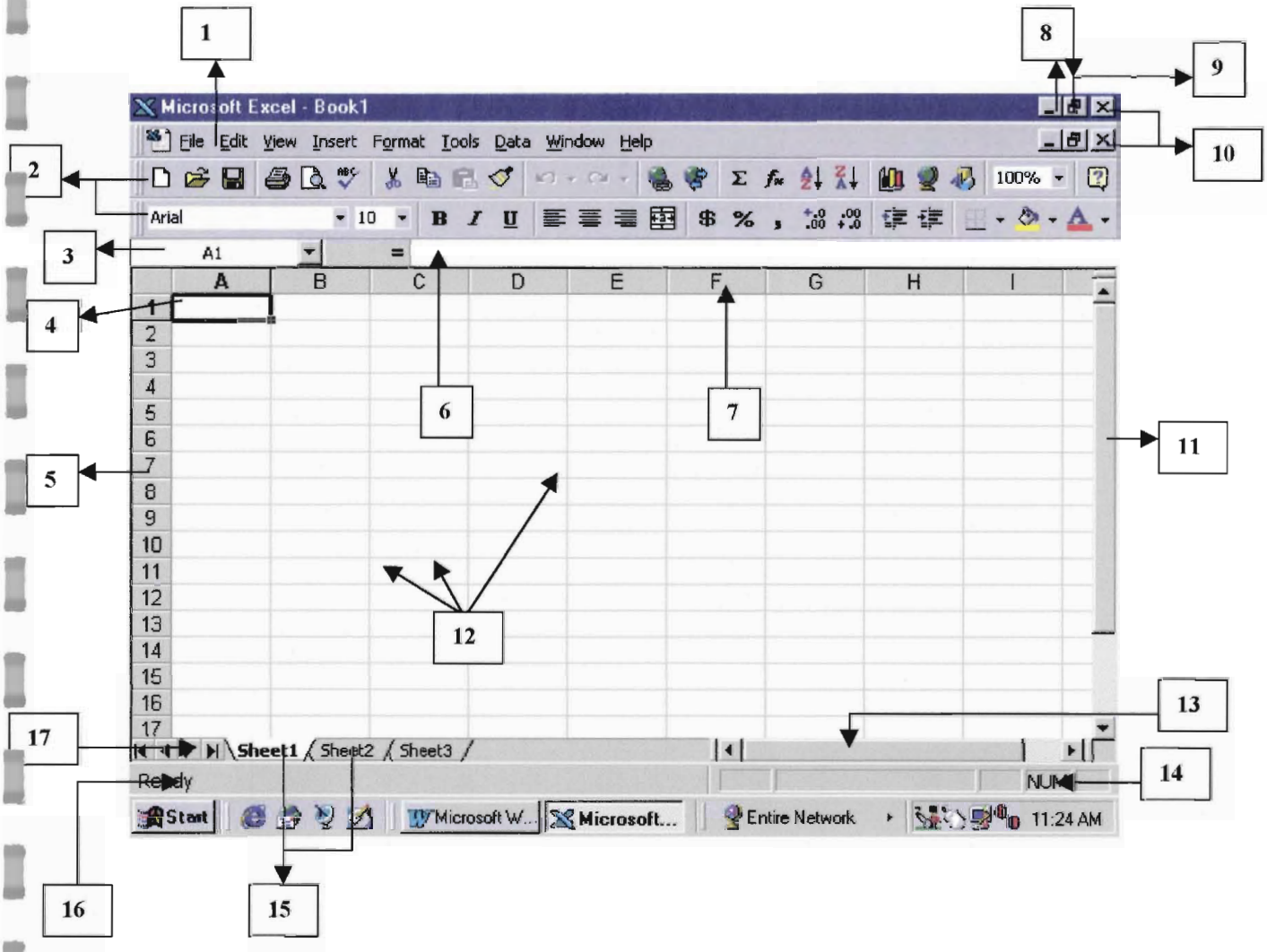



**Fig. 1 The Parts of the Microsoft Excel Screen**

1.Menu Bar
2.Tool Bar
3.Name box
4.Current Cell
5.Row Identifier (Row header)
6.Formula Bar
7.Column Identifier (Column header)
8.Minimize Button
9.Restore Button
10.Exit Button
11.Vertical Scrollbar
12.Gridlines
13.Horizontal Scrollbar
14.Num Lock indicator
15.Sheet Tabs
16.Status Bar
17.Tab Scrolling Buttons

The following table shows what each of these screen items does

| Screen Item | Function |
|---|---|
| Menu Bar | Provides you with the variety of choices which give you access To the main commands and functions of Excel (e.g. File, Edit etc) |
| Tool Bar | These are picture representations of some of the options you can get using the Menu Bar. The top strip comprises of the "*Standard Toolbars*" while the lower one comprises of the "*Formatting Toolbars*". |
| Name Box | Displays the cell address where the cursor is and the name of the defined range if you have done so in your worksheet |
| Cell Pointer | This rectangular highlight shows you where the cursor currently is |
| Row identifier | This row number is identifies the entire row in all the columns in this worksheet |
| Formula Bar | This is where you enter the formula you want to use in a cell or a range of cells. |
| Column identifier | This column label is identifies the entire column in all the rows in this worksheet |
| Minimize Button | This button minimizes the size of the worksheet or program window. It appears like a "Minus" (-) sign |
| Restore Button | This button restores (enlarges) the size of the worksheet or program indow. It appears like a box (□) sign |
| Exit Button | this button exits the worksheet or program window. It appears like a "X" sign |
| Vertical Scrollbar | This bar located at the extreme right of your worksheet enables you to scroll up and down the worksheet. |
| Gridlines | These are the borders of the minute rectangular units (grids) that make up your worksheet. One Grid unit is a "*cell*" in excel terms since it has a specific column and row address. |
| Horizontal Scrollbar | This bar located at the bottom of your worksheet enables you to scroll to the left and right of the worksheet. |
| Num Lock indicator | (Indicates that the numlock key on the keyboard is pressed. Allowing you to input numbers using the compact numeric keypad on the right of the keyboard) |
| Sheettabs | These tabs (pages) enable you to toggle from one tab to another. You can customize the tabs by renaming them. |
| Status Bar | It keeps you updated on important information about the current cell as well as informing you about the current tasks Excel is currently working on. |
| Tab Scrolling Buttons | These buttons enable you to scroll among the sheet tabs |

**Chapter 1 - Starting Microsoft Excel**

Click on the **Start** button, highlight the **Programs** option, move the mouse to your right and down to the **Microsoft Excel** icon and click once again. This should load the Excel spreadsheet.

**Designing and Creating Worksheets**

As stated before, worksheets are made up of the grids of cells in which you enter and edit your data It is important to remember that worksheets are different from workbooks. The former is a part of the Latter. You can do almost anything to a worksheet you can do to a whole file. Meaning you can **Create**, **Rename**, **Delete**, and **Copy** worksheets and even **Move** from one workbook to another.
It is a good practice to store related worksheets in one workbook (File). This enables you organize your data with ease. Before you create and/or edit your worksheet you need to have in mind (or on paper) an outline of the basic structure of your worksheet. This should include basic information like what the Column headings and row names will be, what sort of information you want to put where, what the general look of the sheet will be. Once this step is complete the next is to define the formulae. Formulae are the "brains" of Excel. They enable you to run just about any sort of data analysis or calculation you might want.

By default when you start the excel program it will always load a blank screen. This is based on the Computer's assumption that you intend to work on a new sheet. If you need to load a file (workbook) you had used before you will have to open it by locating its file name on the drive and directory or **Folder** you saved it.

## Chapter 2 - Entering Data in a worksheet
### Types Of Data in Excel

Data in Excel comes in three basic ways – **Numbers, Formulae or Text.** Excel will automatically sense the difference and treat each data in a slightly different way. ***Numbers*** refer to numeric text. When entering numeric data, only enter the actual numbers you want (and a decimal point if appropriate). Do not include commas or any other symbols (e.g. dollar sign, asterisks, percent signs etc). This will prevent excel from treating your numeric data as text rather than the number it is supposed to be. ***Text*** is anything that is ***not*** numeric or a formula; it can be just about any *mix* of letters, spaces, symbols and numbers e.g. Part56098, Customer number etc. To enter your row and column labels, click on the cell where you want to enter text, and start typing. If your text seems too long for the cell, Excel displays it in the next cell in as long as there is no data in that cell. If on the contrary, there is data in the next cell, Excel will not display the "excess' contents until you resize the column. Your data will not be lost though. A Formula always begins with a "equals" (=) sign. It may be composed of values added together (e.g. =23+56+39) or it may refer to specific cell addresses whose contents are put together using a mathematical operand.

### About cell and range references

A reference identifies a cell or a range of cells on a worksheet and tells Microsoft Excel where to look for the values or data you want to use in a formula. With references, you can use data contained in different parts of a worksheet in one formula or use the value from one cell in several formulas. You can also refer to cells on other sheets in the same workbook, to other workbooks, and to data in other programs. References to cells in other workbooks are called **external** references. References to data in other programs are called **remote** references.

By default, Microsoft Excel uses the A1 reference style, which labels columns with letters (**A through IV, for a total of 256 columns**) and labels rows with numbers (**1 through 65536**). To refer to a cell, enter the column letter followed by the row number. For example, **D50 refers to the cell at the intersection of column D and row 50**. To refer to a range of cells, enter the reference for the cell in the upper-left corner of the range, a colon (:), and then the reference to the cell in the lower-right corner of the range. The following are examples of references.

| To refer to | Use |
|---|---|
| The cell in column A and row 10 | A10 |
| The range of cells in column A and rows 10 through 20 | A10:A20 |
| The range of cells in row 15 and columns B through E | B15:E15 |
| All cells in row 5 | 5:5 |
| All cells in rows 5 through 10 | 5:10 |
| All cells in column H | H:H |
| All cells in columns H through J | H:J |

You can also use a reference style where both the rows and the columns on the worksheet are numbered. R1C1 style is useful for computing row and column positions in macros and can be useful for showing **relative cell references**. In R1C1 style, Microsoft Excel indicates the location of a cell with an "R" followed by a row number and a "C" followed by a column number.

### What is a Relative cell reference?

A cell reference such as A1 that tells Microsoft Excel how to find another cell by starting from the cell that contains the formula. Using a relative reference is like giving someone directions that explain where to go from where the person is starting out. – For example, "**go up two blocks and over one block**"

### The difference between relative and absolute references

When you create a formula, references to cells or ranges are usually based upon their position relative to the cell that contains the formula. In the following example, cell B6 contains the formula =A5; Microsoft Excel finds the value one cell above and one cell to the left of B6. This is known as a **relative referencing**.

| | A | B |
|---|---|---|
| 5 | 100 | |
| 6 | 200 | =A5 |
| 7 | | |

When you copy a formula that uses relative references, the references in the pasted formula update and refer to different cells relative to the position of the formula. In the following example, the formula in cell B6 has been copied to cell B7. The formula in cell B7 has changed to =A6, which refers to the cell that is one cell above and to the left of cell B7.

| | A | B |
|---|---|---|
| 5 | 100 | |
| 6 | 200 | =A5 |
| 7 | | =A6 |

If you don't want references to change when you copy a formula to a different cell, use an **absolute reference**. For example, if your formula multiples cell A5 with cell C1 (=A5*C1) and you copy the formula to another cell, both references will change. You can create an absolute reference to cell C1 by placing a dollar sign **($)** before the parts of the reference that do not change. To create an absolute reference to cell C1, for example, add dollar signs to the formula as follows:

=A5***$C$1**

We will now create a new worksheet to see how this is done.

**Exercise 1- Creating a New Workbook**
**(If you are using the toolbars)**

1. Click on the new Workbook icon (the first white rectangular icon on the top left of your toolbar).

**If you are using the menu bar**: -

- click on "File"
- select "New"
- select "Workbook"
- click the OK button in the resulting Dialogue box

2. Point the mouse pointer at the cell (intersection of a row and column) and click the left mouse button. The cell pointer moves to the cell in which you want to enter data.
3. Type data using the keyboard
4. Press the enter key

**Exercise 2 - Entering Data in a worksheet**

Jacks Enterprise employs seven sales girls (Sarah Lydia, Kate, Ann, June, Rose and Liz) who market a range of fast-moving consumer goods. You are the Company accountant and your boss requires a listing of how much money has been brought in by each salesgirl in the past week on a daily basis. Your worksheet layout will be in 2 main parts – on the row section you will put in the names of each of the girls while on the column section you will type in the days of the week. Your worksheet should look like figure 2.1 below.

Type in the following figures against the names of the sales girls: -

Sarah - 3560, 3186, 2952, 3395, 3436, 2800, 3000.
Lydia - 1200, 1000, 1500, 2300, 2000, 2500, 2200.
Kate - 5000, 5200, 2500, 1900, 1256, 4000, 3500.
Ann - 9873, 2405, 3712, 2694, 3544, 3870, 2000.
June - 4000, 4500, 3800, 4800, 4000, 4500, 4000.
Rose - 5000, 2800, 3560, 3200, 3000, 2040, 3300.
Liz - 2900, 3400, 2500, 3000, 5000, 2000, 2000.

**To save your worksheet: -**

1. Click on the **File** option in the menu bar
2. Select "**Save**"

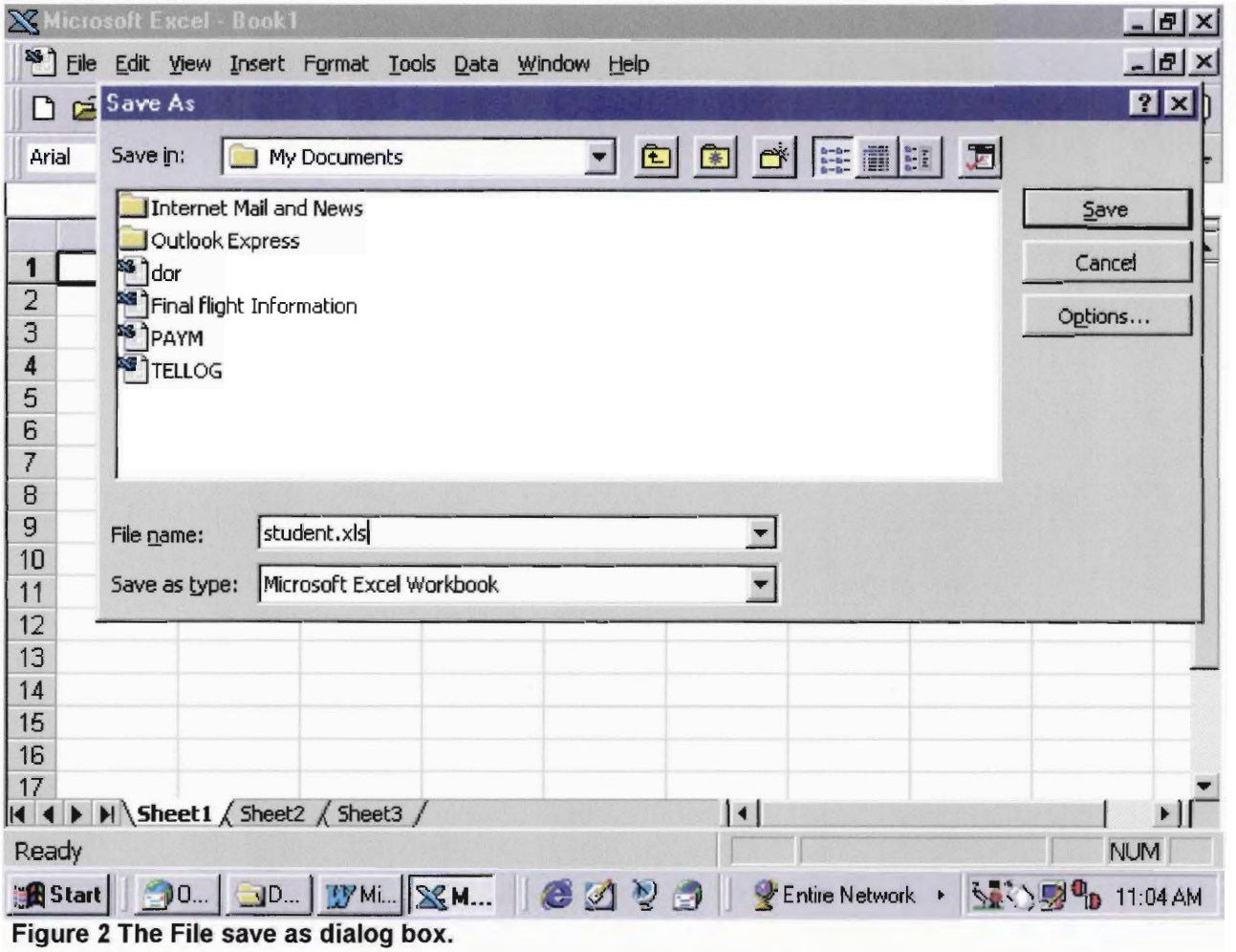



**Figure 2 The File save as dialog box.**

Type "**student.xls**" in the space after the "**Filename**" prompt in the Save as dialogue box.
Click on the **save** button

You will always **use** the "**Save As**" option when you are saving a file (not previously stored in the computer), or when you have **retrieved** a previously saved file but you want to save it in a new drive (either "A" or "C") or in another directory **within** your network environment. The save option is used when you are saving a previously saved file to the **same** drive where you opened it.

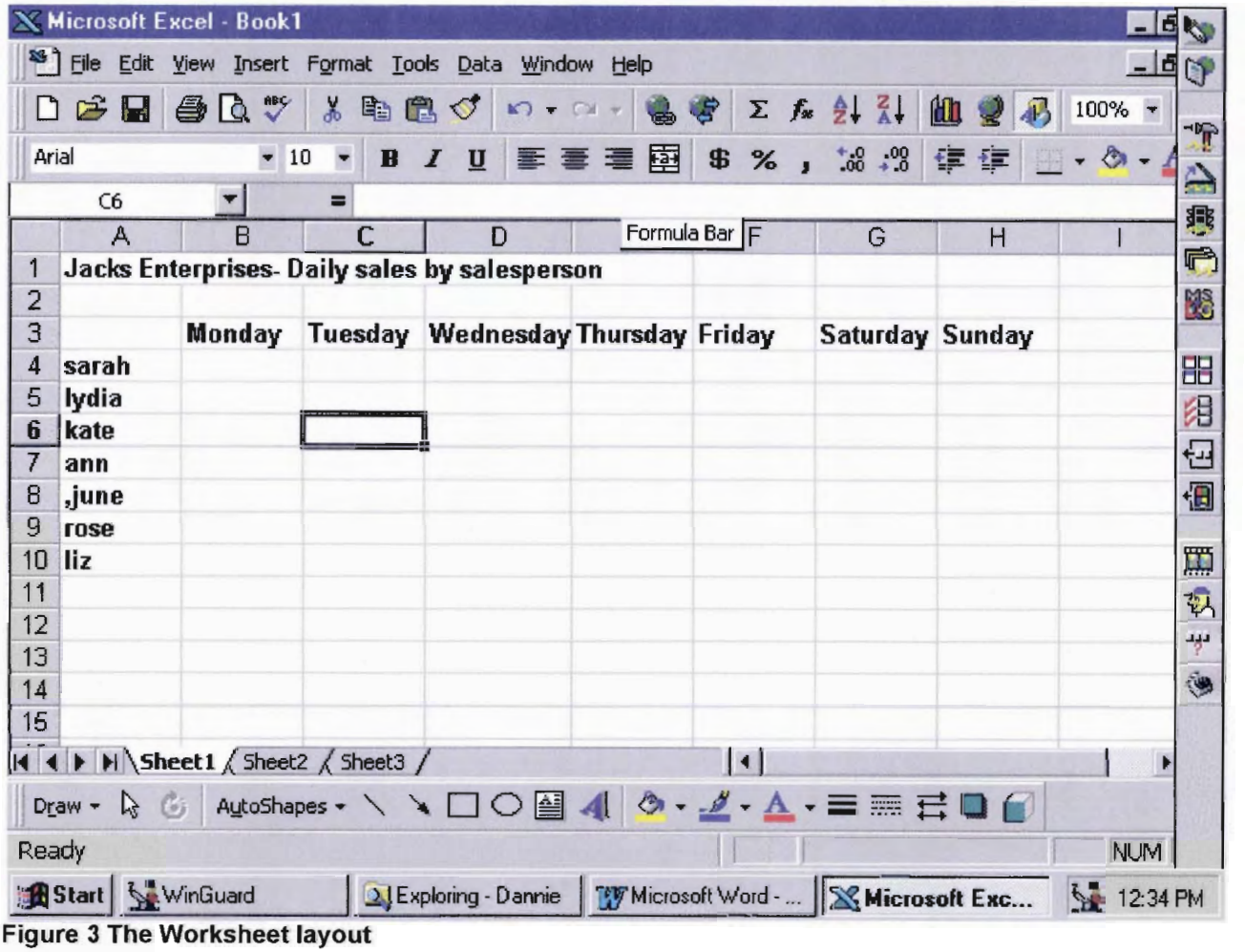



**Figure 3 The Worksheet layout**

**Chapter 3 - Editing Data in a worksheet**

Editing Data is changing aspects of your data that need to read something else.

**To edit data in a worksheet**

1. Double-click on the cell which contains the data
2. Use the left arrow or right arrow key to move the cursor (the vertical blinking line to the Position of the correction

**3a).** If you had left out a character (letter, word, Digit) just type it in. The character will be Inserted on the immediate right of the cursor

**b).** If you had typed the wrong character, you can delete it by positioning the cursor on the left of the character and pressing the delete key on the keyboard

**Editing Data on the formula Bar**

Once your data is entered, you're presented with two ways to edit your data, depending on where your cell cursor is currently located. If you want to edit the currently active cell, click on the copy of your cell's data that appears in the formula box (the blank box on the right of the formula bar), and then edit the data. If the cell with the data to be changed is not currently selected then double click on the desired cell. Your cursor will then be transformed into the shape of an "I" beam in the cell, and you'll be able to edit the data right within the cell.

**Exercise 3 - Editing Data in a worksheet**

Using the data entered in exercise 2 and following the procedure spelt out above, make the following changes: -

- Change Sarah's Daily earnings from Monday to Friday to read 3600, 3100, 3000, 3400,3400
- Change Kate's Friday earning to read 1300
- Change Ann's Daily Earnings from Monday to Saturday to read 9900, 2400, 3700, 2700, 3500, 3900

- Change Rose's Wednesday earning to read 3600 and her Saturday earning to read 2000

Save your work using the same filename. **Hint**: (select **File** on the Menu bar and click on **save**)

**Opening a saved worksheet**

You open a saved worksheet (already stored on a floppy or hard disk drive or over the network) to continue working On it if it was stored before completion or if you want to make changes on the saved file and save it again. To open a saved worksheet do the following: -

- Select **open** from the file menu
- In the file open dialog box select the drive or folder where the file is situated in the Look in drop down list as shown in figure (?.?)
- The contents of the selected drive or folder are displayed below the look in box
- Either **type** in the filename or **click** on its icon
- Click the **OK** button

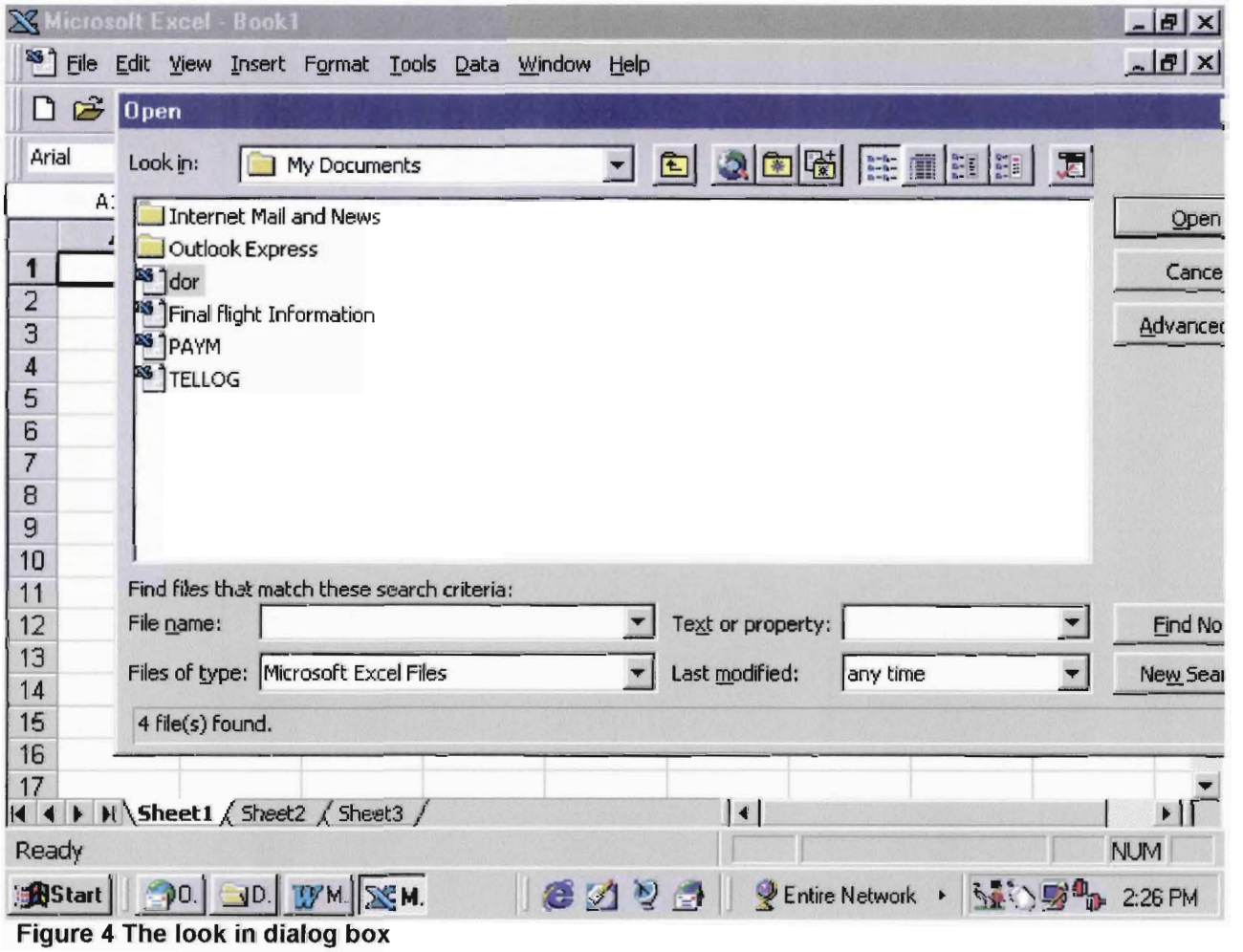



**Figure 4 The look in dialog box**

**Chapter 4- Formatting the worksheet**

We have already seen that data comes in three ways – **Numbers, Formulae** and **Text**. Excel not only makes it easy to adjust the size and appearance; it also provides you with a number of different ways to present your numerical data. You can easily control how many decimal places will be displayed in a cell, what currency formats to use within a cell or range of cells, how you want negative values to appear, fractions displayed or in what format you want date and time to appear.

When we enter numbers and text into a worksheet, labels (text) align themselves to the left side of the column while numbers align themselves to the right. If this is not desired, we can change the alignment. Too many uneven decimal places make it difficult to compare figures.

Long numbers without commas (separators) are difficult to read and a worksheet that has some figures with six decimal places, others with commas and others with no decimal places has an untidy appearance.

**Exercise 4 – How to Format numbers in a worksheet**

**1. Select the range containing the numbers whose format you want to change (In this case B4 TO H10).**
**Hint:** Click on cell B4 using the left mouse button and without releasing drag it to cell H10. Release the mouse button now. The entire range of cells in this space will be highlighted.

2. Click on the "Format" command on the menu bar click on the "Cells" option in the format cells Dialog box.

3. Click on "Number" on the number tab. Check to make sure it reads "2" at the "Decimal places" box. Click on the empty box next to the "use separator" (comma) prompt.

4. Click the "OK" button at the bottom of the dialog box. Your worksheet should now be formatted to 2 decimal places and commas placed at the appropriate places.

**Standard and Custom Number formats**
Standard and Custom formats refer to the way you may want your data to appear on your worksheet. If you click on the format option of the menu bar and click on numbers, you will notice a list of number formats that excel provides. These are called Standard number formats. Often you will realize that none of these built-in formats display your choice of data the way you want it. Excel allows you to create custom number, date and time formats. To do this choose the custom option from the left-hand side of the dialog box. Choose your own format in the text box

**Formatting Dates in Excel**
Excel allows you to display Dates in a variety of formats. Normally, you can just enter a date or time in the same way you'd enter other data in a worksheet. For dates, use the numbers or month names combined with hyphens or slashes. (E.g., 10-23-98 or 10/23/98 or October 23, 1998). If you need to use a specific standard format, you can choose from the format cells dialog box under Date. If you want a custom one Select Custom and type it in.

**Exercise 5 - Formatting date Using the Standard method**

**Using the worksheet, you have so far created (student.xls) insert a date in cell H1 by doing the following: -**

1. Type "12/05/98" and press enter
2. Click on the **Format** command on the menu bar and select **Cells**
3. Click on **Date** category within the number tab and select the format that displays **4-Mar-97** (the displayed dates may vary from computer to computer). This gives you the standard format of date, month, and year. (d,mmm,yy).
4. Click on "**OK**." Your date should be displayed now.

Sometimes the date format cause more confusion than they are able to solve. Take for example a date format like 03/04/97. This could mean "3rd April 1997"in the British date system. It could also mean "April 4th 1997" using the American format. You must therefore ensure your date formats are not confusing as to be interpreted ambiguously.

**Exercise 6 - Formatting date using the Custom method**

1. Type "12/05/98" and press enter
2. Click on the **Format** command on the menu bar and select **Cells**
3. Click on **Custom** category within the Number tab and select the format that displays **d-mmm-yy** .This gives you the Custom format of date, month, and year
4. Click on "**OK**." Your date should be displayed now.

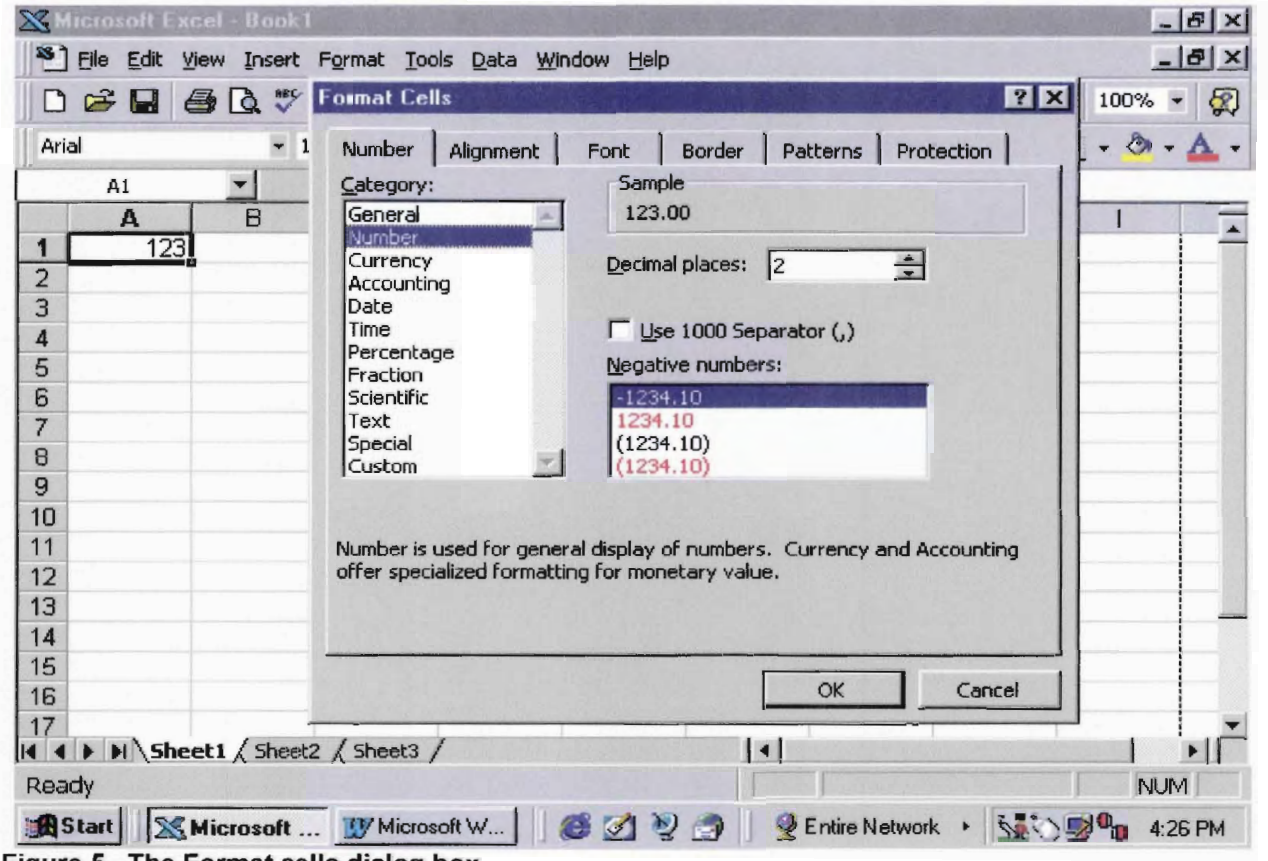



**Figure 5 - The Format cells dialog box**

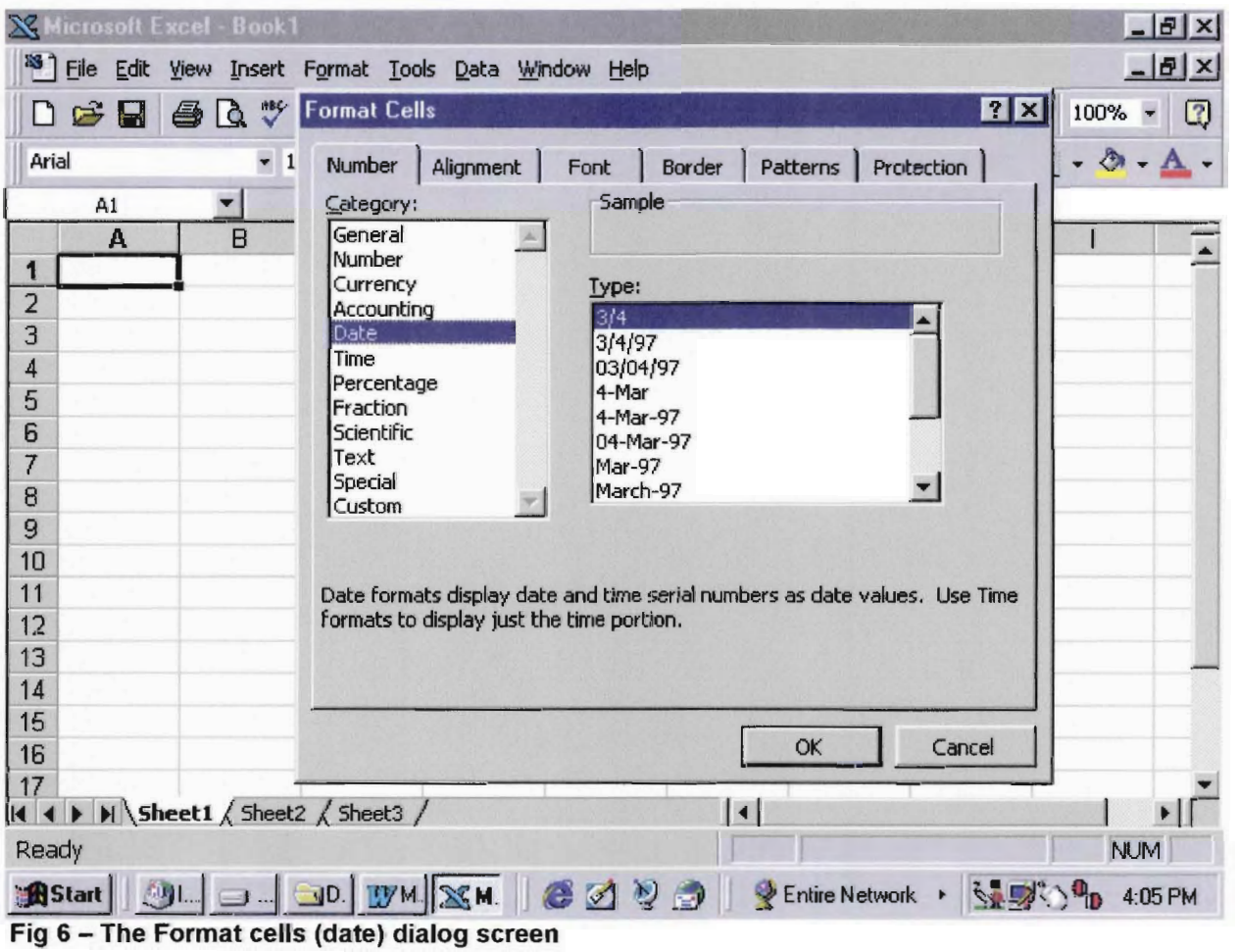



**Fig 6 – The Format cells (date) dialog screen**

**Exercise 7- Formatting Numbers Using the Standard method**

Click on **Sheet2** and retype all the work you have already done on **sheet1** including functional formulae (if any), make sure all earnings made by Kate during the entire week are preceded by a minus (-) sign (e.g. –5000, -5200 etc.) and do the following: -

1. Highlight the entire range of values and formulae (**B4:I10**)
2. Click on the **Format** command on the menu bar and select **Cells**
3. Click on **Number** category within the Number tab and select the following:
   - Click on the down arrow key to select zero ("**0**") decimal places
   - Click inside the blank white box next to the 'Use 1000 separator (,)' to activate it. A tick should appear
   - Click on the format that displays **(1234)**
   - Click on "**OK**"

**Exercise 8 - Formatting Numbers Using the Custom method**

Using the same worksheet as in Exercise above do the following:

1. Highlight the entire range of values and formulae (**B4:I10**)
2. Click on the **Format** command on the menu bar and select **Cells**
3. Click on **Custom** category within the Number tab and select the following:
   - Click on the up arrow key to select two "**2**" decimal places
   - Click on the format that displays **#,##0.00);[Red](#,##0.00)**
   - On the "**Type**" bar above the type display, Highlight all the contents before the **(#,##0.00)** and press **Delete**
   - Click on "**OK**"

Your Tutor will explain the details of this and the previous number display.
Your worksheet is now formatted to 2 decimal places with a separator for every thousandth mark and brackets for any negative figures (Called credits in accounting terms).

**Chapter 5 - Inserting formulae in your worksheet**

Formulae are used to tell Excel how we want a particular value to be computed. If you don't use formulae, there will be no automatic recalculation when any of your figures change. Formulae in excel can refer to the cell addresses (e.g. B4, I7, H3 etc) or the actual values in the said cell addresses. Before you enter a formula take, the following issues to account: -

1. Decide on what you want to be calculated
2. Note down what values in the worksheet are to be involved in the calculation
3. Write down how these values would yield the calculated values(the formula)
4. Substitute these values with their cell references
5. Type the formula in the cell where you want the calculated value starting with the "equals" (=) sign. Excel uses this sign to differentiate between a label (text) and a formula (e.g. the "=SUM" formula which is inserted whenever we click on the AutoSum Button).
6. Press the enter key. Excel immediately calculates and shows the result in the cell, while the formula is displayed in the formula bar.

**Using the Function Wizard's Magic Formulas**

If you want full access to Excel's dizzying variety of functions but don't want to memorize them all, you can trot out Excel's function wizard to help you plug functions into your formulas. The function wizard steps you through the whole process by allowing you to decide what functions you want to use in a formula and what worksheet values you want to perform the operation on. To let the function wizard give you a helping hand, click on the **Insert** command on the menu bar, and then choose **Function** from the pull-down menu. You will then see this dialog box open:

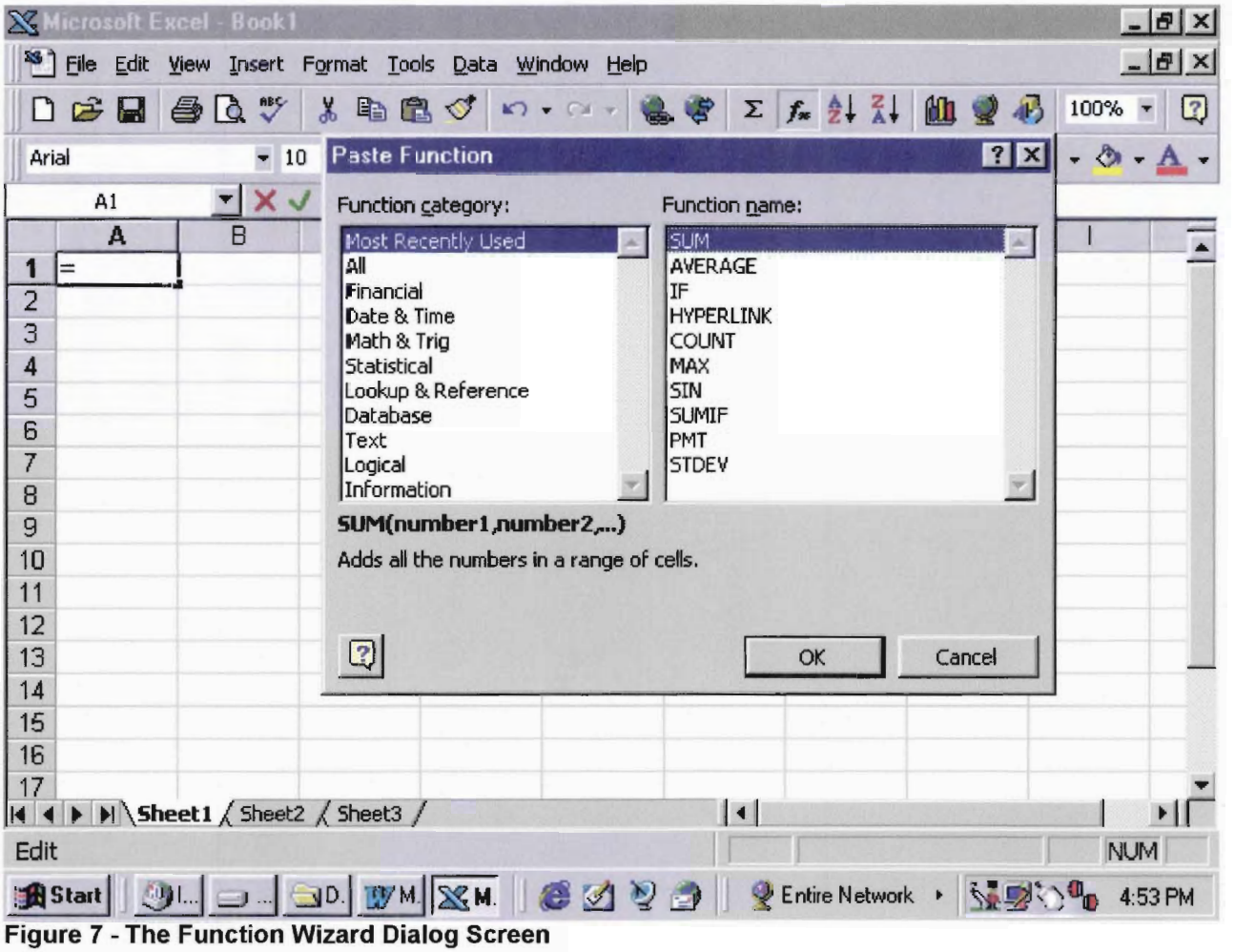



**Figure 7 - The Function Wizard Dialog Screen**

**Exercise 9 - Inserting formulae in a worksheet**
**Method 1 – Manual- using cell addresses**

- At cell I4 Type **"+B4+C4+D4+E4+F4+G4+H4"** and press the **enter** key. These series of additions should give you the actual total of all these values put together

- At cells I5, I6, I7, I8, I9, I10 repeat the same procedure as in the above example.

**Method 2 – Manual- using cell contents (values)**

- At cell I4 Type **"+3600+3100+3000+3400+3400+2800+3000"** and press the **enter** key. These series of additions should give you the actual total of all these values put together

- At cells I5, I6, I7, I8, I9, I10 repeat the same procedure as in the above example.

**Method 3 – Using the AutoSum button**

1. At cell **B11** Type **"=SUM (**" and using the mouse click on cell **B4**. Use the down arrow key (↓) to come down to cell **B10**.close the bracket (this is called an argument) and press the **enter** key. These should give you the actual total of all these values put together

**Hint:** Note that you should not include spaces either before or after the brackets (parenthesis).

2. At cells C11, D11, E11, F11, G11, H11 repeat the same procedure as in the above example.
3. Highlight all the formulae entered on row and column basis and press the delete key. In each of the formula fields click on the AutoSum button (your tutor will show you) and see how easy the toolbar makes things easy.

Repeat the delete procedure as in the first part of (3) above.

## Chapter 6 - Copying Data in a worksheet.

One of the most flexible things about Excel is its ability to share data within itself and with other programs. It uses a method called **O**bject **L**inking and **E**mbedding (OLE, for short.... which is different from the "Ole' " that you shout after eating spicy Mexican food!). This method allows you to link or move objects such as formulas, charts, cells, whole worksheets, or even entire files from excel to any other program, which supports the OLE standard. When copying data in whatever form select (highlight) the data to be copied with your mouse. Once you do this click on the **Edit, Copy** Command, move to the desired location and click on the **Edit, Paste** command.

### Copying Formulae in a worksheet

Copying formulae is necessary especially in a large worksheet in order to reduce the effort and time taken to insert similar formulae in subsequent cells. You will notice in the above example you are dealing with the same formula but you have to keep retyping every other time. Copying the formula to the other subsequent cells can save you time in this respect. Spreadsheets understand a formula relative to the cell in which the formula has been placed. For example in our worksheet a formula, "=B4+B5+B6+B7+B8+B9+B10" in cell B11 is understood as, "add the contents of the top seven cells above and show the result in B11. If you copied the formula from B11 to C11 it would use the same interpretation and show the result this time in cell C11. This is called **Relative referencing** or Relative Addressing.

### Exercise 10 – Copying Formulae in a worksheet

**Method 1**

1. Enter the formula in the first cell where it is necessary
2. Select the range starting with the cell containing the formula and covering all the cells in which we want similar formulae to be copied to
3. In the **Edit** Menu, the **Fill** submenu has Up, Down, Left and Right as some of the options. Select one of them as appropriate

**Method 2**

1. Enter the formula in the first cell where it is necessary
2. Select the range starting with the cell containing the formula and click on the "Copy" command
3. Select the range to copy to and click on the "Paste" command

### Exercise 11 – Copying Data in a worksheet

**Using the workbook "Student.xls" do the following: -**

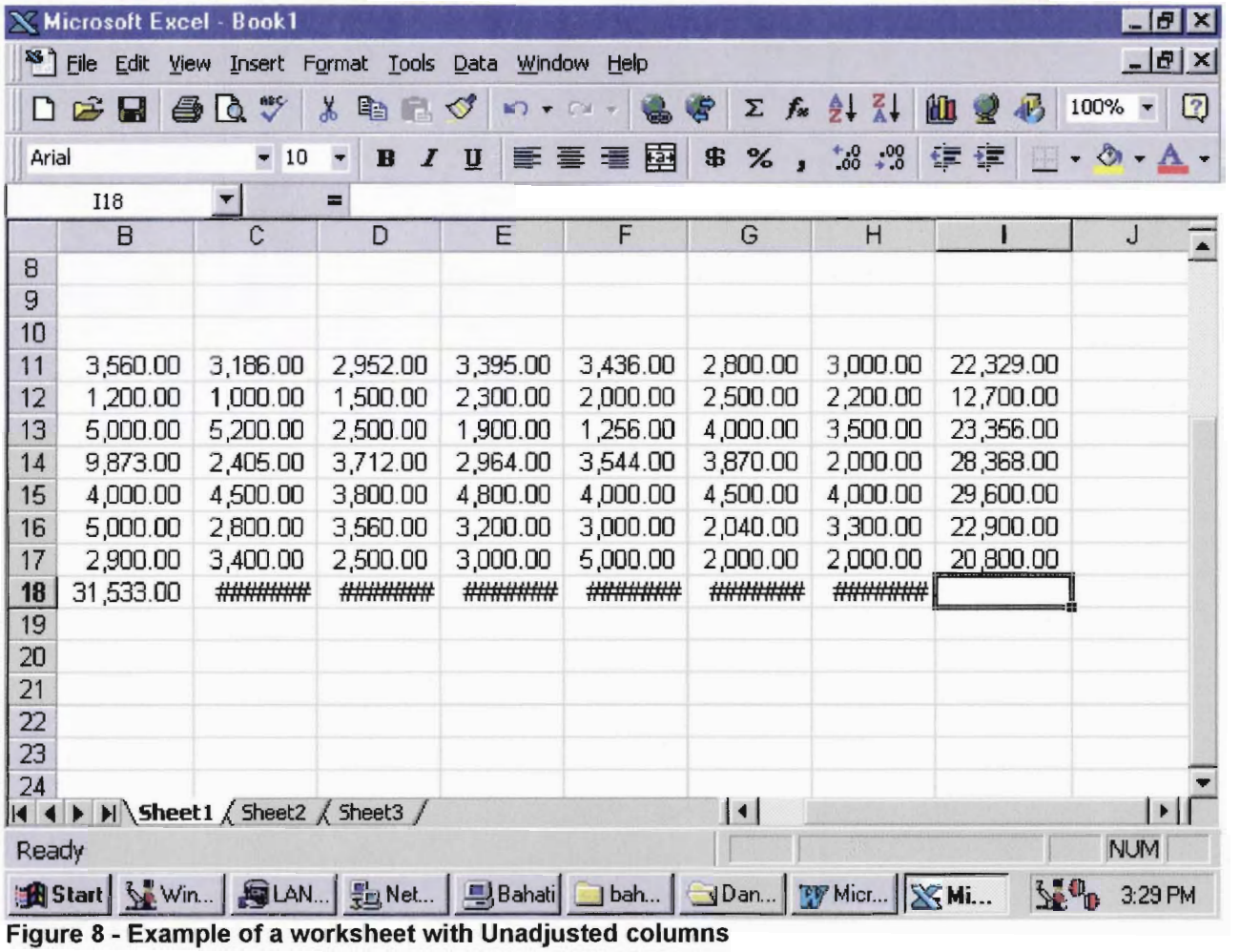
1. Highlight the range of data from (**B4:H10**)
2. Click on the **Edit** menu and select the **Copy** option
3. Click on cell B13
4. Click on the **Edit** menu and select the **Paste** option

## Chapter 7 – Columns and Rows in your worksheet

More often than not, the data in your worksheet will not be displayed as you initially typed it in. A fitting example would be a situation where you have typed data that spills onto the next column. This data would appear truncated once you type in new data in the blank column. Sometimes you will need an extra Column or Row right in the middle of your worksheet, while there may be chances where some Columns and Rows may render themselves redundant prompting your deleting them. This chapter discusses these aspects.

### Adjusting Column Width

Adjusting column width is necessary in order to see the cell contents when an entry exceeds the width of the cell and overflows into the next column that also contains an entry.




| | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | 3,560.00 | 3,186.00 | 2,952.00 | 3,395.00 | 3,436.00 | 2,800.00 | 3,000.00 | 22,329.00 | |
| 12 | 1,200.00 | 1,000.00 | 1,500.00 | 2,300.00 | 2,000.00 | 2,500.00 | 2,200.00 | 12,700.00 | |
| 13 | 5,000.00 | 5,200.00 | 2,500.00 | 1,900.00 | 1,256.00 | 4,000.00 | 3,500.00 | 23,356.00 | |
| 14 | 9,873.00 | 2,405.00 | 3,712.00 | 2,964.00 | 3,544.00 | 3,870.00 | 2,000.00 | 28,368.00 | |
| 15 | 4,000.00 | 4,500.00 | 3,800.00 | 4,800.00 | 4,000.00 | 4,500.00 | 4,000.00 | 29,600.00 | |
| 16 | 5,000.00 | 2,800.00 | 3,560.00 | 3,200.00 | 3,000.00 | 2,040.00 | 3,300.00 | 22,900.00 | |
| 17 | 2,900.00 | 3,400.00 | 2,500.00 | 3,000.00 | 5,000.00 | 2,000.00 | 2,000.00 | 20,800.00 | |
| 18 | 31,533.00 | ######## | ######## | ######## | ######## | ######## | ######## | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

**Figure 8 - Example of a worksheet with Unadjusted columns**

**To adjust columns do the following: -**

1. Position the mouse pointer at the right boundary of the column header so that the shape changes to a cross.
2. Double click. This will adjust the column width automatically so that the widest entry in the column just fits. This is normally called the "Best Fit" method.
3. If you are not satisfied with the results of the "best fit" method, modify the width by performing step one above then dragging the column edge while holding down the left mouse button until you have the desired width.

**To adjust Rows do the following: -**

1. Position the mouse pointer at the top boundary of the Row number so that the shape changes to a cross.
2. Double click. This will adjust the Row height automatically so that the tallest entry in the Row just fits. This is normally called the "Best Fit" method.
3. If you are not satisfied with the results of the "best fit" method, modify the height by performing step one above then dragging the row edge while holding down the left mouse button until you have the desired height.

**Inserting Rows and Columns**

You insert rows and columns in order to add information in a worksheet between already existing rows and columns. This may be necessary to do when some items which were not anticipated earlier, are now required to be inserted.

**Inserting Rows and Columns.**

1. Point at the column/row header just before which you want the column/row to appear (i.e. to insert a column between column A and B, click on the column header for column B. To insert a row between rows 9 and 10, click row header 10.

2. Select Rows or Columns from the insert menu to insert a row or column respectively

**Deleting Rows and Columns.**

1. Select the number of rows or columns you want to delete. (If more than one select using the left mouse button in combination with the shift key.
2. Perform step 2 above but this time select the Delete option

You could still save more time doing the above by using the shortcut menu facility in excel. This involves: -

1. Selecting the Rows/ Columns you want to Insert or delete using the left mouse button.
2. Clicking on the right mouse button and selecting the desired option

**Exercise12 - Inserting and Deleting Rows and Columns**

Using each of the method specified above: -

a). Insert a blank row between row 9 and 10
b). Insert a blank column between column E and F
c). Delete the blank row created in a). above
d). Delete the blank Column created in b). above

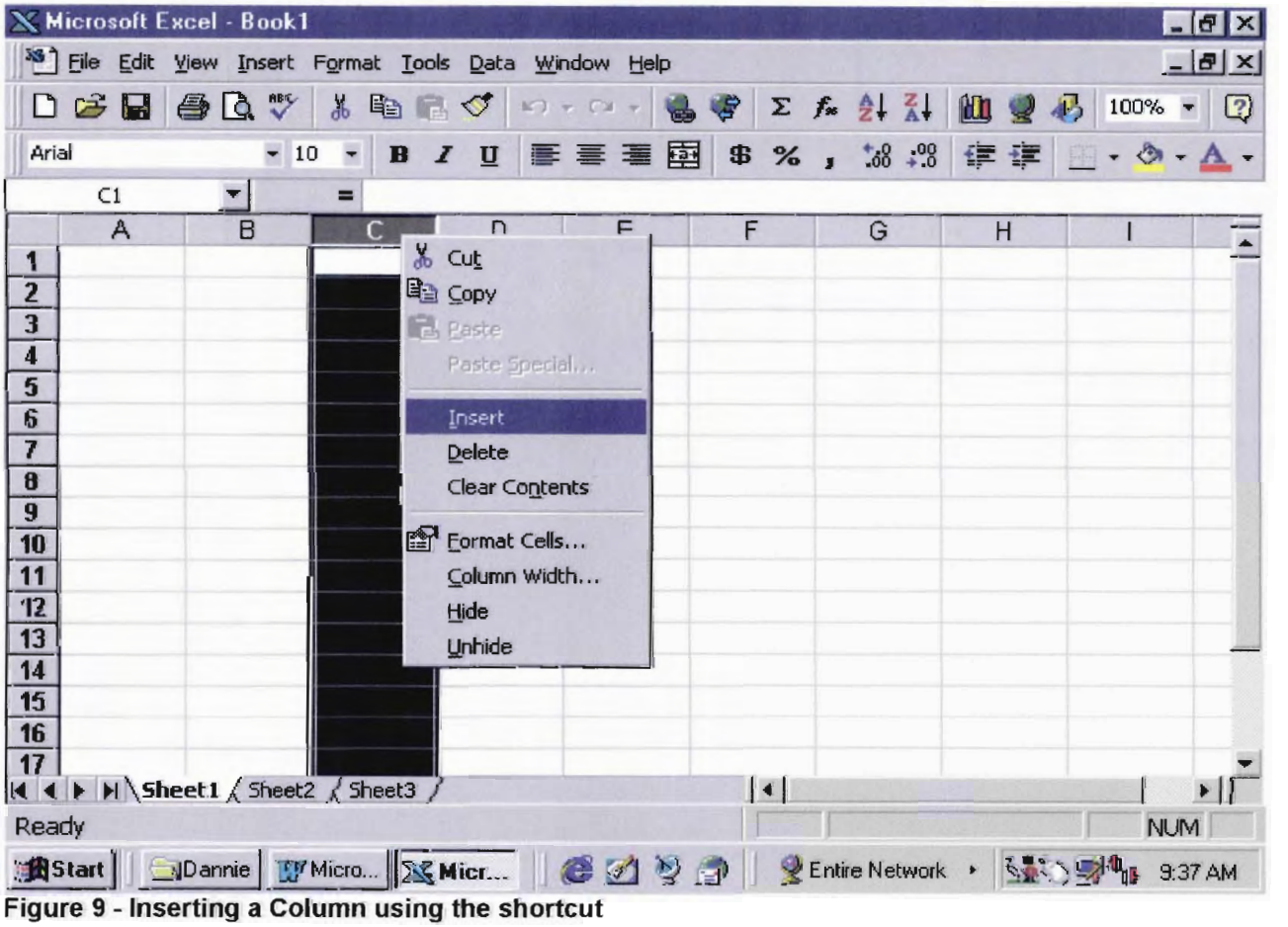



**Figure 9 - Inserting a Column using the shortcut**

**Chapter 8 - Moving data in your worksheet**

The process of moving data in your worksheet just like the copying option involves the specification of two important addresses; Namely the **Move From** address and the **Move to** address. The difference between the move and copy operations however is that whereas in copy you will have the copied data shown in two physical locations within your worksheet for instance, in the Move option the data moved will only appear where it has been moved to leaving a blank space where it was moved from. To Move data follow the following Procedure: -

1. Select the data you want to move (This will be your "Move From" address)
2. Select the **Edit** menu option the "**Cut**" command
3. Select the place to move to and using the **Edit** menu option, click on the "**Paste**" command

**Exercise 13 – Copying Data in a worksheet**

**Using the workbook "Student.xls" do the following: -**

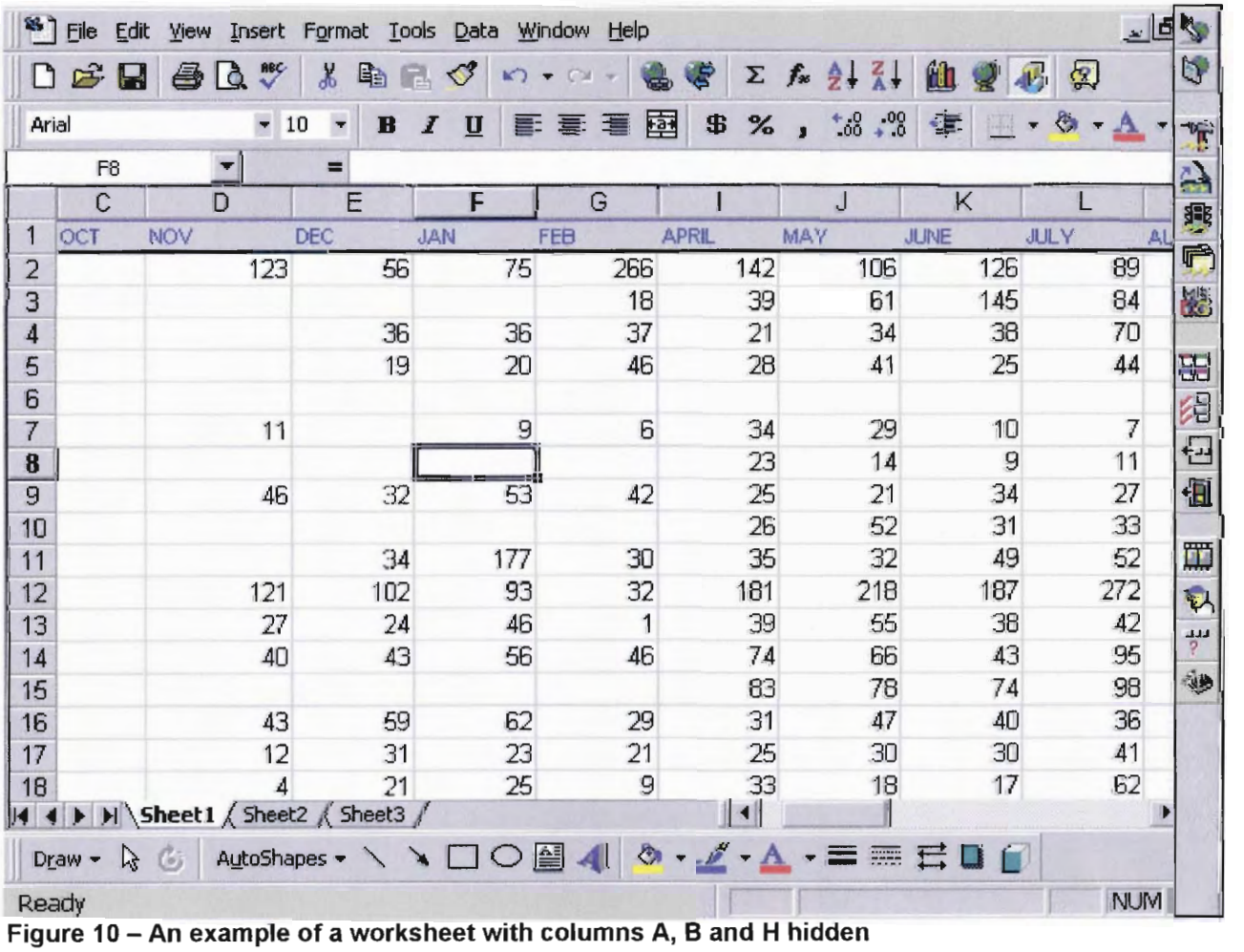
1. Highlight the range of data from (**B4:H10**)
2. Click on the **Edit** menu and select the **Cut** option
3. Click on cell A1 in **Sheet3**
4. Click on the **Edit** menu and select the **Paste** option

**Hiding Columns and Rows**

You can hide columns and rows if the worksheet cannot fit. To do this: -
1. Click on the row number or column letter
2. Select "***Format***" and select either "***Row***" or "***Column***" and click on "***Hide***"

Kindly note that a hidden Row or Column will not be displayed when printing. You have to unhide the row or column prior to printing so that its contents may be displayed. To unhide rows and columns: -

1. Repeat step 1 as in hiding rows and columns above
2. Repeat step 2 as in hiding rows and columns but this time instead of clicking on "Hide" click on "Unhide"




| | C | D | E | F | G | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|
| 1 | OCT | NOV | DEC | JAN | FEB | APRIL | MAY | JUNE | JULY |
| 2 | | 123 | 56 | 75 | 266 | 142 | 106 | 126 | 89 |
| 3 | | | | | 18 | 39 | 61 | 145 | 84 |
| 4 | | | 36 | 36 | 37 | 21 | 34 | 38 | 70 |
| 5 | | | 19 | 20 | 46 | 28 | 41 | 25 | 44 |
| 6 | | | | | | | | | |
| 7 | | 11 | | 9 | 6 | 34 | 29 | 10 | 7 |
| 8 | | | | | | 23 | 14 | 9 | 11 |
| 9 | | 46 | 32 | 53 | 42 | 25 | 21 | 34 | 27 |
| 10 | | | | | | 26 | 52 | 31 | 33 |
| 11 | | | 34 | 177 | 30 | 35 | 32 | 49 | 52 |
| 12 | | 121 | 102 | 93 | 32 | 181 | 218 | 187 | 272 |
| 13 | | 27 | 24 | 46 | 1 | 39 | 55 | 38 | 42 |
| 14 | | 40 | 43 | 56 | 46 | 74 | 66 | 43 | 95 |
| 15 | | | | | | 83 | 78 | 74 | 98 |
| 16 | | 43 | 59 | 62 | 29 | 31 | 47 | 40 | 36 |
| 17 | | 12 | 31 | 23 | 21 | 25 | 30 | 30 | 41 |
| 18 | | 4 | 21 | 25 | 9 | 33 | 18 | 17 | 62 |

**Figure 10 – An example of a worksheet with columns A, B and H hidden**

**Chapter 9 - Printing your work – (Using the File, Print command)**

You have now run all of those calculations and re-calculations and your worksheet is formatted to your satisfaction. What may be left now is to get a printout (or in computer terms make a hard copy) of your work.
If you are wondering what that worksheet will look like when you finally get it printed out on paper, just choose the ***File, Print preview*** command. Excel will open a special screen that graphically shows how your printout will look like after printing. This is a very handy function especially with regard to checking your margins, page breaks, or pasted-in graphs, charts or pictures to make sure that everything is looking sharp before you put your printer to work. Excel contributes to your office stationery savings because the print preview habit helps save paper since you see anomalies long before they are printed.

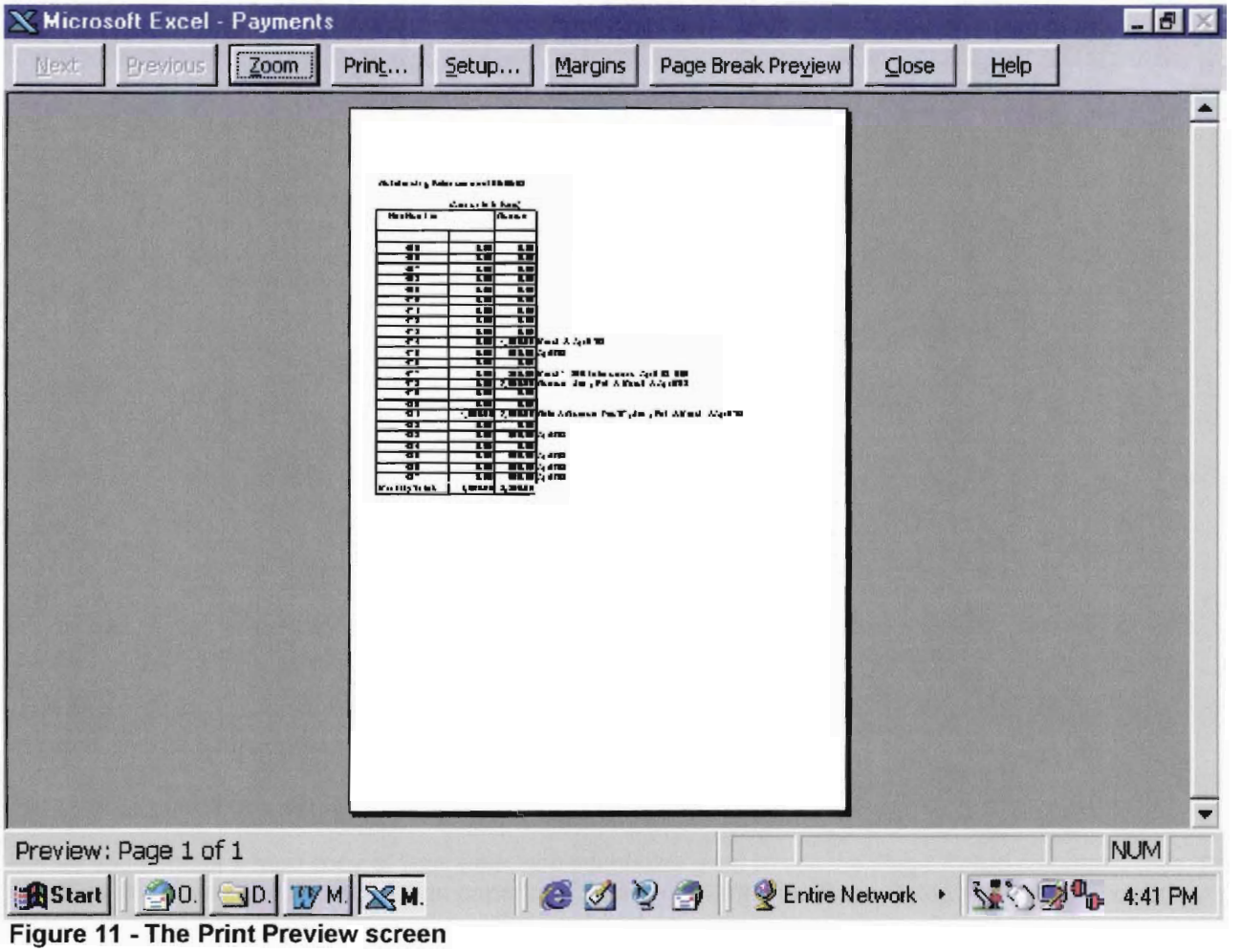


**Figure 11 - The Print Preview screen**

When you select the "**File, print**" command on the menu bar, the Print dialog box appears. This box allows you to choose several things among them: -

- Choose a printer (if your computer is able to access and use more than one printer) NB:There is always, at any given time, a default printer, which your computer must print to when the print command is issued. You can only change the printer if you want to use another printer other than the default printer.
- Specify how many copies of the worksheet you want to print
- Specify whether to print the entire worksheet(this excel does by default), just certain pages or you want to print a particular range of cells or selection (Termed Print area)

If you just want to print one copy of your entire spreadsheet, then click on the print button (the one displaying the icon of a printer) rather than going through all the hassle of choosing the ***File Print*** command. The Print button will start printing out one copy of your worksheet using the default printer settings.

The ***Print Area*** command allows you to print out a specific portion of an entire worksheet. When you move your mouse over this command, a sub-menu will appear: choose ***Set Print area*** to specify what range of cells you'd like to print out or choose ***Clear print area*** to de-select this range of cells from your worksheet.

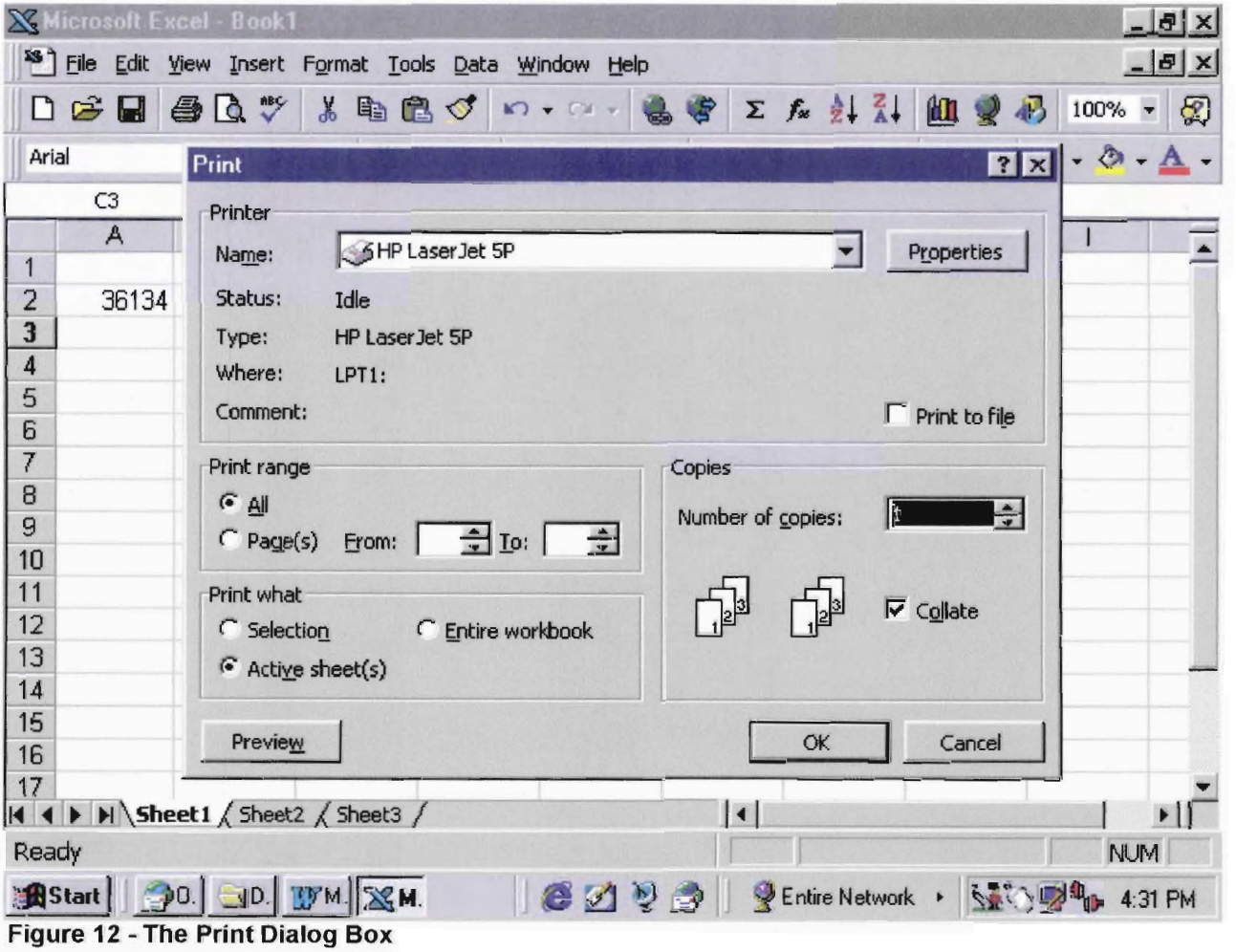


**Figure 12 - The Print Dialog Box**

**Formatting your Print job**

Before you printout a hard copy of your work, you'll probably want to use the ***Page Setup*** command (File, Page setup) to make sure that it prints out on paper exactly as you want it to. Page Setup allows you to customize your printjob in a variety of ways e.g.: -

1. Adjust Page Margins
2. Decide on whether to Print Portrait (straight up) or Landscape (sideways) mode
3. Set (change if need be) paper size
4. Change scaling percentage ( reduce or increase the general font size to fit in your page(s)
5. Format headers and Footers (Text to appear at the top or bottom of every page)
6. Print with specific rows appearing at the top of every page
7. Print with specific columns appearing at the left of every page
8. Print with specific row and column headings on every page
9. Print with worksheet gridlines appearing on every page

You only need to click on the tab of the area you want to adjust, and click the "**OK**" button when ready for the printer to print your sheet.

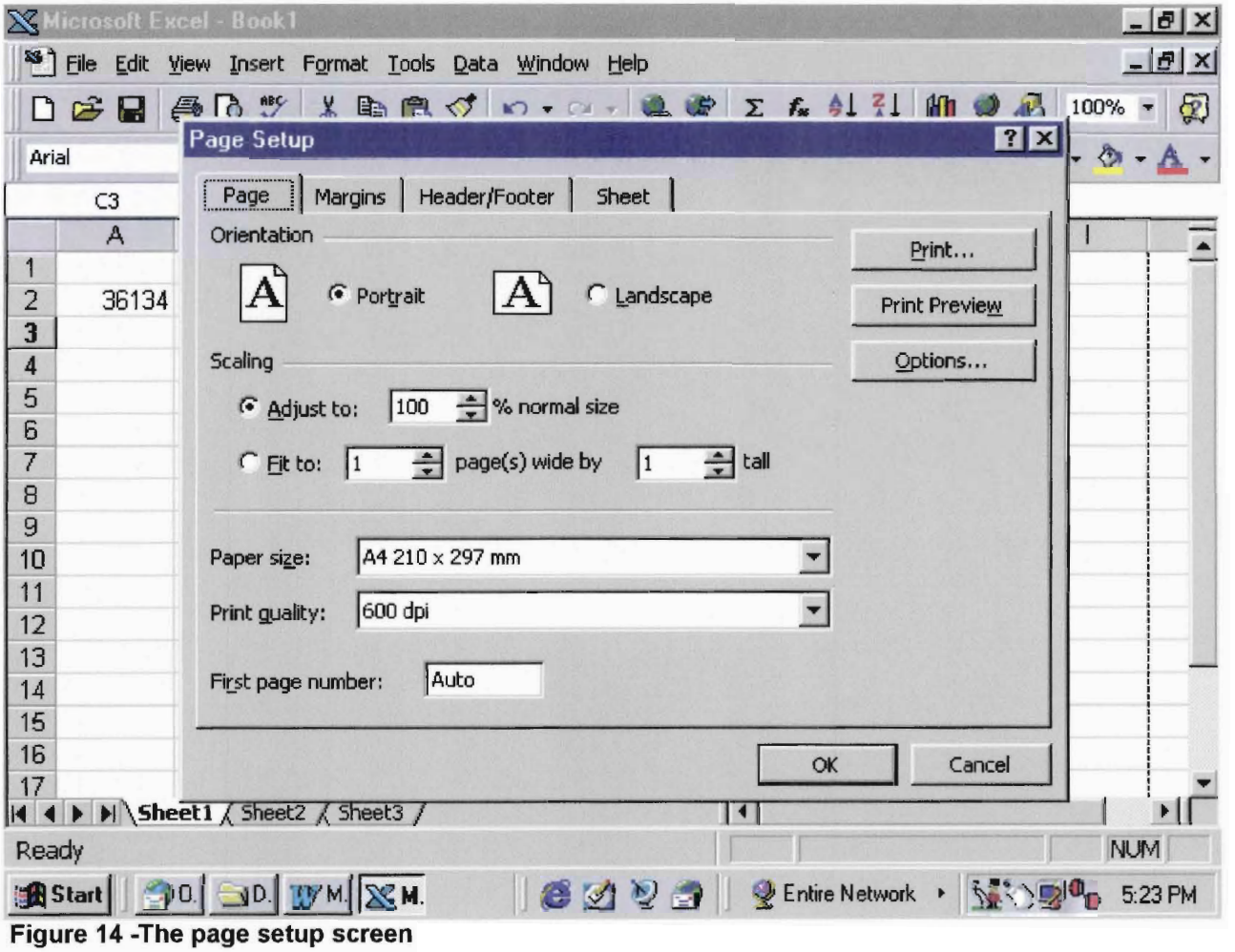


**Figure 14 -The page setup screen**

## Chapter 10 - Saving your file

Your worksheet has now been printed, but you may need to refer to it in the near or distant future. It may happen that this is a file you need to update regularly (maybe daily, weekly, monthly or even yearly). In order to be able to access it you need to save it on diskette or (Hard) disk by using the ***File save*** command. Be sure to save your files as frequently as possible. This way you can rest assured that a system crash or some other disaster won't result in data loss. Be aware, though, that each time you save a file, it automatically overwrites the previous saved version of the file.

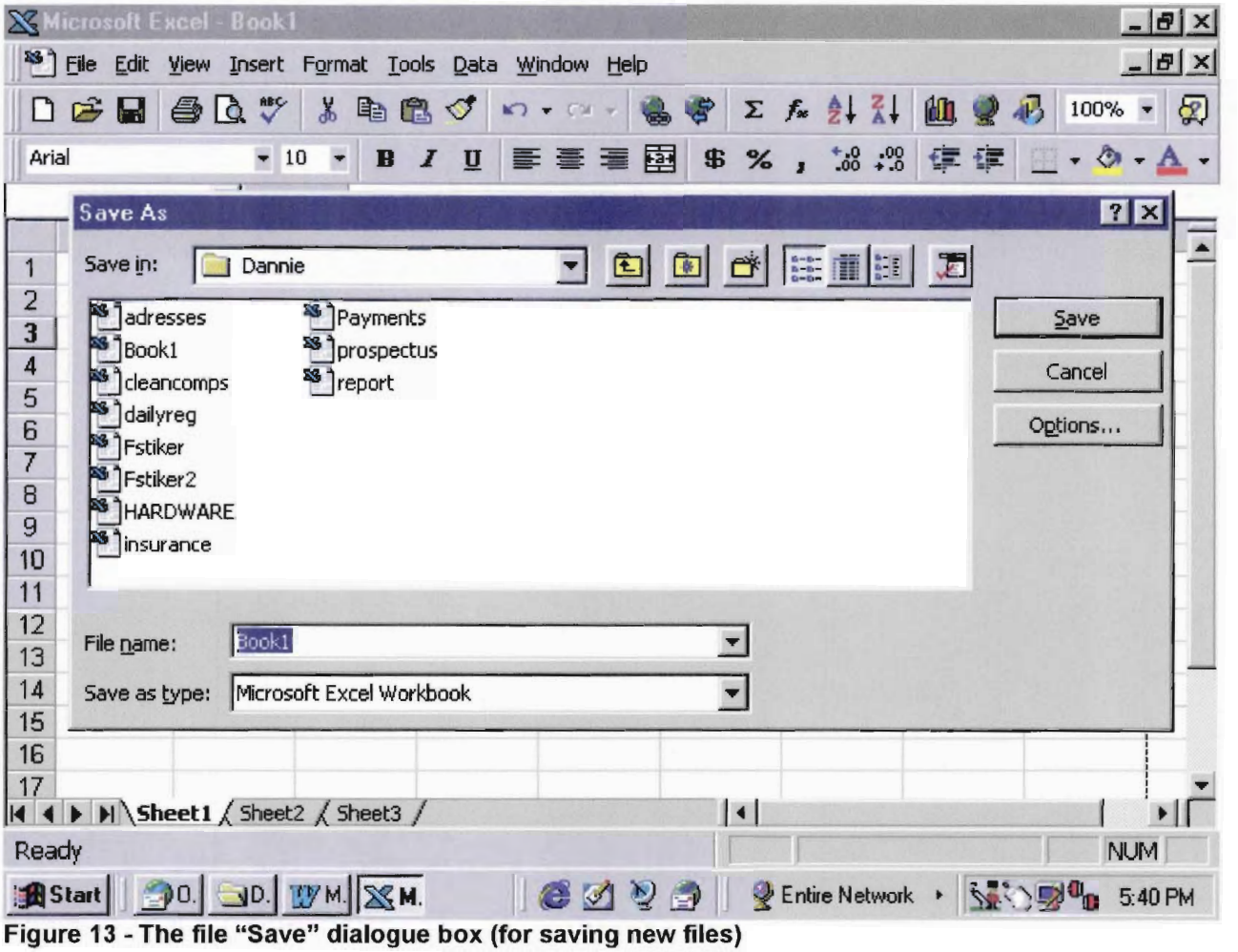


**Figure 13 - The file "Save" dialogue box (for saving new files)**

## Creating and Using Charts in Excel

When you create graphs in Excel, you have a choice about where to put them. You can place your chart in the worksheet with the data that you have used to generate the chart; when you do this the chart becomes a "**chart object**". On the other hand, you can put the chart on its own separate sheet, which is known as a "**chart sheet**". Excel offers you a wide selection of chart types. Each type is particularly suited to represent certain types of data clearly. If you want to represent a trend for example, a line chart will be most suitable for your needs. If you are comparing two sets of results, then you'll probably want to use some sort of bar chart. And not only must you decide what type of chart you want to use (bar, line, area, etc) You'll have to decide whether the presentation of your data is clearer using 2-D (2 dimensional) or 3-D (3 dimensional) charts

### 2-D and 3-D Charts

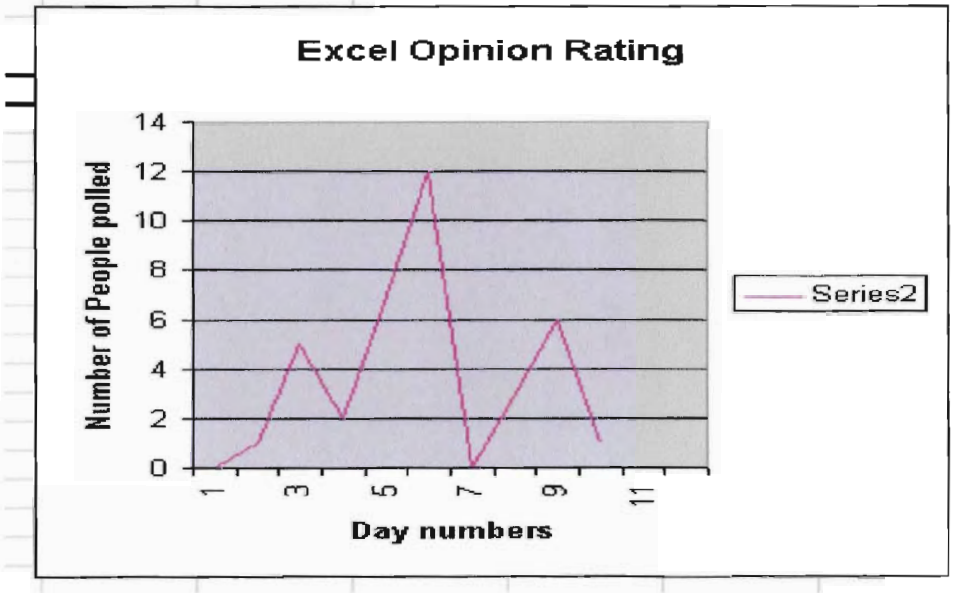
You can use two different categories of charts in Excel: 2-D or 3-D.2-D charts are two-dimensional (flat) representations of your data. They create a simple and direct impression. Use them for fairly straightforward presentations, when the data you're representing is not all that coomplicated.3-D charts create the illusion of three-dimensionality and look much slicker than 2-

D charts. Sometimes however a 3-D chart can make certain types of complicated data much clearer than a 2-D chart.

**Types of charts available in Excel**

**1. Line Chart**

A line Chart maps a tendency in your data over time. This type of chart is particularly well-suited to showing whether something is showing a trend toward increasing or decreasing. For example, a line chart could help you to find out whether or not the value of a particular stock is on rise or heading for a crash.



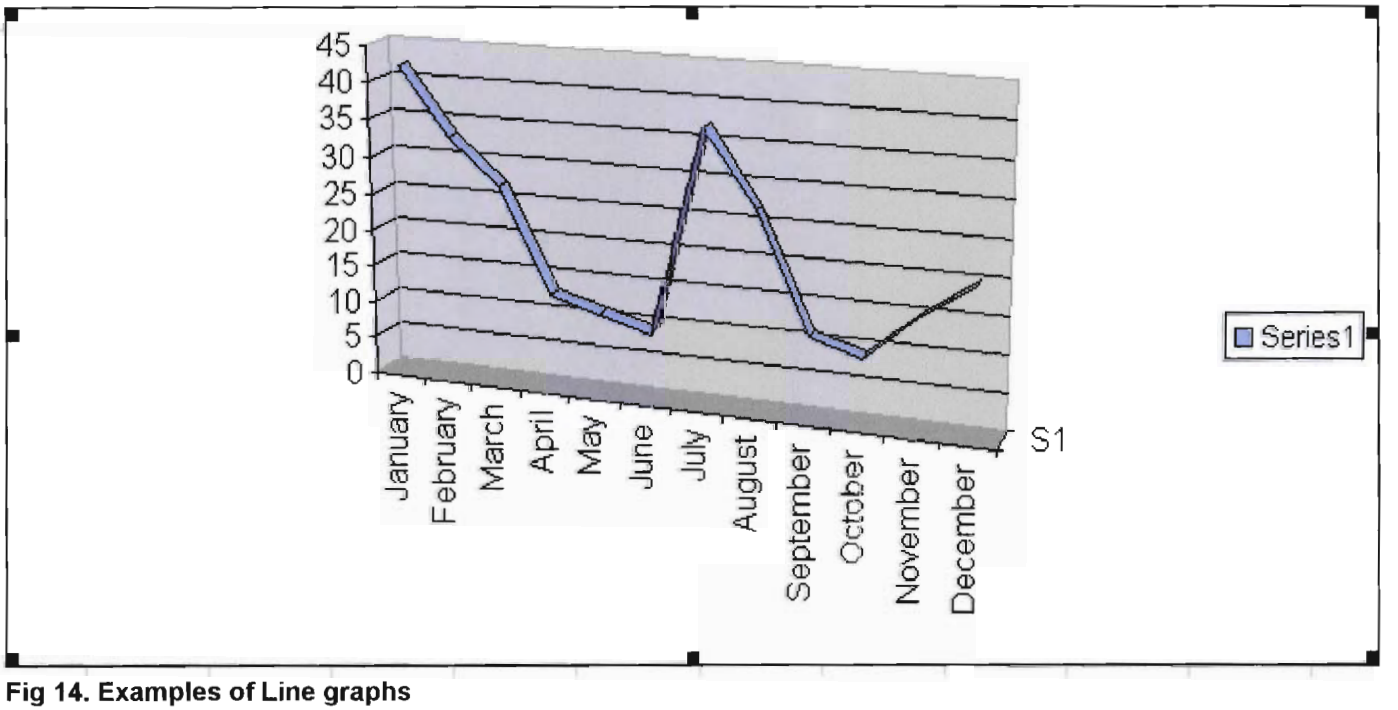
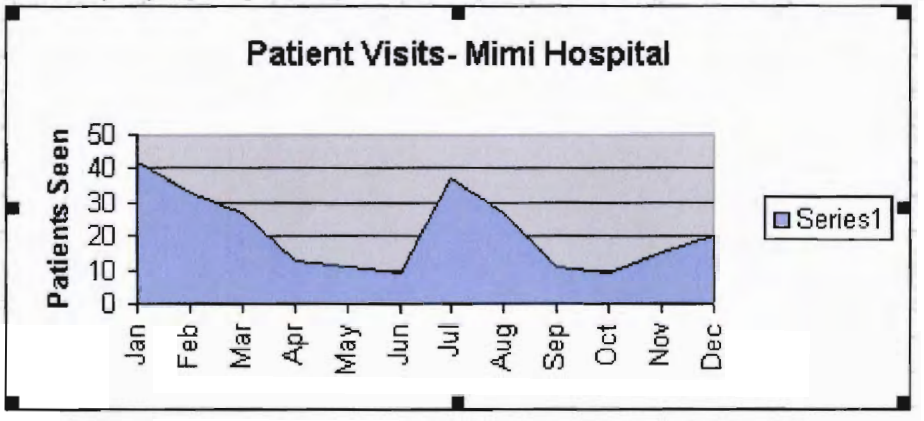




**Fig 14. Examples of Line graphs**

**Area Charts**

An area chart is very similar to line chart; it's good at showing trends over time though to its credit it goes one step further by highlighting the importance of particular data points in relation to other data points on the same chart.



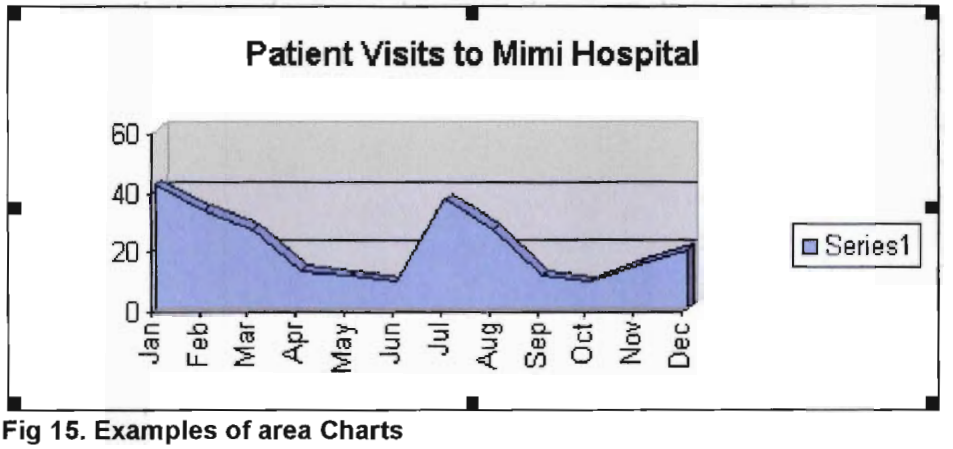
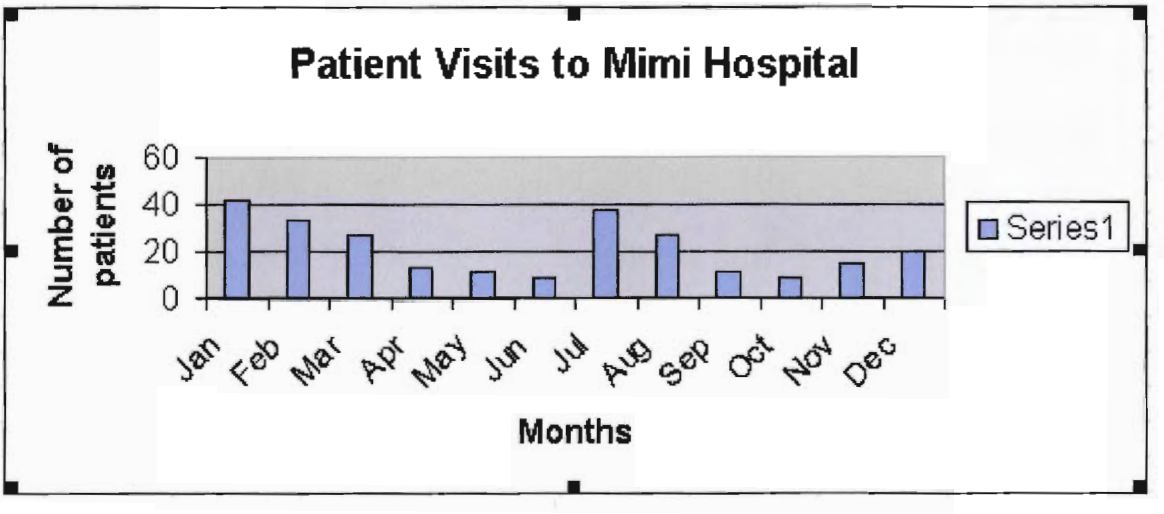




**Fig 15. Examples of area Charts**

**Bar Charts**

Bar charts are more suited for comparing individual data values. You can use them to compare the speed of one computer to another for instance.



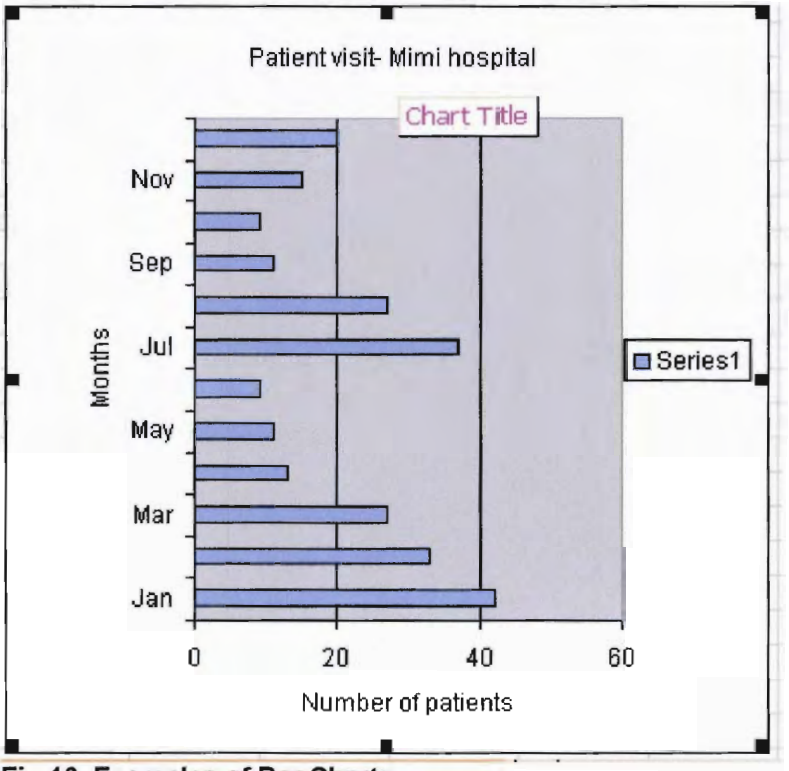



**Fig 16. Examples of Bar Charts**

**Pie Charts**

Pie charts help you to show how a whole thing breaks down into its component parts and how each of these parts (the pieces of the pie) relates to the whole. This type of chart could be used for example, to break down total monthly household spending into its different categories (mortgage, car payment, groceries, utilities etc. As can be seen from the following two examples a 3–D pie chart is much more visually appealing than its 2-D version.

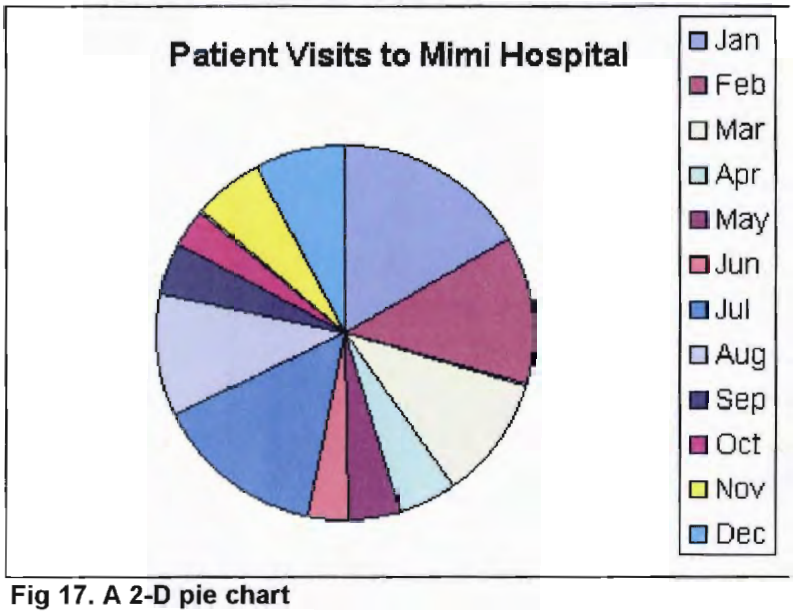



**Fig 17. A 2-D pie chart**

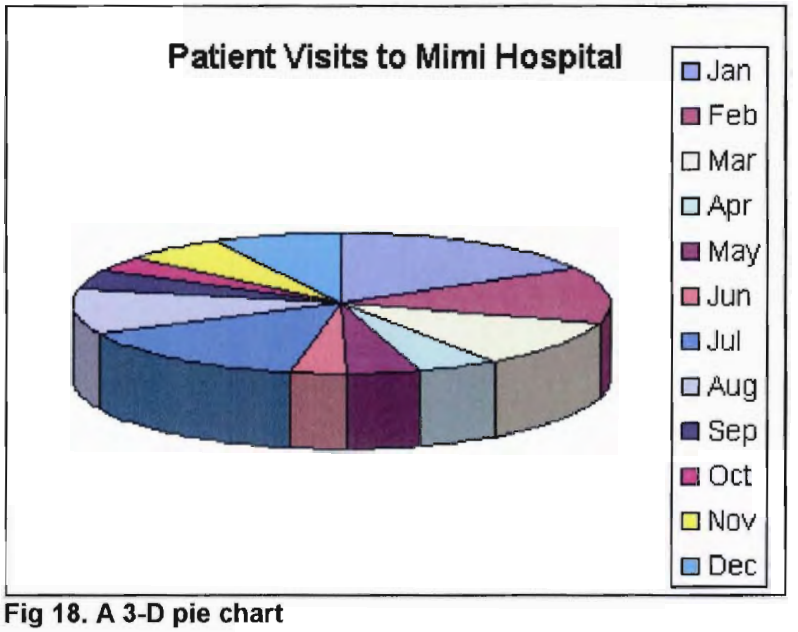



**Fig 18. A 3-D pie chart**

**Creating A Chart**

You can create Charts and graphs in excel in one of two ways: either the easy way or the hard way. The easy way is to let the chart wizard create the chart automatically. The hard way is to do manually what the chart wizard does for you. At this point, there's really no need to learn how to manually create charts, so we'll just spend our time here explaining how to use the chart wizard, because it is simple yet both flexible and powerful, you probably won't ever need to learn any other way.
Before you begin to trout out the chart wizard and begin creating your chart, you should answer a couple of basic questions about your chart:

1. **What data do you want to show on the chart?**
   - You'll need to select whatever range of data you want to include in the chart. You should do this before beginning the process even though its possible to do it once the chart wizard is started. This will help minimize any possible confusion later.
2. **Where do you want the chart to appear? In the worksheet or in a separate sheet?**
   - Before the chart wizard gets rolling, you'll have to tell it where you to put the chart when it's done. Do you want it to be a chart object in a worksheet or a chart sheet in the Workbook?
3. **What sort of relationships would you like your chart to summarize graphically? What type of chart will most clearly and accurately show these relationships?**
   - This may probably be the most important question to think through. Using exactly the right chart for the situation will help ensure that the data and results won't be misunderstood. Once you have created the chart, it is very easy to change it to a different type with just a few click of the mouse.

**Using the Chart Wizard**

Once you've told excel where to put the chart after it's been created, you're ready to put the chart wizard through its paces. The Chart wizard will take you by the hand and help you complete a five-step procedure that will create the kind of chart you want. When you've finished each step, just click the **Next** button and you will be whisked away to the next step. If you want to go back and change something in a previous step, just click on the back button.If you would rather have the chart wizard finish up the process for you by using the default settings, just click on the Finnish button. If you have made an error and wish to start all over again click on the cancel button.

Starting the Chart Wizard

- Click on **Insert** on the **Menu** bar
- Move the mouse pointer to **Chart** and click a sub-menu will pop out as shown in the diagram below. This will mark the first of the four steps of the chart wizard.

- The chart wizard will first require you to select the type of chart you want to use. As shown in the following figure.

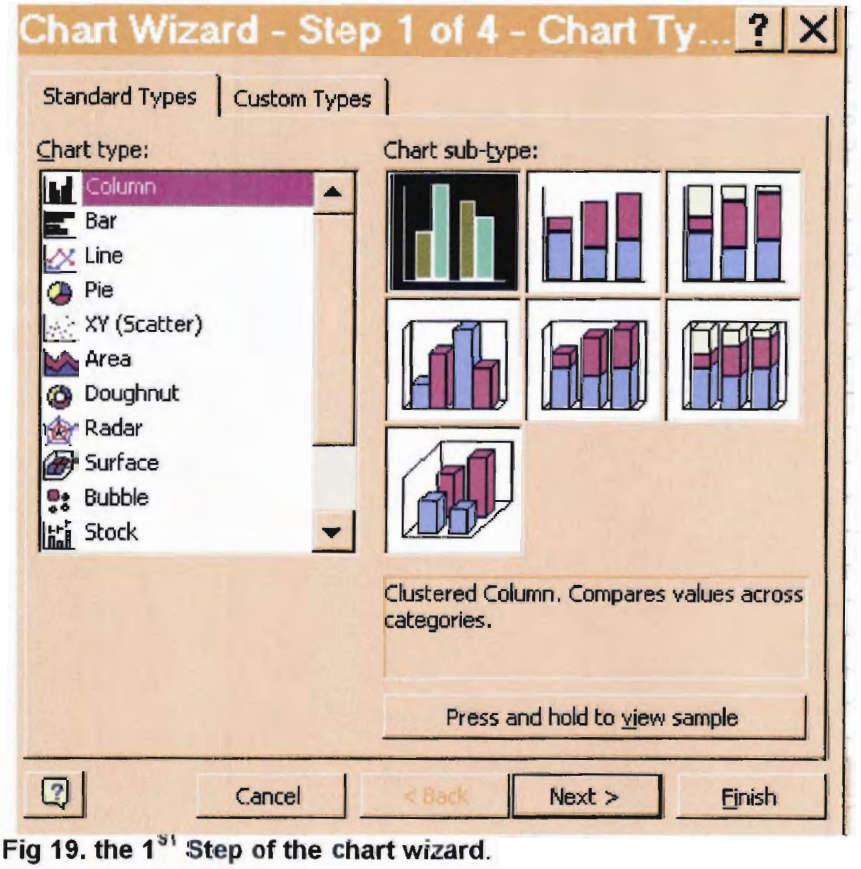



**Fig 19. the 1st Step of the chart wizard.**

**Click** on the **Next** button to move to the second step of the chart wizard.

Here you will have to specify Two main areas:

**1**. Select (Highlight) the cells with the data you want to represent graphically in the chart. The cell addresses of this data will show on the **data range** dialog box. You can also manually type in the cell addresses which must be in absolute cell format (for example **Sheet1!$A$1:$B$12** where Sheet1 is the worksheet name and $A$1 and $B$12 are the first and last cells respectively)

**(If you've already selected the cells before beginning, then that range of cells and the series basis whether row or column will automatically appear, and you won't need to do anything more in this box)**

**2**. You will also be required to specify what the basis of your series is by clicking on either the **rows** or **columns** radio buttons.

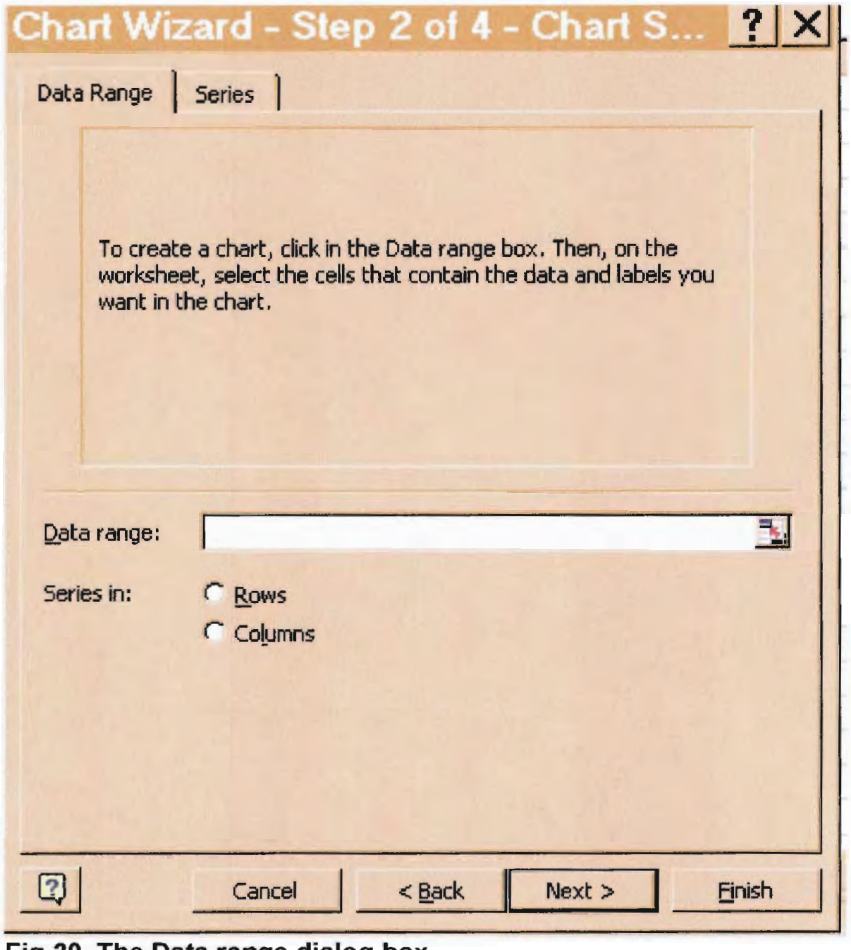



**Fig 20. The Data range dialog box**

The third step allows you to feed in the Chart options. These are things like the **chart title** and the Titles of the **X** and **Y** axis (The X and Y axis may not apply to pie charts).It is here that you also decide on what legends you want to appear on the chart. Fill in as appropriate in the relevant fields.

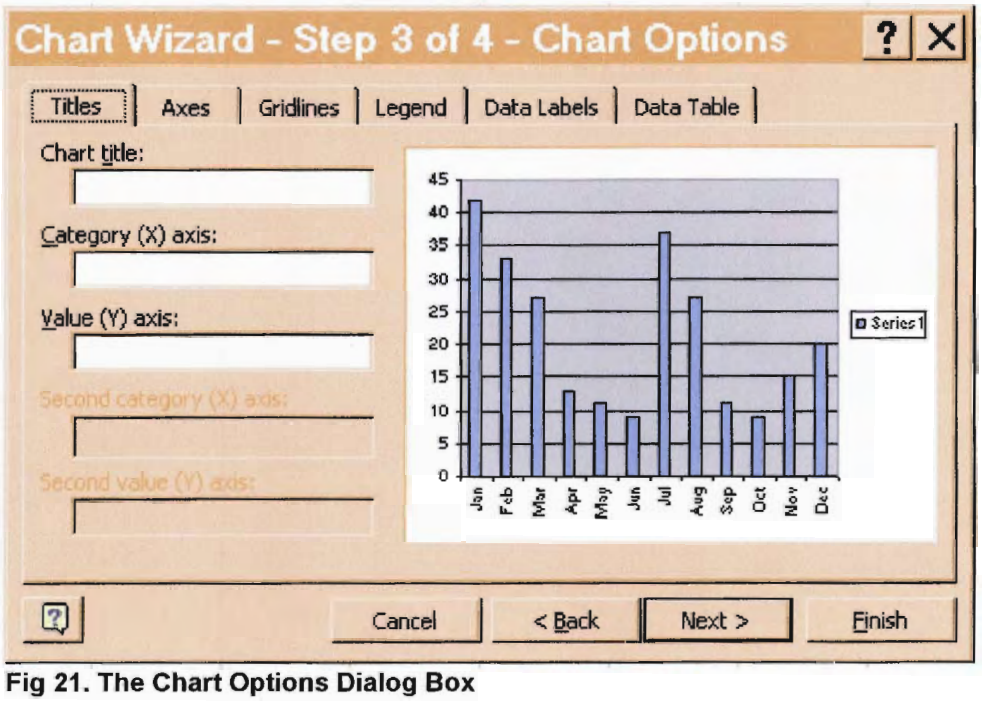



**Fig 21. The Chart Options Dialog Box**

The Fourth and final stage Is the Chart Location dialog box which requires you to specify whether you want the chart to be inserted directly (as an object) into the worksheet or as a new sheet (its own separate chart sheet in the current workbook)

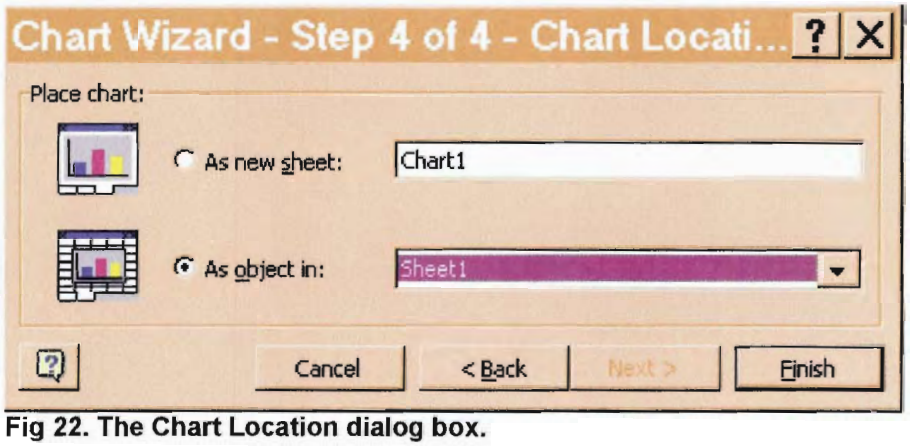



**Fig 22. The Chart Location dialog box.**

At this point click on Finish. That's all there is to it. You are now the proud owner of a brand new, deluxe chart. Great work !

**This is the Last Page of this manual**

# Microsoft Word 97 for Windows

## Training Workbook

**Prepared by:**

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**September 1998**

**How this Manual is organized**

This manual is designed for the beginner in Microsoft Word. It can also serve as a basic reference guide as you continue to familiarize yourself with Word. The layout has been split into several Lessons each addressing specific important topics which you as a beginner must know about before you are on your own. It is by no means a conclusive coach but it will serve the purpose of ensuring you can create your initial documents, Letters, memos, reports and newsletters with ease.

Your tutor will be able to explain to you where you will not understand and he will emphasize on certain areas of the manual so that you gain confidence at the soonest.
Your proficiency though will depend highly on practice and ability to learn the commands.
This way you will find yourself getting to appreciate Word more as you discover that there is more to it than just typing.
Special care has been taken to ensure that this manual is user friendly.
This workbook is a supplementary text to the concepts you will cover during the course.
The language is simple and any technical terms that are referred to are simplified in terms that reach out to you as a beginner. It is hoped that by the time you have gone through the exercises you'll have mastered the basics and hence feel more comfortable with the program

Chapter headings, Important instructions, figure illustrations and Menus are in **Bold** or both **Bold** and ***Italics***. Explanatory text is in normal typeface. Throughout the workbook when the word '**Click**' is used it means '**Click the left button on the mouse**' unless, otherwise stated.

## Introduction

Welcome to word-processing and specifically Microsoft Word97. Computers have rendered almost obsolete the use of earlier office equipment like the typewriter because of the myriad advantages the computers have over the latter. With the advent of computers and application packages like word97, you are able to check the spellings on your document, save the file electronically for future reference or mail it to any part of the globe without begging the postman to do so. You can also design your own letterheads, memos and faxes. The typewriter in comparison performed these tasks dismally if it ever attempted.

You will find this application intelligent and versatile. It is a package that will revolutionize your document-writing skills and demystify the skill of typing. It is a user-friendly program that you will interact with ease. There is always the **Help** facility when you are stuck somewhere or are not at all sure what to do. It also comes with a new addition - **the Office Assistant**, just to step you through a difficulty. You do not need to cram the format of an official letter or memo; there are **Wizards** and **templates** to save you time in preparing the same. There is much more to word than just typing, as you will soon discover.

## What is Microsoft Word?

Word is a word processing program created by Microsoft. It helps you write and create professional looking documents that can be printed, faxed or delivered on-line (electronically).
You can start word by:

- Clicking on the word document Icon
- Use the start button Menu

Word opens a new document, which it automatically names **Document1**. This filename remains until you re-name the document.

Let us start by making a tour of the Word screen.

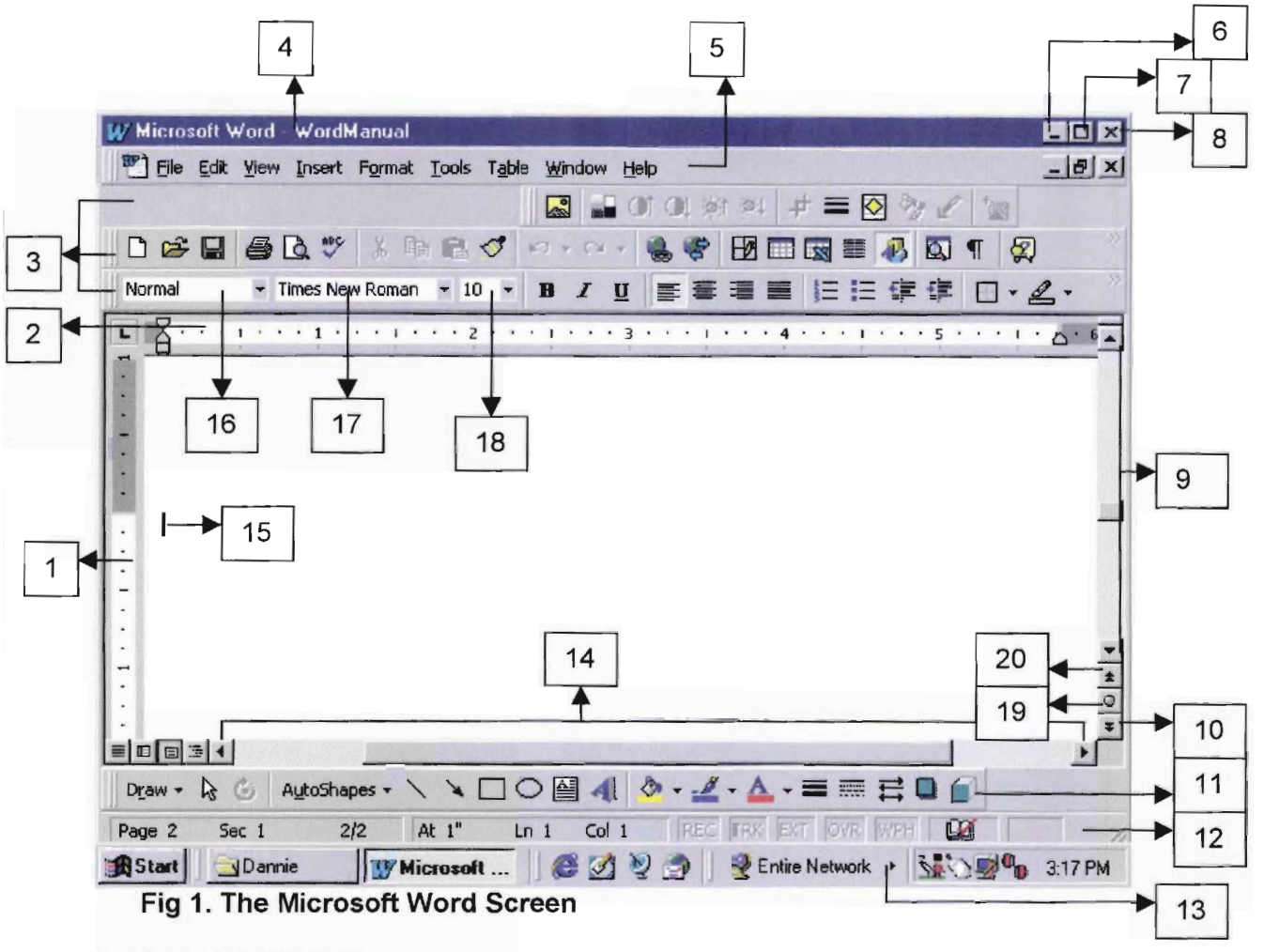



**Fig 1. The Microsoft Word Screen**

1. **Vertical Ruler Bar**
2. **Horizontal Ruler Bar**
3. **Toolbars** – Contains Shortcuts to the more Popular commands
4. **Title Bar** – Displays the current file name (In our case Word Manual)
5. **Menu Bar** – Contains list boxes that may show submenus
6. **Minimize (Program) Button**
7. **Maximize (Program) Button**
8. **Exit (Program) Button**
9. **Vertical Scroll bar**
10. **Move to Previous and Next Page Browse object Button**
11. **Drawing Toolbars**
12. **Status Bar**
13. **Taskbar**
14. **Horizontal Scroll Bar**
15. **Cursor** – appears as a Blinking Insertion – shows where the text you type will appear
16. **Change Style Button** – Click Combo box to see more Style Types
17. **Font type Button** – Click Combo box to see more Font Types
18. **Font Size Button** – Click Combo box to see more Font Sizes
19. **Select Browse object Button**
20. **Move to Previous Browse object Button**

The line below the Title bar is the **Menu Bar**. You access the Word commands through the menu bar. To choose a command, click the menu item and thereafter click the command.
An arrow (▶) indicates a Sub-menu will appear when the item is selected.
An ellipsis (...) indicates that a dialog box will appear with more options when the item is selected. A depressed button indicates that an item is active.

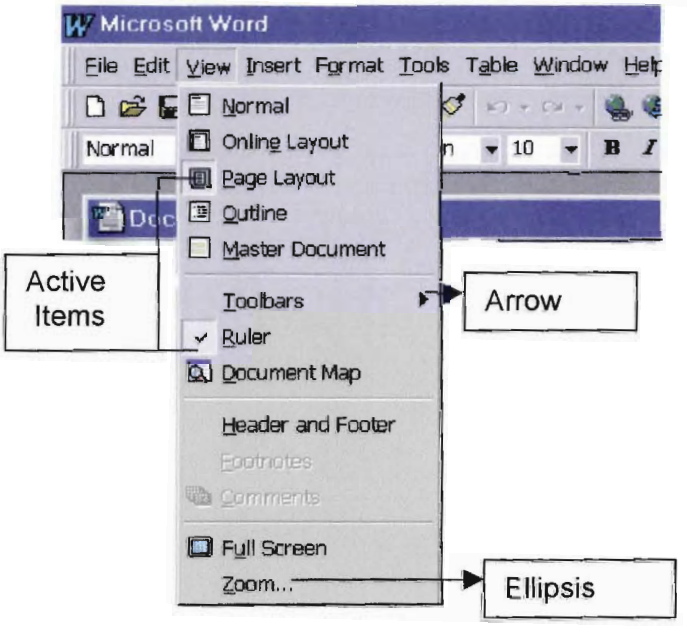



**Fig 2. The drop down list box**

**The Menu Bar**

The keyboard combinations that appear to the right of some menu commands are called Keyboard short cuts. When a menu is not open, pressing the keyboard shortcut activates the command. Keyboard shortcuts are however not available when a menu is open.

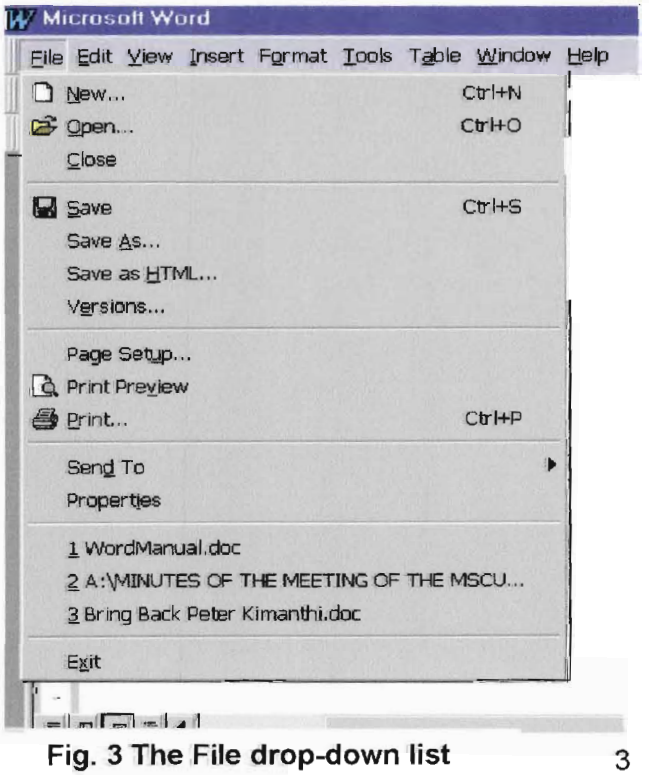



**Fig. 3 The File drop-down list**

**Starting Microsoft Word 97 (Using the Start Button)**

To start Ms Word click on the **start** button on the Windows95 taskbar. Point at **Programs** then select **Microsoft Word** on the resulting Pop up Menu by Clicking on it. Your fresh Word Screen should now appear.

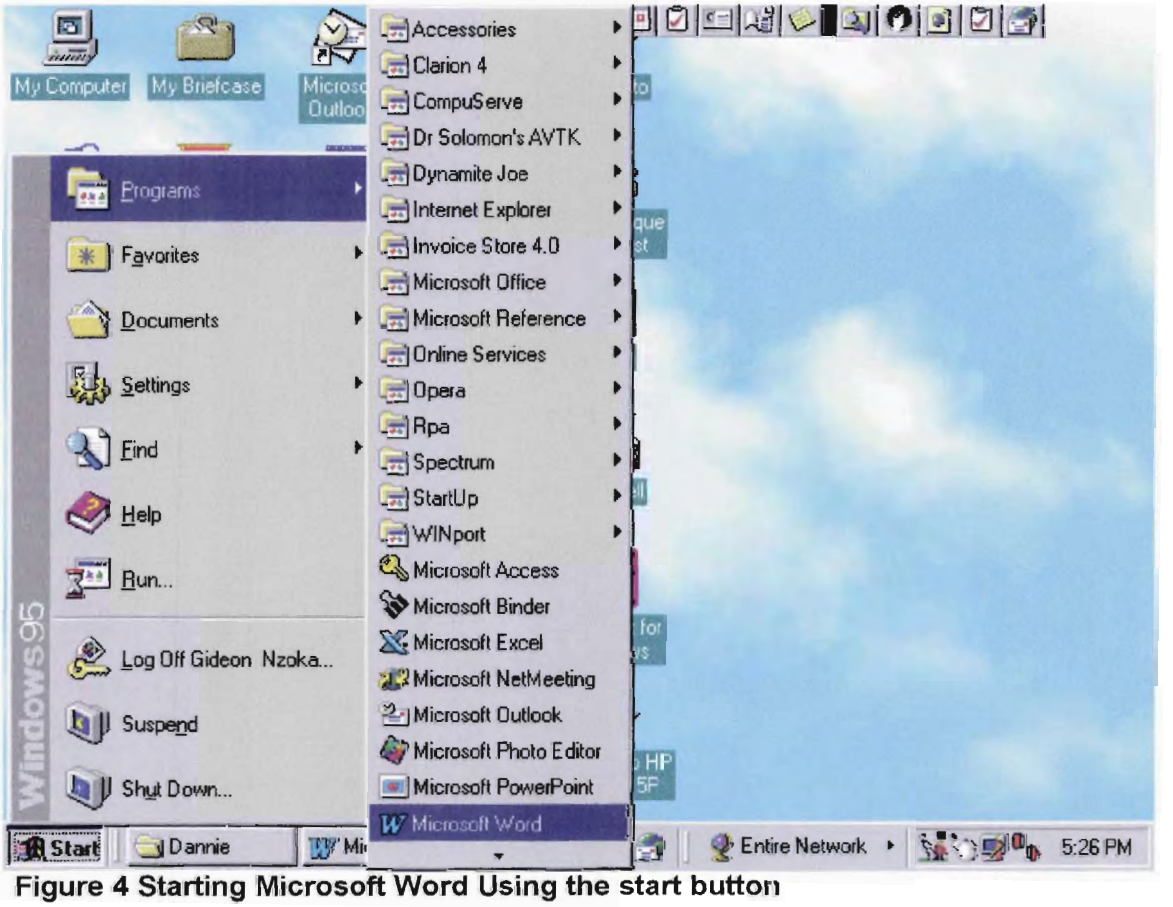



**Figure 4 Starting Microsoft Word Using the start button**

When you start word, the screen contains a fresh document, surrounded by a "dashboard" of handy buttons, Menus and other tools that you will use to work on your document. You can easily create a new document from scratch. You can also save time by using a **wizard** or **template:** each produces a ready-made document with an attractive layout and 'Fill-in-the-blanks text'. Wizards take you step by step through creating documents while Templates provide you with a preset layout.

A word-processor is a tool that you use for producing documents such as business and general correspondence, Curriculum Vitae and resumes, weekly newsletters about sports and entertainment, legal documents like lease agreements and research papers such as thesis and term papers.
Once you have the document screen, you can now begin typing your text. Typing with a word-processor is a little different from typing with a typewriter. When you reach the end of the line (the right margin), do not press the **Enter** key. Word has a facility known as **word-wrap** meaning that it will 'wrap' your text across the screen onto the next line. You will only press enter when you want to start a new paragraph.

**Lesson 1. Creating a New Document**
Since we already have a blank screen we will proceed and do some typing work.

**Exercise 1(a).**
Type the following two paragraphs. Press Enter twice to double space between paragraphs. Don't worry about correcting typing mistakes. When you are finished your screen should look something like this:

**I have completed sections A through D of the medical form, but I am still really confused about whether the benefits start on the last day of August or on the first day of September.**

**I would very much appreciate any information that you could give me. I am grateful for your help.**

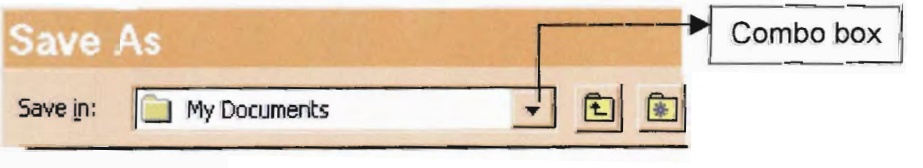
You will now save this work before we move to the next step. For a filename to be valid, it must satisfy several conditions. These being: -

- It can be a maximum of 255 characters (which may consist of letters, numbers, spaces and a limited set of special symbols) in length
- A Valid character may be a letter of the alphabet, a numeric digit, or some of the special characters like -, _, & or $ (hyphen, underscore ampersand or dollar respectively).
- The following Characters should not be used anywhere in the name:
  Forward slash (/), backslash (\), greater-than-sign (>), less-than-sign(<),asterisk(*), question mark(?), pipe symbol (|),colon (:)or the semicolon (;)

**Filenames and the conditions they must meet**

Click on the **File** Menu. In the drop down list choose **Save As.** The **Save As** dialog box lets you name your document and also specify the Directory (Folder) you want to file it in. In this case you will choose the folder (directory) called **"My Documents"**.

1. Click on the Combo box (the small rectangular box with an arrow pointing Down) on the extreme right of the "**Save in**" box.




2. Click on the "**My Documents**" folder
3. Type **Note.doc** in the filename textbox
4. Click on **Save**
5. Click on the **Exit** box at the top right hand corner of your screen.

Though Word allows more than eleven characters for a file name, it is recommended that when you name your document, you follow the **DOS** naming conventions. You can use a maximum of **11** characters: ( as many as **8** characters in the **first** name and as many as **3** characters in the optional **last** name called an **extension)**. A period **(.)** separates the two names. You cannot use spaces in the filename. Word files are followed by a **.doc** file extension. This enables you to distinguish it from a WordPerfect extension **(.wpd)** for example.

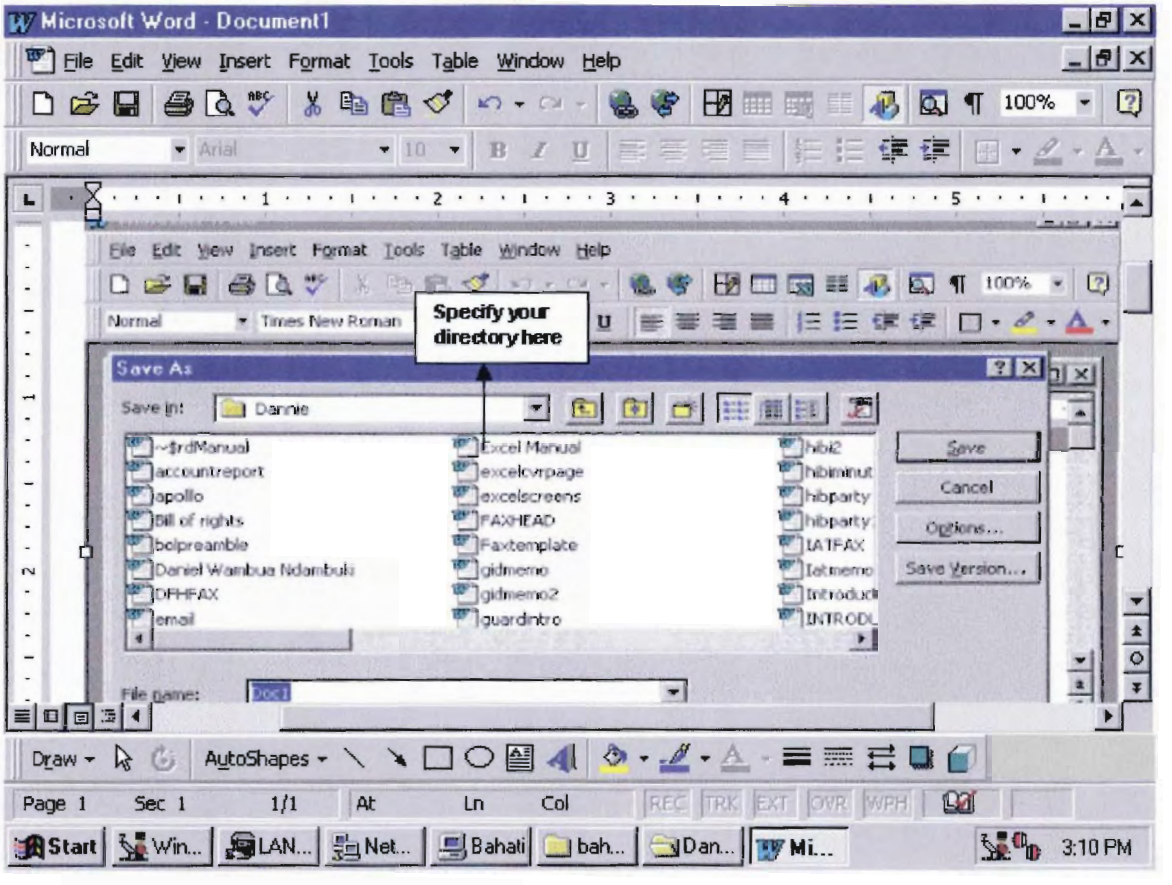



**Figure 5. The Save As Dialog Box**

**Creating a letter using the letter wizard Exercise1 (b).**

**In order to get the best results in this exercise click on the *File* Menu and select the *New* option. With the new blank word screen do the following:**

**a).** Click on "**Tools**" and select the "**Letter Wizard**". You should get the following screen:

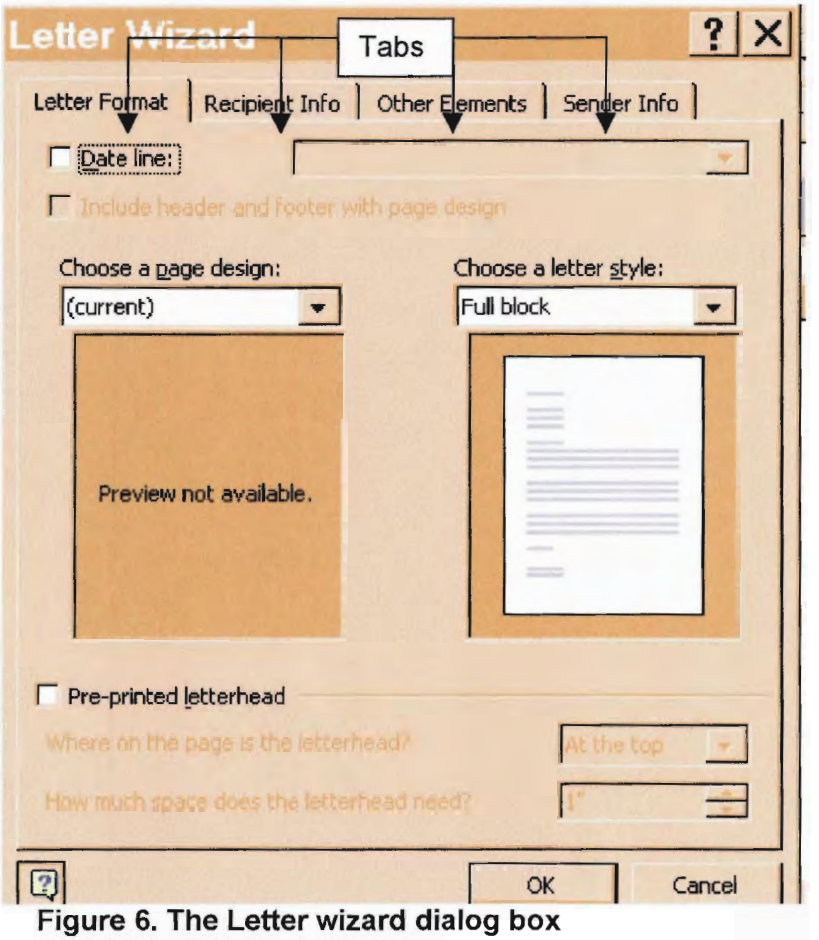



**Figure 6. The Letter wizard dialog box**

**b).** At the **letter format** tab click on the empty **Dateline** box in order to place a check (tick) on it.

**c).** 1. Click on the **Recipient info** tab and type in the **recipient's name** and **delivery address** in the space(s) provided.

2. Choose a **Salutation** from the options given (after clicking on the combo box). You may type your own and disregard the available options.
3. Click on the **Reference line** and choose an option. You may type your own and disregard the available options.
4. If you want to categorize the mail (as Registered, Confidential or personal) click on "**Mailing Instructions**" and pick an option from the Combo box.
5. If the letter is for the attention of somebody click on **Attention** and add the name(s) and title.

**b).** At the **letter format** tab click on the empty **Dateline** box in order to place a check (tick) on it.

**c). 1a).** Click on the **Recipient info** tab and type in the **recipient's name** and **delivery address** in the space(s) provided.

**b).** Choose a **Salutation** from the options given (after clicking on the combo box). You may type your own and disregard the available options.

**c).** Click on the other elements tab and on the **Reference line** and choose an option. You may type your own and disregard the available options.

If you want to categorize the mail (as Registered, Confidential or personal) click on "**Mailing Instructions**" and pick an option from the Combo box. If the letter is for the attention of somebody click on **Attention** and add the name(s) and title.

**d).** Click on the **Sender's Information** tab and fill out the following :

1. **Sender's (**your**) name**
2. **Return Address(**click on **omit** if you do not want it displayed on the letter**)**
3. Choose any of the **Complimentary closing** options (or type your own)
4. Type in your **Job Title** (this is an optional field)
5. Type in your **Company Name (**this is an optional field. The name that appears there by default is the name that was provided in the company field during the installation of Ms Office**)**
6. Type in your **Initials(**This is an optional field**)**
7. Click on **Enclosures** and use the bi-directional buttons to increase/decrease the number of enclosures.

**e).** Click on **OK**

**f).** Type in the body of the letter where shown on the screen

**Lesson Recap**

**In this lesson you have learnt the following:**

- To start Word, double-click on the Microsoft Word program Icon.
- When you type in Word, text wraps to the next line automatically. Press **Enter** when you want to start a new paragraph.
- To choose a menu item, click the menu name, and then click the item.
- To save a document for the first time, choose **Save As** from the **File** menu, specify the name of the file, then choose **OK**.
- To exit Word, Choose **Exit** from the File Menu.

**Lesson 2: Editing and Enhancing text in a Document**

**Editing text**

Typing alone is not the end of the job. You will also need to perform additional tasks in an effort to ensure your document appeals to the reader. This involves editing of your text and enhancing the appearance of the document. Use the arrow keys to move the cursor (the vertical blinking line) to the position of the correction. If you had left out a character (letter or digit) just type it. Word will insert the character on the immediate right of the cursor. If you had typed a wrong character, you can delete it by positioning the cursor on the immediate left of the character and pressing the Delete Key on the keyboard.

### Saving a Document with a different Filename

You will now rename this file so that you or someone else can use the original file later.

1. Choose **Save As** from the File Menu.
2. Type **lesson1.doc** to replace the current filename
3. Click on **Save**.

The Original File **Note.doc**, still exists on your hard drive.

### Opening an already Saved File

You open a saved document (that is a document stored on a floppy disk or on the hard disk of the computer) to continue working on it if it was saved before completion. You may also open a saved document to view or print the data it contains or to update it if the data it contains represents information that changes periodically e.g. a weekly report etc

1. If you have not done so, start Microsoft Word and once you have the default screen
2. Once you have the default screen Choose **Open** from the **File** Menu.
3. If your computer is showing a directory other than **My Documents** click on the **Look in** combo box beside the current directory (The combo box is the small rectangular box with an arrow pointing Down) and double click the **My Documents** directory to view its contents.
4. Choose **Note.Doc** (Double-click it ***or*** click once and choose **Open**).

The file is now Open

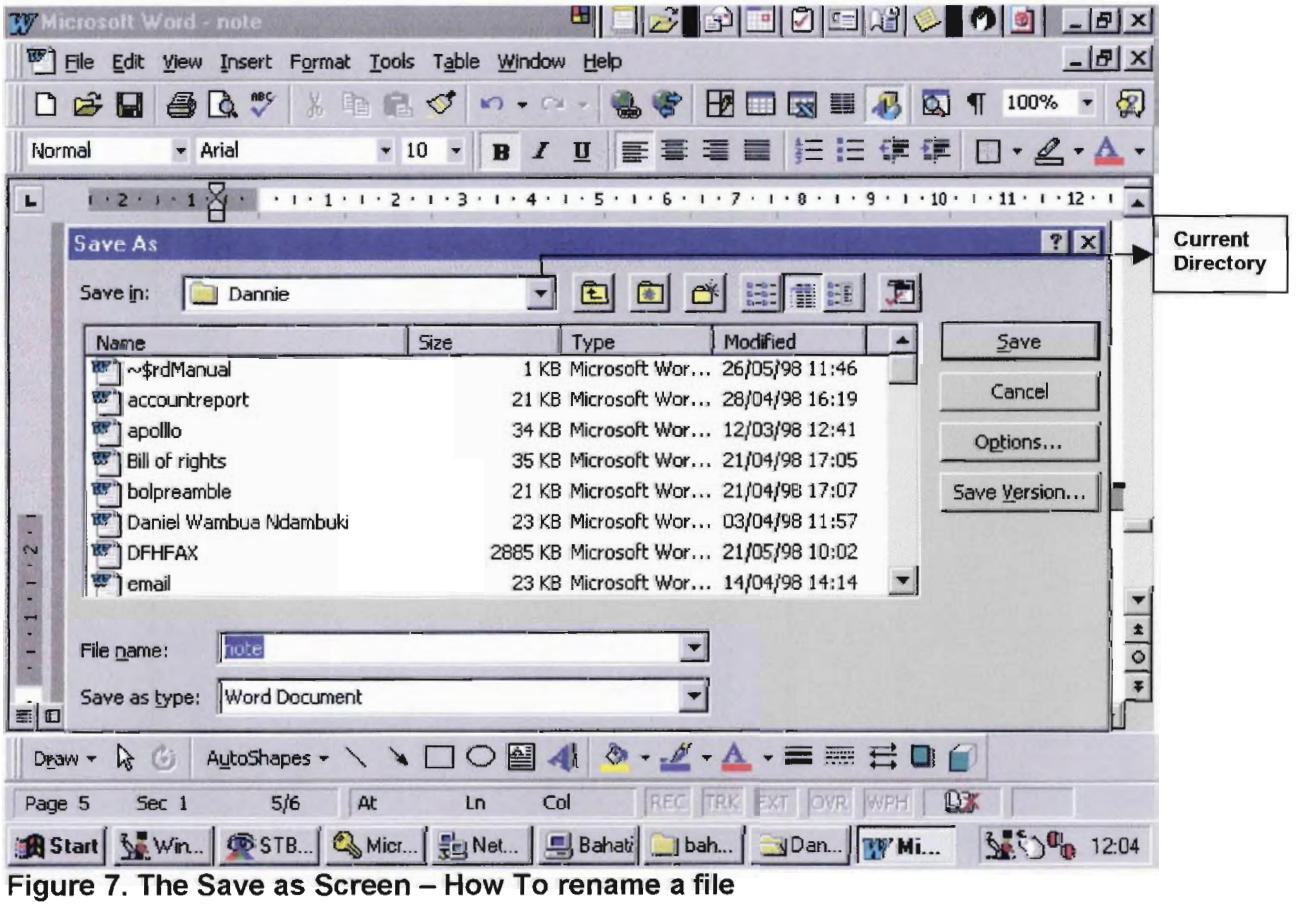



**Figure 7. The Save as Screen – How To rename a file**

## Moving the Insertion Point

Before you edit the note, you must know how to move the insertion point through the document. You can move the insertion point by clicking the mouse or by using the arrow keys on the Keyboard.

### Exercise 3 - Moving the Insertion Point

1. Move the mouse pointer anywhere within the second paragraph and click
(**Hint**: Notice that the insertion point moved to the place where you clicked)

2. Continue to click within your document to move the insertion point until you feel comfortable with this task.

**Problem?** If you accidentally drag across text with your mouse, the text will be selected (highlighted). If this happens, simply click anywhere outside the selection to cancel.

3. Experiment with all four arrow keys until you feel comfortable moving through the document

## Inserting New Text

We will now add a sentence to the middle of the second paragraph.
Place the insertion point before the 'I' in 'I am grateful' (second sentence second paragraph)

**Type the following Sentence:**

**My home phone number is 555-1235, and my work number is 555-7890**

Notice that the new text appears at the insertion point position. Existing text is pushed forward and reformatted as you type

## Lesson 3. Enhancing The appearance of a Document

You can enhance the appearance of your document in order to draw attention to important words or sentences by making them **bold**, ***Italics*** or <u>underlined</u>. You could also do this to draw attention to titles and headings by making them larger and changing their **Font** face. The use of these methods and additional ones like adding color and putting in special effects like dropped capitals, superscripts and subscripts makes your document look more fancy. Before you enhance a particular portion of a document, you must select the portion first. For example, before you make a word **bold**, you must select it.

- To select a word, position the mouse pointer anywhere over the word and double-click the left mouse button.
- To select a sentence, position the mouse pointer anywhere over the sentence and double-click the left mouse button while holding down the control key.(The **Ctrl** key on the Keyboard).

To select a paragraph click three times on the paragraph

The following figure shows some of the toolbars that are important in enhancing your document. We will be using some of them shortly.

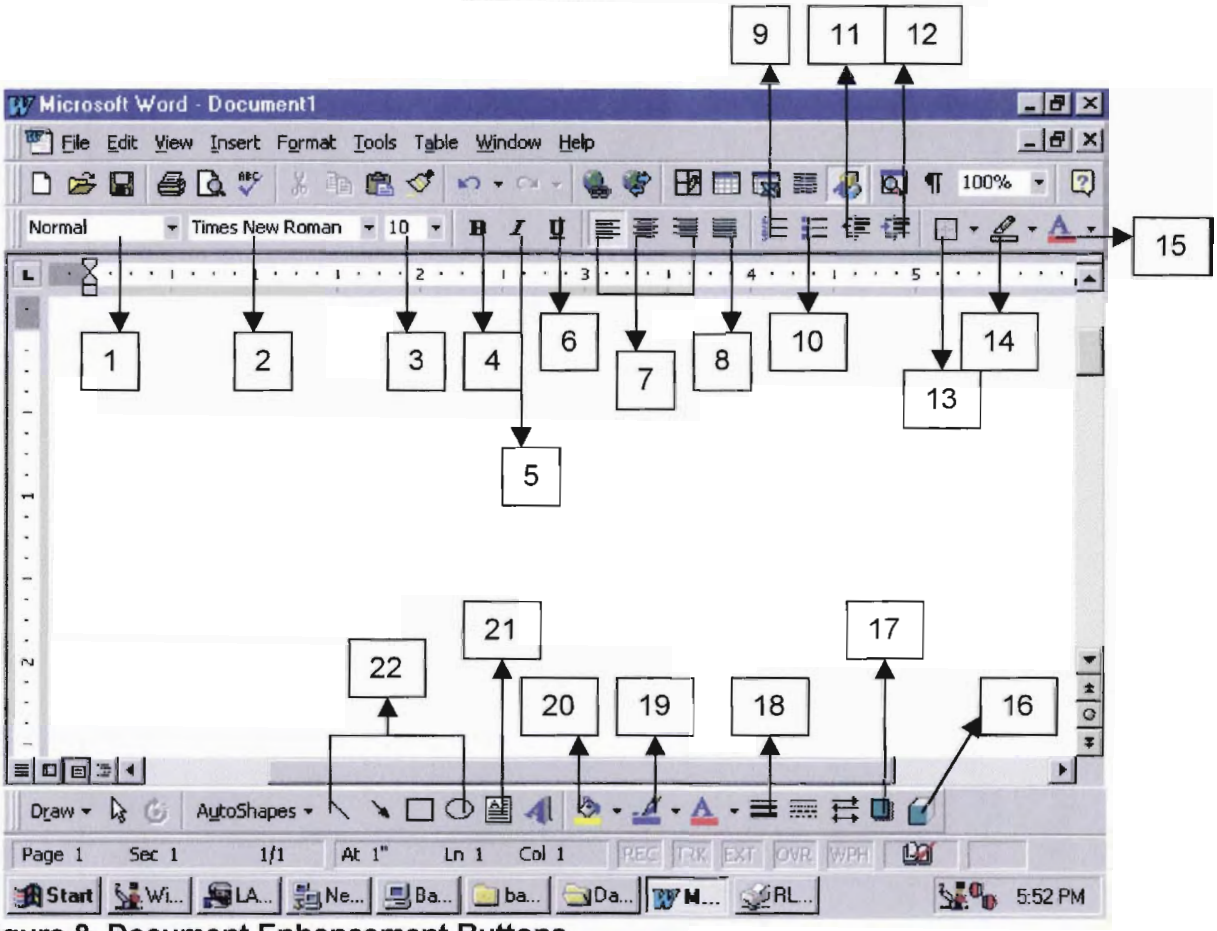



**Figure 8. Document Enhancement Buttons**

The following is a description of the above buttons.

1. Style Button
2. Font Type Button
3. Font Size Button
4. Bolding Button
5. Italics Button
6. Underline Button
7. Text Alignment Buttons (Left, Center and Right respectively)
8. Justify Button
9. Numbering Button
10. Bullets Insertion Button
11. Decrease Indent Button
12. Increase Indent Button
13. Outside Border Button
14. Highlight Button
15. Font Color Button
16. 3-D Button
17. Shadow Button
18. Line style Button
19. Line color Button

20. Fill Color Button
21. Textbox Button
22. Drawing Tools (Line, arrow, Rectangle and oval).

**Type in the following Passage and enhance it following the instructions that follow**

Robot Added to work Force

Our athletic shoe division took a step toward the twenty-first century this month when it purchased a robot to assist with manufacturing.
The robot threads shoelaces into track shoes at an outstanding rate of speed. Human co-workers report that the robot is pleasant to work with and "doesn't complain much." In fact, the robot doesn't talk at all.
Nicknamed "Tongue Tied" by his co-workers, the 5'6" tall robot was originally programmed to whistle as he worked. Fellow workers soon voted to shut off this function. Does Tongue Tied make any noise at all now? Supervisor Paul Martin reports, "At the end of the day his hydraulic system decompresses and he sort of sighs"

**Exercise 4 – Bolding and Centering text**

1. Highlight the Words "Robot Added to Work Force"
2. Click on the Bolding Button (If you have forgotten refer to chart)
3. Highlight the Words "Robot Added to Work Force" again and click on the Center button(If you have forgotten refer to chart)

Notice the new Change in terms of the bolded Heading and Centered Text

**Exercise 5 – Italicizing Text and Using the Drop cap option**

1. Using the above passage highlight the words attributed to Supervisor Paul Martin and Click on the Italics Button
2. Highlight the letter 'N' in the word Nicknamed.
3. Click on the **Format** Menu
4. Select **Drop Cap** from the pull-down Menu that follows
5. Select the **Dropped** Position and Click on **OK**

**Exercise 6 Changing the Font Face and Font Size**

1. Highlight the entire second paragraph.
2. Click on the combo box in font type and select Arial
3. Click on the combo box in font size and select 12.If it is currently showing 12 select 10.

Notice the difference between the two paragraphs.

**Exercise 7(Optional) - Making Corrections in a Document**

Using the techniques spelt out in lesson 2 "**Editing a Document**" correct any spelling errors that may be showing in the passage that you typed for exercises 4 and 5.

**Finding or Replacing Text in a document**

Sometimes you will need to change a particular word or phrase in a document. For example, an outdated product name in a brochure can be changed to its new name easily using the Find and Replace option in Word. This feature is efficient and exact.

It is also easy to use and saves time compared to reading through the document (in search of the text) and manually making Changes.
In a document where Roiko Mchuzi Mix is mentioned sixty-five times, we need to change it to its new brand name of Royco Mix, we could save lots of time using the **find and replace feature** instead of hunting for the entire 65occurrences of the word in the document. Here is how to do it: -

1. From the **Edit** Menu, select **Replace**
2. In the **Find What** Box, type the text you want to replace
3. In the **Replace with** box, type the text you want to replace
4. If you want to replace all occurrences of the text in the **Find what** box, click on the **Replace all** button
5. Click on the **Find Next** Button. Find Next finds and selects the next occurrence of the text specified in the **Find what** box
6. If you want to replace the selected text, click on the **Replace** button. This changes the selected text to the text in the Replace with box, and then finds the next occurrence.

Word97 can replace all occurrences of the same word in different forms. For example, if you replace make with manufacture, Word can also replace made or makes with manufactured or manufactures respectively. To activate this, click on the more button then select "**Find All Word forms**" in the Replace dialog box.

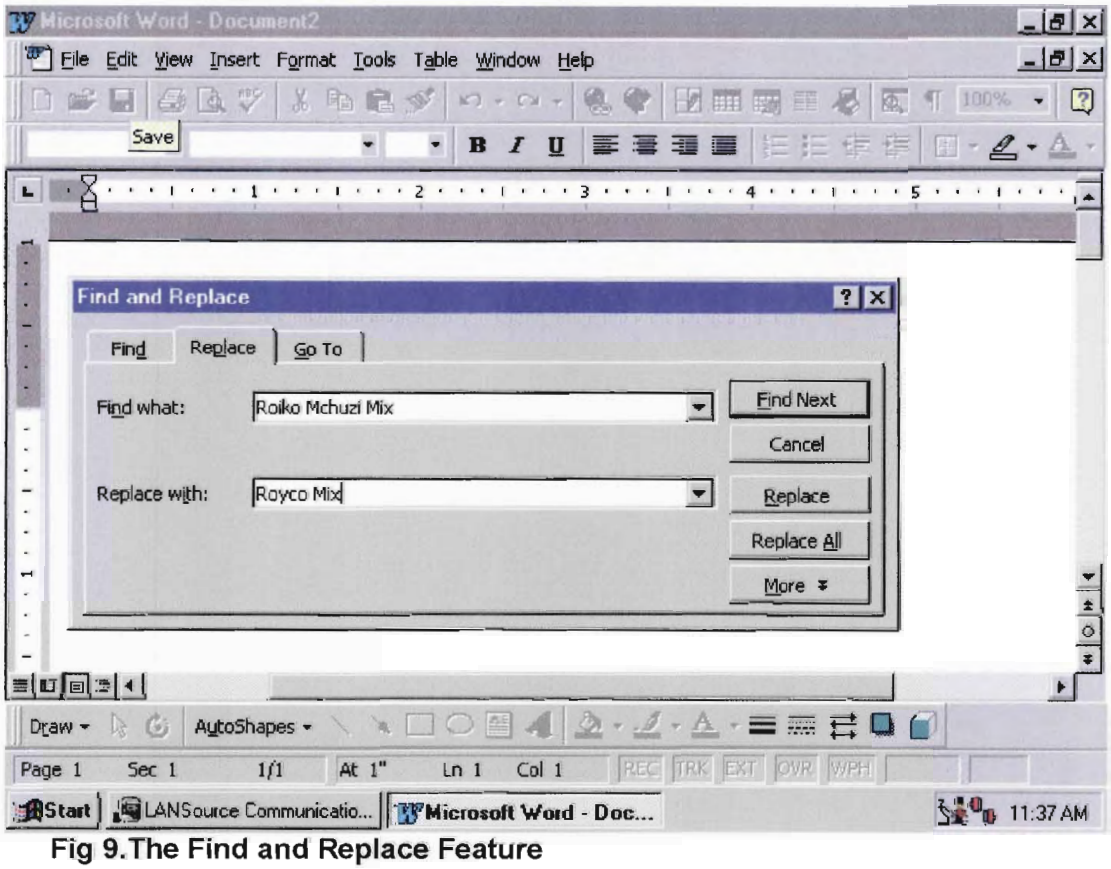


**Fig 9.The Find and Replace Feature**

## Using the Undo Feature Of Word

The Undo feature in word enables you to reverse changes you make in a document, such as editing, formatting, spell checking, and inserting breaks, footnotes, and tables. This is useful when you make changes and then realize that these changes were a mistake.

To quickly reverse changes in editing, formatting, and other actions, click the undo button on the standard toolbar.

## Spell-checking your Document

When you finish typing your document, you can have word search the document for spelling and grammatical errors. The spelling and grammar command also identifies sentences in your document that have possible grammatical errors or a non standard writing style. For many types of errors, the spelling and grammar command suggests ways to correct the sentence. You can choose the correction you want to make and have the sentence changed in your document and then continue checking.
The spelling and grammar command also provides a quick and convenient way to find many common grammatical errors. However, remember that the grammar checker is not a substitute to your careful proof reading of a document.
When word finds a possible error, you can correct it and then continue the check. To do this:

1. Click on the spelling and grammar button(situated next to the print preview button).You should see the following screen:

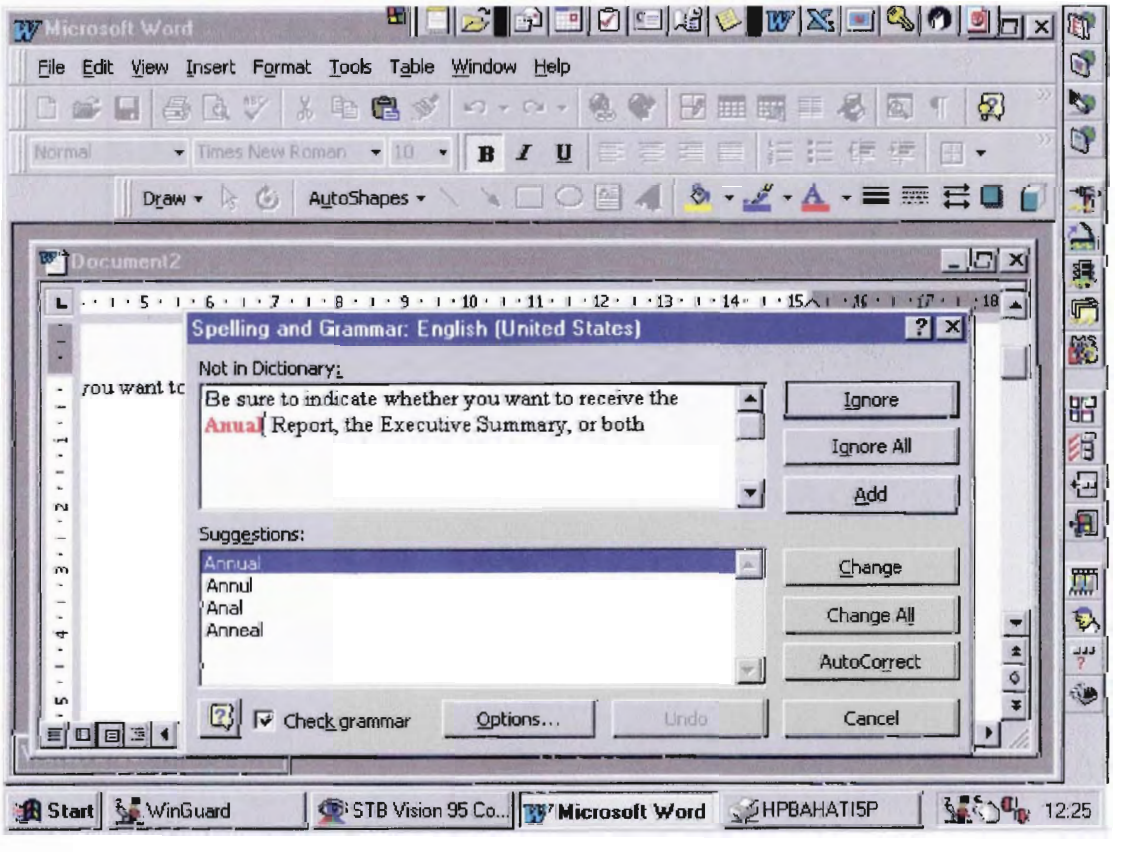



**Fig 10. The spelling and Grammar dialog box**

2. When the spelling checker locates a word that is not in its dictionary, it displays it in the **error** box. The above dialog box shows that the word "**Anual**" is not in Microsoft Word's dictionary.
3. Word displays the most likely words to correct the spelling mistake in the Suggestions box.

    - If the suggestion list contains the correct word, select it then click on the **Change** button. Use the **Change all** button if the same spelling error is likely to have occurred in several places and you want to make all the corrections in one shot.
    - If the suggestion list does not contain the correct word type your own correction directly in the **error** box.
    - If the highlighted word in the document is correctly spelled – if the word is a proper noun or a technical term you know is spelled correctly – click the **Ignore** button
    - If you use the word in the document more than once and know the spelling is correct, click the **Ignore all** button. Word ignores all occurrences of the word throughout the entire document.
    - If you use the word whose spelling you know is correct in other documents, click the **Add** button. Word 97 adds the word to a custom Dictionary.
    - To add the word to the **Auto correct** dictionary, click the **AutoCorrect** button.
4. After you correct a word, the spelling checker will search the remainder of the document
   For other spelling mistakes. Steps 2 and 3 are repeated until the whole document has been checked. After which it displays the message that the spelling and grammar check is complete.

**Using the AutoCorrect feature in Word**

The Auto correct feature can fix common mistakes such as typing "teh" instead of "the" while you type. You can use Auto correct to expand abbreviations such as "asap" for "as soon as possible." Insert proper capitalization at the beginning of sentences and the names of the week. Correct letters that were capitalized due to accidental use of the CAPS LOCK Key. Auto correct can also automatically correct two initial capitals, capitalize the first letter of sentences, and capitalize names of days as you type

**Formatting your Document**

**Formatting Paragraphs with indents, bullets, and numbering.**

**Bullets and Numbering**

You can quickly create numbered and bulleted lists to make a document easier to read and understand. **A numbered list shows sequence, while a bulleted list separates items in a series to emphasize each point.**
If you add, delete, or reorder items in a numbered list, Word updates the numbers for you.

## Indents

Text in paragraphs usually extends from the left margin to the right margin. You can indent a paragraph to set it off from other text.

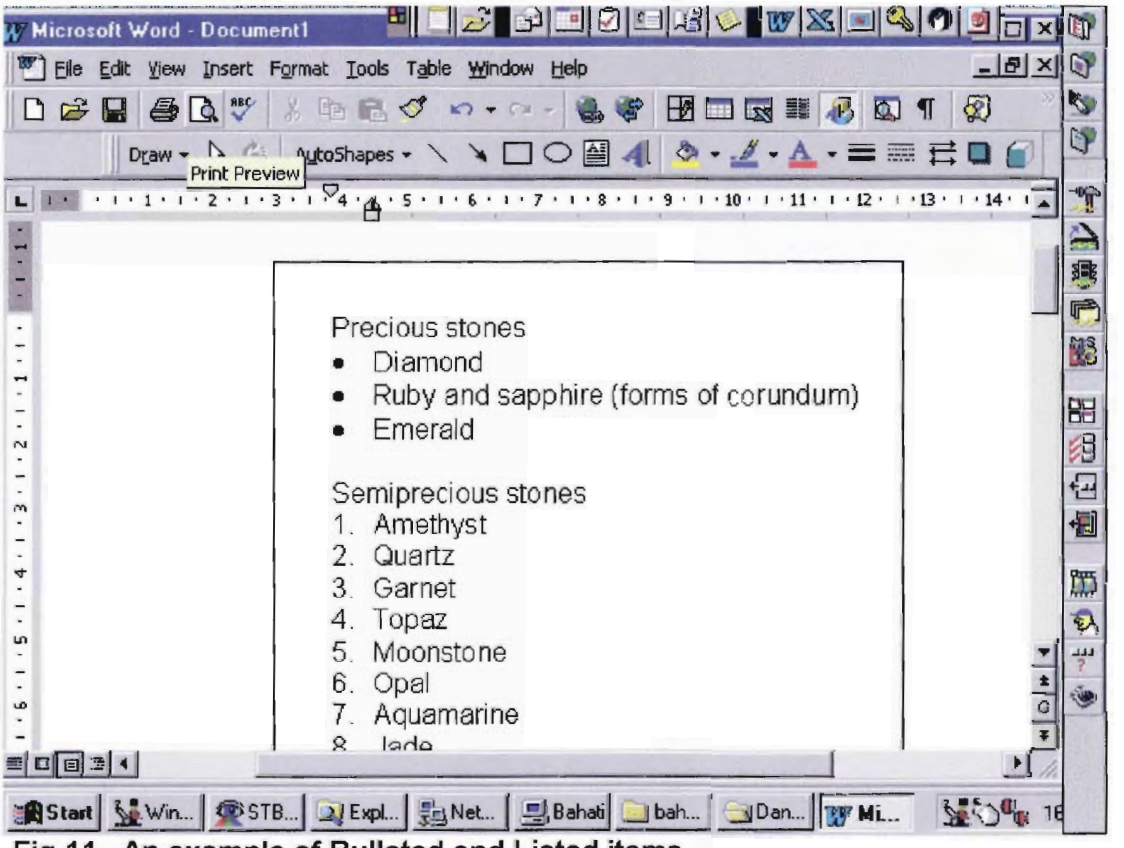



**Fig 11. An example of Bulleted and Listed items**

### How to do it?

- Select the items to which you want to add (or from which you want to remove) bullets or numbers. When you select a bulleted or numbered list, you cannot select the actual bullets or numbers
- To add or remove bullets, click on the Bullets button.
- To add or remove numbers click on the Numbering button

There is one caution though, When you press **ENTER** to start a new paragraph, Word carries over the list formatting to the next paragraph. For example, in a list whose items are numbered 1 through 5, Word displays a 6 when you press **ENTER** after the fifth item.

To Indent Paragraphs

1. Select the paragraphs you want to indent
2. To indent a paragraph towards the right click the increase indent button
3. To indent a paragraph towards the left click the decrease indent button

### Multi-level Numbering

Your Document could have several levels of paragraphs; the main topic, the subtopic and so on. Each level can be numbered or bulleted differently. For example:

1. Main Topic
    a) Sub-topic
        i) sub-sub-topic

**To do this:**

- Select the text
- From **Format** Menu Choose bullets and numbering
- Click on the Outline Numbered tab.
- Choose a format then click OK

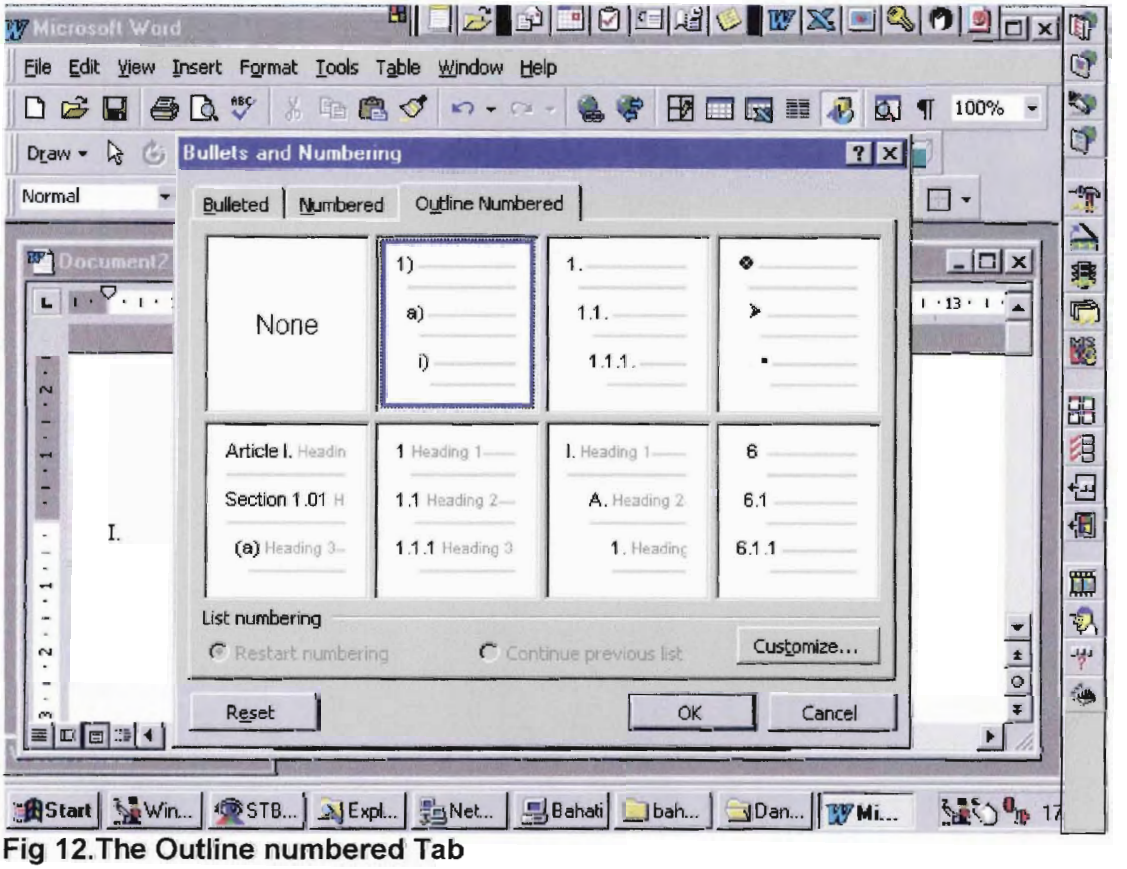



**Fig 12.The Outline numbered Tab**

To see more bullet types click on Customized bulleted list box click on Bullet. Select a symbol from the symbol Dialog

**Working with Tables**

**Creating a table within your Document**

Tables make it easier to read information that would otherwise have to be written in a repetitive and lengthy fashion, e.g. rather than describe the sales of a company using many words and sentences (like "George sold 500 units while jane sold 513. George had been allocated a target of 600 while Jane's was 450"), putting the information in a table makes it shorter and easier to understand, as the portion of the table on the next page shows.

| Sales Person | Sales | Target |
|---|---|---|
| Albert | 500 | 600 |
| Jane | 513 | 450 |
| : | : | : |

**To create a table:**

1) Position the insertion point where you want to create a table
2) On the standard toolbar, click **Insert Table** Button. A grid appears below the button
3) Drag over the grid until you have selected the number of rows and columns you want, then release the mouse button. In the illustration below, 4 rows and 5 columns have been selected.

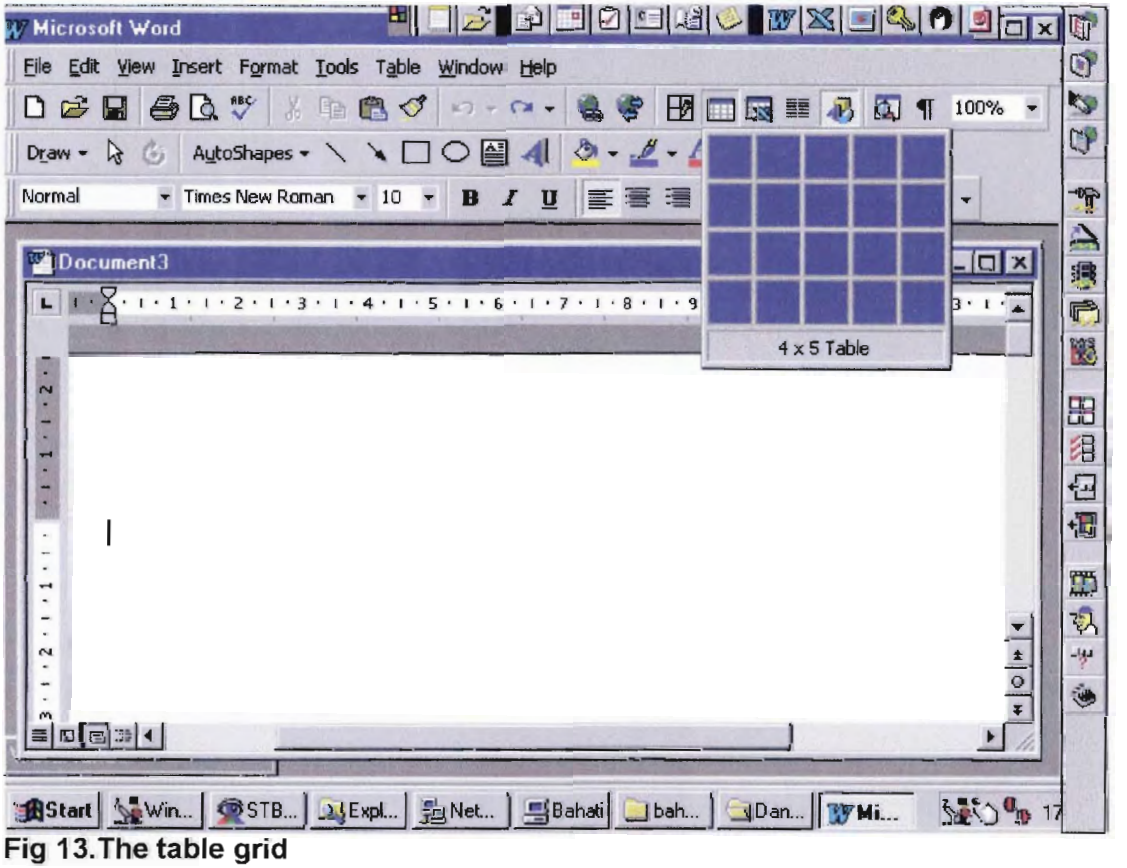



**Fig 13.The table grid**

4. In a table, you work with rows and columns of cells. Word positions the insertion point in the first cell of the table. You can immediately type in the table, or insert a graphic object like a picture or a drawing
5. To move one cell to the next, press **Tab** key on the keyboard. To move to the previous cell, hold down the **Shift** key and then press the **Tab** key

**Tip 1**

**a).** Instead of using the insert Table button, you can specify exact measurements for the width of columns when you insert a table by using the **Insert Table** command on the **Table** Menu.

**b).** You can use a shortcut menu to carry out common commands for tables. Position the insertion point in a table or select a cell ,row, or column, and then click the right mouse button.

**Tip 2**
You can also create a table using the **Draw table** command from the **Table** menu. When you select this option the following set of buttons will appear

**Fig 14. The tables and Borders toolbox**

The mouse pointer changes into a pencil just like the first one in the diagram above. Using the mouse you then drag to draw the outer borders of the table, then subdivide the interior appropriately.
It may be difficult to achieve a high level of consistency in the size of the rows and columns using this method. If you want to adjust the rows so that they are of equal dimension for instance follow the step below.

Steps
- Select the rows you want to work on.
- Click on "distribute rows evenly" button or select the same option from the table menu.

**Modifying a table**

When working with tables you will often find the situation demands that you add rows to the existing table, or delete a number of adjacent cells, rows, or columns from a table if you do not need them anymore. You may also find it necessary to change the width of a column to enhance the appearance of the table – for example, if the cells are wider than the text they contain.

**To add rows to a Table**

1. Select the row or rows **below** which you want to insert a new row or rows. Select the same number of rows as the number you want to insert – for example, to insert three rows, and select three existing rows. (To select a row, click the mouse pointer on the left of the row outside the table.)
2. On the standard Toolbar, click the Insert rows button (shown here below)

The Insert rows Button

**Fig 15 the insert rows button**

**OR**

From the **Table** menu, Choose **Insert Rows.** Word inserts a row above the rows you selected.
To add rows at the end of a table, position the insertion point in the last cell of the last row and then press the **Tab** key. The cells in the new row retain the formatting of the cells in the preceding row.

**Exercise 8 - Adding rows to a table**

Supposing you have a table in which you maintain a list of clients' names and flights. On one day you may acquire 3 new clients whose details you want to add to the table. You prefer the list in order of name and you wish to insert each client's details in the appropriate row. Coincidentally the three new clients follow each other alphabetically.
Given the table shown below and with instructions to insert after the row containing Allan's name, How would you do it?

| Name | Arrival | City | Airport |
|---|---|---|---|
| Allan | 17th April | London | GAT |
| Gabriel | 22nd April | Monaco | MUN |
| Humphrey | 5th May | Madrid | MAD |
| Millicent | 18th April | London | HEA |

**Steps**

1. Click on the cell containing **Gabriel's** name
2. **Highlight** the entire row and come down to the last cell in the last row
3. Click on the **Table** Menu
4. Select **Insert Cells**
5. Select **Insert entire row**

You now have three rows between Allan's entry and Gabriel's.

**Deleting cells in a table**

To delete cells in a table:

1. Select the cells you want to delete
2. From the table menu, choose Delete ells. The dialog box shown below appears.

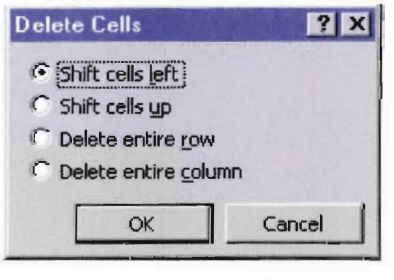



**Fig 16. The delete cells dialog box**

3. Do one of the following:

| To | Select this option button |
|---|---|
| Move cells from the right of the deleted cells to the location of the cells being deleted | Shift Cells left |
| Move cells from below the deleted cells to the location of the cells being deleted | Shift Cells up |
| Delete the row or rows | Delete Entire row |
| Delete the column or columns | Delete Entire column |

4. Choose the OK button.

There is also an alternative way of deleting rows or columns in a table.

a). Select the rows or columns you want to delete

b). From the **Table** menu Choose **Delete Rows** or **Delete Columns**

**Resizing Columns in a table**

1. Position the insertion point anywhere in the table
2. Position the mouse pointer over the column boundary. When the mouse pointer changes as shown below, double click the column boundary to the right or left

**OR**

Point to the column marker on the horizontal ruler above the column boundary you want to adjust, and hold down the mouse button. When word displays a dotted line drag it to the left or right.

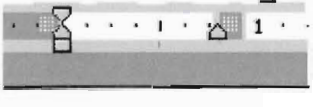


**Fig The Column marker on the horizontal ruler**

**Fig 17. The column marker**

**Note.**

Double clicking, dragging a column boundary, or dragging a column marker on the horizontal ruler, do not change the overall width of the table.

**Implications of changing column widths**

By default, when you adjust the width of a column, Word resizes the other columns such that the overall width of the table does not change. This means that increasing the size of a column, for instance, will result in the decrease in size of all the other columns.

**Additional Options for adjusting a column are:**

1. To adjust the current column and resize only one column to the right, hold down **SHIFT** while you drag
2. To adjust the current column and resize all columns to the right equally, hold down **CTRL** while you drag
3. To adjust the current column without resizing the other columns, hold down **CTRL** and **SHIFT** while you drag
4. You can quickly achieve precise measurements (that is specify exact column width of one or more cells in a column) by using the cell height and width command on the Table menu.

Tip.

To display column width measurements on the horizontal ruler, point to a column marker. Then hold down both the **ALT** key and the left mouse button.

**Formatting a Table**

Formatting a table can take place in a variety of ways.

- You may want to control the horizontal placement of a table within a page by changing row alignment. For example, you can centre a table between the left and right page margins.
- You can also combine two or more cells in a row into a single cell for example, you can create a table heading that spans several columns
- You can split a cell horizontally and split one or more cells into parts.
- If a table is split between pages, you can automatically repeat the table headings on each page
- Word does not print the gridlines that divide table cells on your screen. To print vertical and horizontal lines between cells, you must apply borders to the table. For a more finished look, you can also apply shading.

**To center a table and change its row alignment**

1. Select the row or rows you want to change
2. From the Table menu, choose Cell height and width

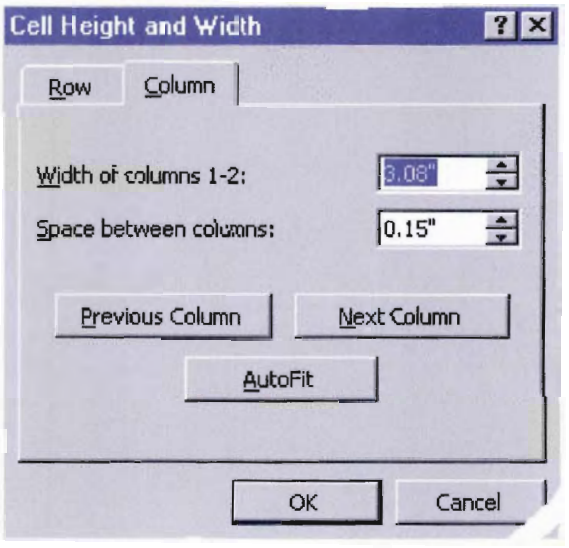



**Fig 18.The Cell Height and width**

3. Select row Tab
4. Do one of the following:

| To | Do This |
|---|---|
| Center a table between the left and right margins | Under Alignment select the Center option button |
| Set an exact amount of indentation from the left margin | Type or select a number in the Indent from left box |
| Set the alignment flush with the left or right margins | Under Alignment, select the Left or Right option button, as appropriate. |

5. Choose the **OK** button

**Merging and splitting cells in a Table**

To merge cells in the same row of a table.

- Select the cells you want to merge. *Note that the cells will only be merged horizontally even if you select more than one row of cells.*
- From the Table menu, choose Merge Cells. Word converts the contents of each merged cell to a paragraph within the combined cell

To split cells.

1. Select the cells you want to split
2. From the **Table** menu, choose Split Cells
3. Type the number of columns you want to split each cell into, and then choose the **OK** button

A single cell is split according to the number of paragraph marks it contains. If there is more than one paragraph mark, text remains in the cell on the left and empty cells are inserted to the right. If there is more than one paragraph mark in the cell, the paragraphs are divided evenly between the cells

If you want to repeat Table headings

- Select the row or rows of text (beginning with the first row in the table) you want to use as table headings
- From the **Table** menu, choose headings. The rows selected in step 1 above will be repeated automatically on each page if the table is split between pages.

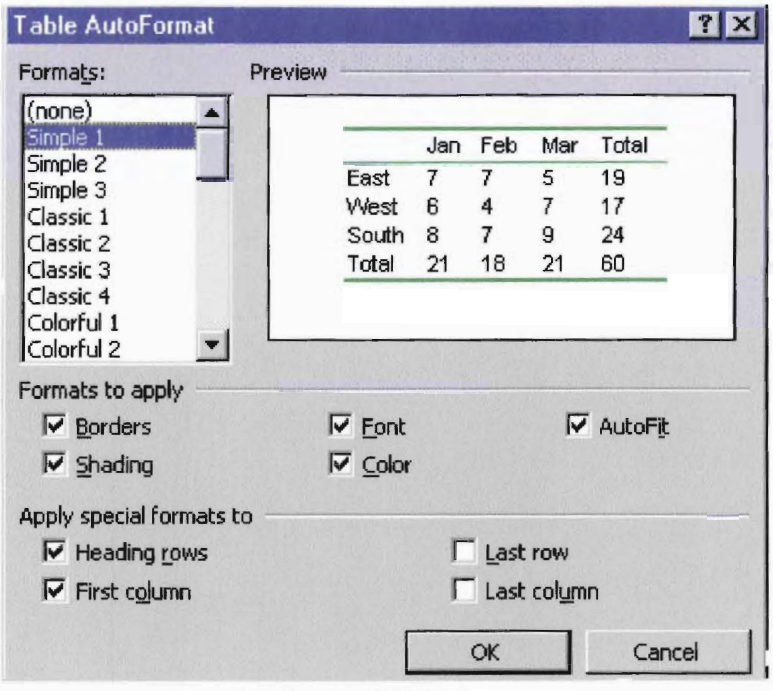
If you make changes to headings in a table that splits between pages, the text will automatically be updated in all repeated headings.

**Note:**

**Word will not repeat or update a heading if the table is split between pages by a hard page break**

**Adding Borders and shading automatically to a table**

1. Position the insertion point in the table to which you want to apply borders and shading
2. From the **Table** menu, choose **Table AutoFormat** as shown below




1. **Borders, Shading, Font** and **color** apply the lines and borders; shading; Font; or color specified by the design respectively.
2. **AutoFit** automatically adjusts the size of the table based on the amount of text in the table.
3. **Apply special Formats To** applies or removes the formats assigned to components of the design you select in the formats list. Some elements may not be available in all designs
4. **Heading Rows, First Column, Last Row** and **Last Column** apply a special format to table headings; the first column of the table; the first row of the table; or the last column of the table as specified by the design of the selected format respectively.

**Fig 19 The cell height and width dialog box**

3. In the Formats box, select the design you ant. A sample of the design you select appears in the preview box

4. To remove all formats, select None.

5. Under **formats to apply** and **apply special formats to**, select the options you want

6. Choose the **OK** button

Heading rows, first column, last row and last column are given special treatment because, generally, they contain key information to which attention needs to be drawn. For example in the preview shown in the dialog box above, if the month names, total row and column and the regions are emphasized, the meaning of the information presented becomes obvious at a glance.

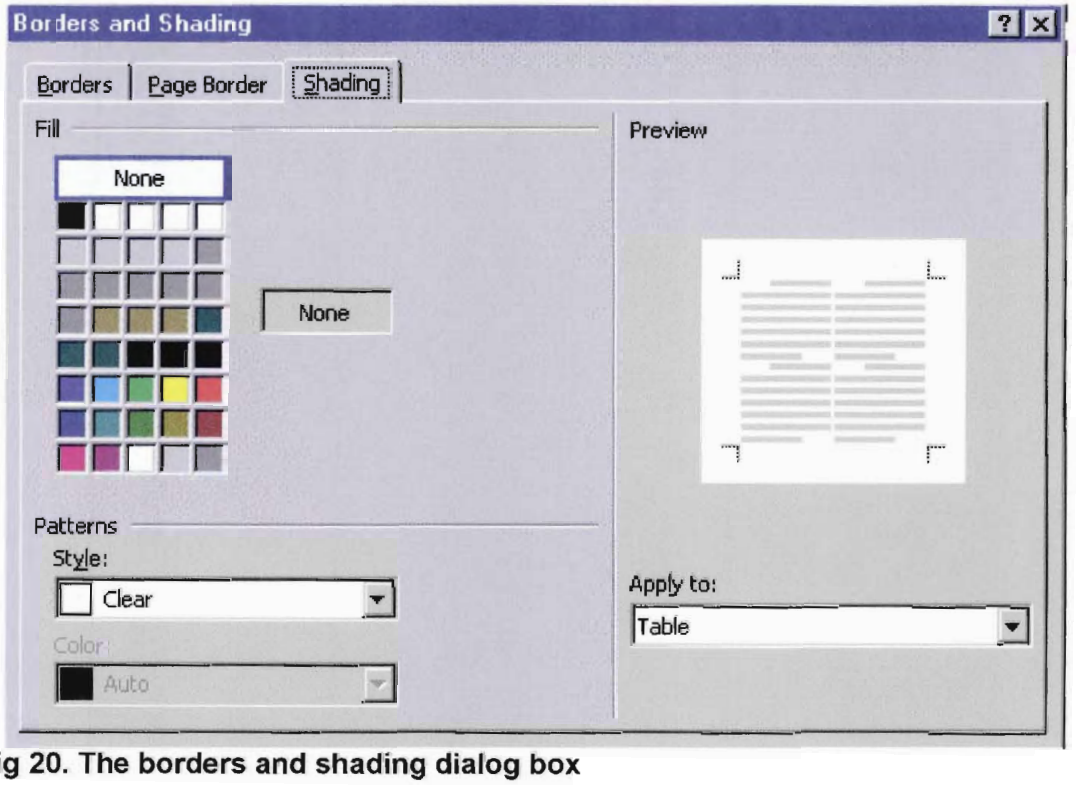



**Fig 20. The borders and shading dialog box**

**Other ways to add Borders and shading**

1. Select the Cell(s) you want to format then use the Borders and Shading command from the format Menu and the above dialog screen appears
2. Click on the Shading Tab, and from the patterns section select style. The drop down list provides you with various degrees of shading you can apply to the selected cell(s).
3. You can also add or remove the borders from any of the sides by clicking the actual position of the border in the diagram on the right.

**Sorting in a Table**

Sorting enables you to rearrange your work the way you want. By default, Word reorders rows based on the entries in the first-column. However, you can specify a different column or columns as the basis for sorting. You can quickly rearrange rows in tables or arrange table entries in alphabetic or numeric order, or better still sort them by date. In order to sort in a table do the following:

1. Click on any cell in the table.
2. From the **Table** menu, choose **Sort**. The entire table is automatically selected and the following dialog box should appear

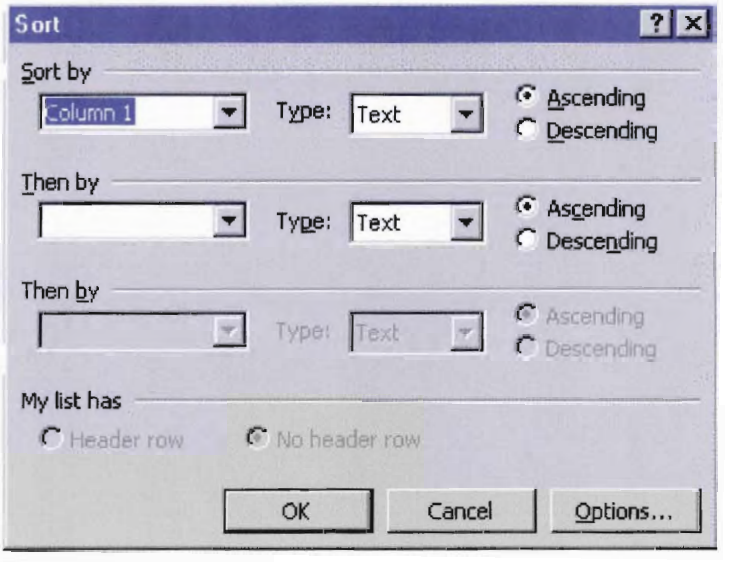



**Fig 21. The sort dialog box**

3. If you have a heading that you do not want word to sort, select the header row option button under **My List Has**.

4. Under **Sort by**, select the column to sort by.

5. In the **Type** box, select Text, Number, or Date (depending on the column's contents), and then select the **Ascending** or **Descending** option button

6. If you want to use additional columns for sorting, click under "**Then by**" and repeat steps 4 and 5 above.

7. Click the **OK** button

You can use the options button to perform a case-sensitive sort and sort a column without reordering other columns. A case-sensitive sort orders text so that a word whose first letter is a capital letter precedes any word whose first letter is a capital letter precedes any word whose first letter is the same letter in lowercase.

Exercise 9

You have created a price list in a table (shown below) that you want to sort in alphabetical order item wise. How would you do this :

| **Item** | **Price** |
|---|---|
| Hardcover books A4 size | 86.80 |
| Muster roll books A4 | 81.20 |
| Shorthand notebooks | 25.20 |
| Ruled pads A4 | 24.50 |
| Scribbling pads A4 | 19.60 |
| Scribbling pads A5 | 9.80 |

| | |
|---|---|
| Adding machine rolls 2.75 | 7.60 |
| Petty cash pads | 7.00 |
| Adding machine rolls 2.25 | 6.25 |

**(Hint)**

1. Click on any cell in the table
2. Select Item under sort by in the sort dialog box
3. Under type, select Text
4. Then select Ascending to sort in ascending order.
5. Since you do not want the first row to be sorted, select the header row option button under My List has.
6. Clicking on OK produces the required result (Your tutor will review this with you)

You can also use the Options button to perform a case-sensitive sort and sort a column without re-ordering other columns. A case-sensitive sort orders text so that word whose first letter is a capital letter precedes any word whose word is the same letter in lowercase.

**Exercise 10**

You have created a long price list in a table (for the purpose of this lesson it is shown below) that you want to sort in alphabetical order of items.

| **Item** | **Price** |
|---|---|
| Hardcover books A4 size | 86.80 |
| Muster Roll books A4 | 81.20 |
| Shorthand notebooks | 25.20 |
| Ruled Pads A4 | 24.50 |
| Scribbling Pads A4 | 19.60 |
| Scribbling Pads A5 | 9.80 |
| Adding Machine rolls 2.75 | 7.60 |
| Petty cash pads | 7.00 |
| Adding Machine rolls 2.25 | 6.25 |

1. Click on any cell in the table.
2. Select Item under sort by in the Sort dialog box
3. Under Type, select Text
4. Then select Ascending to sort in ascending order
5. Since you do not want the first row to be sorted, select the Header row option button under My list has
6. Clicking on OK

**If you get the following result you are correct**

| **Item** | **Price** |
|---|---|
| Adding Machine rolls 2.25 | 6.25 |
| Adding Machine rolls 2.75 | 7.60 |
| Hardcover books A4 size | 86.80 |
| Muster Roll books A4 | 81.20 |

| | |
|---|---|
| Petty cash pads | 7.00 |
| Ruled Pads A4 | 24.50 |
| Scribbling Pads A4 | 19.60 |
| Scribbling Pads A5 | 9.80 |
| Shorthand notebooks | 25.20 |

**Performing Calculations in a Table**

You can quickly add the numbers in a row or column. You can also subtract, divide, and average numbers. Percentages too can be worked out and you can also find out the minimum and maximum values for a range of cells. When performing calculations in a table cells are referred to as A1,A2,B1,B2 and so on just like we have them in Microsoft Excel where the letter represents the column and the number the row. To perform calculations in a table:

1. Position the insertion point in the cell where you want the sum to appear
2. From the Table menu, choose Formula and the following dialog box appears

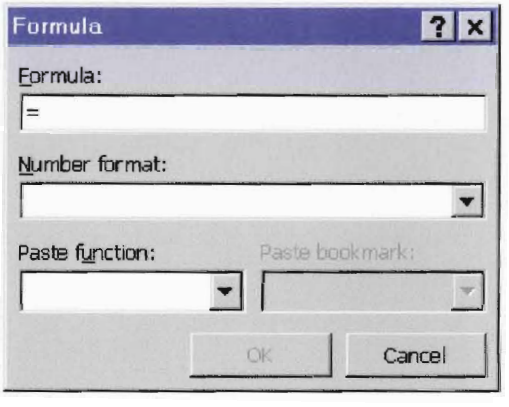



**Fig. 22 the formula dialog box**

3. Word analyses the table and proposes the appropriate formula in the formula box. For example, if the insertion point is at the bottom of a column of numbers, word proposes **=SUM(ABOVE)**

If word cannot determine an appropriate formula, it inserts an equal sign in the Formula box. When Word proposes a Formula that you do not want to use delete it from the Formula box. You must type or select the function you want, as described in the subsection below.

4. Choose the OK button. Word insert the sum of the numbers in the cell that contains the insertion point.

**To perform other calculations in a Table**

**a). Simple Calculations**

- Type cell references together with the arithmetic sign for adding, subtracting, multiplying, or dividing. For example, to add the numbers in cell A1 and B4, **Type = A1+B4.** To divide the number in a1 by the number in B4, **type =A1/B4.**

Do not use arithmetic signs in conjunction with any of the functions from the paste box. For example, do not use **=SUM (A1+B4)**.

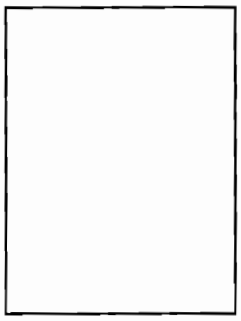
**b). Complex Calculations**

- To average cells or perform more complicated calculations, select a function from the Paste Function box. Then, in the formula box, type between the parentheses the range of cells you want to use in the calculation.
- Use commas to separate references to individual cells. For example **=average(A1,B2,F3)** to find the average of the values in cells A1,B2 and F3.
- Designate a range of contiguous cells by using a colon to separate the first and last cells in the range. For example, to find the average of numbers in cells A1, A2, B2, C1, C2, we would type A1:C2 between the parentheses to make the formula = **average(A1:C2)**.

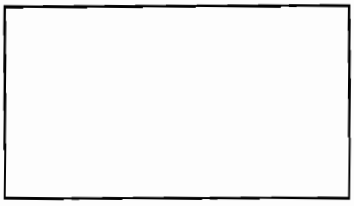
In the number **Format box**, type or select a format for the numbers. For example, to display the numbers as a decimal percentage, select **0.00%.**
Choose the **OK** button. Word inserts the result of the calculation as a field in the cell that contains the insertion point. **However, be aware** that if you change the values in the referenced cells, the result of the correction will not be automatically updated.

**Changing the Page Orientation**

When working with a table with many columns and/or with wide columns, you may find that it does not fit across the page or you are not able to specify as many text columns as you want because word is limited to the width of the page.
To be able to print more across the page, you can setup the page orientation to landscape orientation so that word now prints across the length of the page.



**Portrait Orientation**



**Landscape Orientation**

**Fig. 23 the Portrait and Landscape page layouts**

**How do you do it?**

1. Select **Page Setup** from the File menu

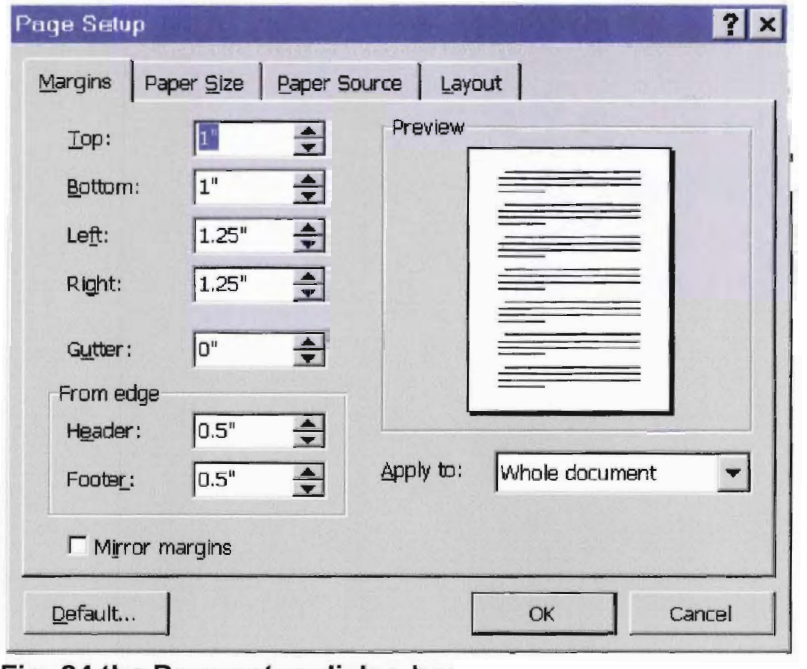



**Fig. 24 the Page setup dialog box**

2. In the resulting dialog box click on Paper Size
3. Change the orientation to the Landscape
4. Click OK.

### Printing Your Document

After word has finished preparing a document for printing, it does not send it directly to the printer. It first hands it over to the Windows print manager to carry out the actual printing. The print manager shows all the available printers and what each printer is doing at that moment.
By selecting printer, you can read its current status at the bottom of the print manager window. The print manager is useful in three main ways which are :

- It enables you to stop printing a document
- It gives you the opportunity to change the order in which various documents should print
- It allows you to determine which printer to use for printing if different printers are available

### Selecting a Printer

There are many different types of printers and word communicates with each one separately. You therefore have to tell Word which printer is connected to your computer (or if you are in a network which printer you want to use to print) in order to get the best results. To do this:

1. Select **Print** from the **File** menu in word
2. In the print dialog box, click on the **name list box** then click on the appropriate printer.
3. Click **OK**

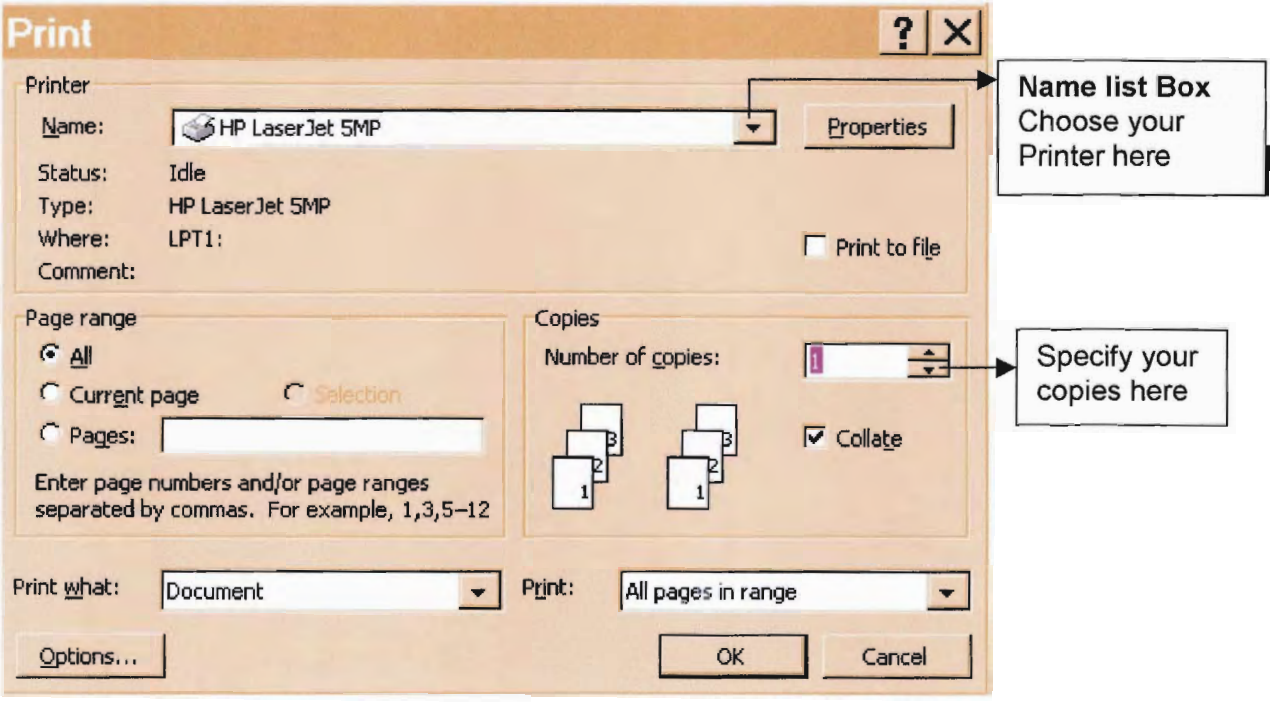



**Fig 25. The print dialog box**

In the case below the print manager shows the HP Laser jet 5P printer with the document Excelcvrpage.DOC printing. If there will be any other documents to be printed, they will appear under the one printing. In this situation we say they are on queue either spooling or waiting to be printed.
You can alter the priority of printing by **Pausing** a document or documents about to print in order to allow a document or documents to print. Please note that the pausing will not work on a document that is in **Printing** status.

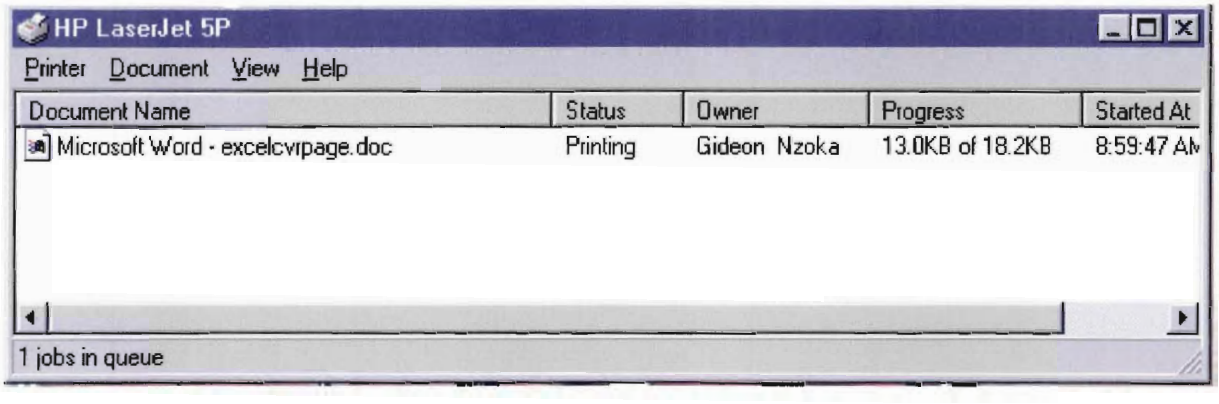



**Fig 26 The print Manager dialog box**

The figure above shows the following details about the document to be printed :

1. The Document name
2. The Status(Usually Printing or Spooling)
3. The Document Owner (Computer from which the document is being sent)
4. The progress made (usually how many Kilobytes or pages of the total for the document)
5. The time started

**To view the print manager Window:**

Double click on the printer Icon displayed next to the clock in the notification area of the taskbar

**Or**

1. Click on the **Start** button in the task bar the select **Settings**
2. Click on **Printers**
3. Double click on Printer you are currently using from the given list

**To re-assign priority to a document far from the print process**

1. Click on the document(s) before it on the print queue
2. Click on the **document** menu on the print manager menu bar
3. Click on Pause

This action makes the print manager believe the document you want to print is next on the print queue. After this you can now click on the previously paused documents to enable them to get printed.

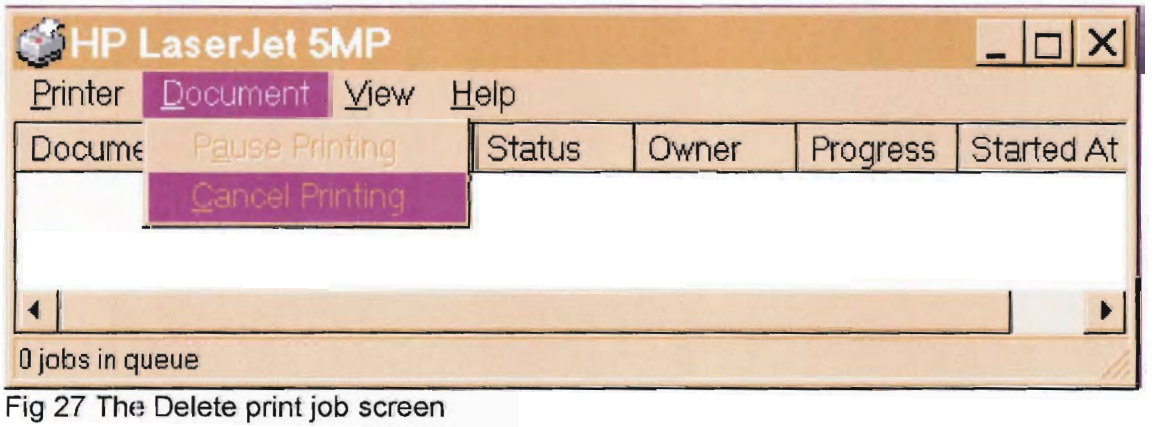



Fig 27 The Delete print job screen

**To delete a print job**

1. Highlight the job you want to delete
2. Select **document** from the Menu Bar
3. Click on **Document** menu then choose the **cancel printing** option.

**This is the Last page of this Manual**

# Appendix X

## Integrated Logistics Management Information System (ILMIS) in the Ministry of Health, Ghana

# Integrated Logistics Management Information System (ILMIS) in Ghana Ministry of Health

## Critical Issues

**prepared by:**

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**20 August, 1998**

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# Executive Summary and Recommendations

This report contains the observations of a team that in July 1998 reviewed opportunities to develop an integrated logistics management information system to strengthen logistics support for the Ghana Ministry of Health. This mission followed up specific questions raised by an earlier logistics mission in May.

The management structure for logistics management has not yet been defined. It may become an autonomous unit or a better defined technical operation within the Ministry.

**Recommendation:** *Before an integrated logistics management information system can be developed, the structure and operation of the Ministry's logistics support mechanism must be defined.*

Development of a distribution system awaits a clearer definition of the roles of intermediate stores at regional and district levels.

**Recommendation:** *Before developing a centrally organized distribution system, the center, regions, and districts should agree on the role of regional and district stores and the operational and financial transactions that guarantee timely and cost-effective resupply.*

Vertical information systems are the most common in the Ministry. A decentralized model has been tested and well received at regions and districts.

**Recommendation:** *Several specific steps should be taken to strengthen and implement the information system that supports decentralized management:*

1. *Agreement on performance indicators between the major technical divisions (public health, institutional care, drugs and supplies, human resources, and finance) for each type of facility and management unit.*
2. *Identify and strengthen the channel for information flow and dissemination.*
3. *Train staff at all levels in decentralized management techniques and the supporting information system.*
4. *Information disseminated from the decentralized system replaces the information produced from the vertical system.*

The drug logistics system relies on revolving funds for procurement, with financial information assuming equal importance as inventory information in decisions to procure. This is a highly decentralized management model, with two types of information flow. One type is that required to manage the finances and inventory in the management unit; this type

of information is discussed later. The other type of information shows how the logistics system in a specific management unit is performing.

**Recommendation:** *Ghana National Drug Program (GNDP), in collaboration with Stores, Supplies, and Drugs Management (SSDM) division, the Procurement Unit (PU), the Pharmacy Unit, and the General Accountant's (GA's) office, should develop and test a set of performance indicators for logistics management.*

Several steps can be taken immediately to improve the flow of information between SSDM and its partners and within SSDM itself.

**Recommendation:** *SSDM should convene a procurement and stock management working group. Participants should be invited from MCH/FP, EPI, institutional care, and the biomedical engineering unit, as well as from donor agencies involved in procurement such as DANIDA, DFID, JICA, Netherlands, UNFPA, UNICEF, USAID, and perhaps others. This group should develop written guidelines for coordinating procurement and serve as a forum where issues of immediate concern can be raised.*

**Recommendation:** *An operations coordinating committee should be established within SSDM, with regular weekly or biweekly meetings. The committee chair should be the acting Director, SSDM; the committee members should include representatives from PU, Central Medical Stores (CMS), AG's office, GNDP, and the Pharmacy Unit.*

Some information sources could be used immediately by SSDM to manage logistics operations.

**Recommendation:** *Several useful information related activities should be initiated immediately by SSDM and its affiliates: participation in redesign of CMS automated system; review and rationalization of monthly consumption estimates; and study of reasons for not purchasing from CMS / RMS.*

Some Ministry employees have a very high level of information technology (IT) skills. Their participation should be enlisted in developing IT standards.

**Recommendation:** *IME should convene a working group of IT specialists currently in the Ministry to formulate policy and guidelines regarding hardware, software, and telecommunications. These guidelines should include standards for hardware, telecommunications, office suites and database platforms for general purpose use in the Ministry, with a focus on ease of use and support available both within the Ministry and the private sector.*

**Recommendation:** *Since telecommunications can be an expensive investment, to avoid potential incompatibilities or unnecessary expenses in comparison with the Intranet technology, the Ministry should refrain from investment in this technology until the IT working group has made its guidelines.*

Several immediate steps can be taken to improve information use for stores management.

**Recommendation:** *Stores management standards and procedures should be developed and published in an updated store keeping standards and procedures manual for each level.*

**Recommendation:** *At national, regional, and facility levels the role of financial manager of the drug revolving fund and the nondrug consumables cost recovery should be assigned to an existing staff member. This person will be responsible for carrying out the fund management procedures and to harmonize the ATF rules with information required for financial management.*

**Recommendation:** *Each subdistrict, district, hospital, and medical store should calculate the net worth of the drug revolving fund quarterly and annually. The percentage change from the previous reporting period should be reviewed by the management unit and reported to the next higher level.*

**Recommendation:** *Policy guidelines on credit for each operational level should be established as soon as possible. These guidelines should include a mechanism for prompt recovery of the credit granted between revolving funds and should address exemption funds and the operational definition of clients in the exempted categories, including the poor.*

**Recommendation:** *The policy objectives for cost recovery using the drug revolving fund should be reviewed. Pricing guidelines should be established in accord with these policies and with respect to their cost effectiveness, their transparency, and their implications for equity and affordability. The guidelines should also include mechanisms for enforcing and monitoring their observance.*

**Recommendation:** *The Kenya Ministry of Health plans to introduce a cash and carry system for drugs. It would be very useful for policy, planning, and operational specialists from the Kenya Ministry to observe the system in Ghana. The IT collaboration between Kenya and Ghana to support LMIS development should continue.*

**Background.** Strengthening the logistics system that supports the availability of drugs and supplies throughout the health system has been identified as a priority by the Ghana Ministry of Health (MoH). This document summarizes the observations and recommendations of a team of one MoH pharmacist and two expatriate information systems consultants who reviewed the current logistics system to identify opportunities for improving the logistics management information system (LMIS) in July, 1998. The team interviewed a number of logistics and service delivery managers at all levels, including regional and district managers at Central Region and Assin Foso District.[1] This review was guided by the observations of an earlier mission on integrated logistics management information systems (ILMIS) in May, 1998.[2]

The MoH began instituting reform of the health system in the early 1980s. Management of the system has become increasingly decentralized, with facilities, districts, and regions assuming responsibility for planning, budgeting, and implementing activities. In recent years, the decentralized mode has been reinforced by new planning and budgeting procedures introduced throughout the public sector by the Ministry of Finance and Economic Planning (MFEP).

The decentralized operational model, with its emphasis on local decision making, suggests a management information system with very different characteristics than a centralized model. For the information system that supports logistics, the challenge is to integrate a centralized procurement system, with its economies of scale, into a decentralized management system.

Development of a LMIS depends on several decisions and guidelines from the Ministry related to the structure of the logistics management organization and the overall approach to information systems. While these medium term issues are resolved, several immediate institutional and information issues can be addressed. This document discusses each of these sets of issues in turn: medium term institutional issues, short term institutional issues, and short term information issues.

## 1. Medium Term Institutional Issues

Two institutional issues need to be addressed before LMIS development can proceed.

- The structure of the organization responsible for management of procurement, stores, and distribution needs to be defined.

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[1] An itinerary and list of persons interviewed are included as Annexes A and B.

[2] The terms of reference for this mission are included as Annex C.

- Steps need to be taken to strengthen the information system that supports the Ministry's new decentralized management structure.

## 1.1 Structure of Procurement, Stores, and Distribution Operations

The main task of a management information system (MIS) is to support decision making by managers. The structure of the information system depends on the management structure; without a clearly defined management structure, the information system cannot be developed. Two basic options have been discussed: devolution of Central Medical Stores (CMS) into an autonomous business unit, or integration of procurement, stores, and distribution operations into the emerging decentralized management of the health system.

Until the management structure is defined, it is not possible to develop an information system to support it. Each choice has somewhat different implications for information systems design.

### 1.1.1 Autonomous Business Unit

The evolution of CMS into autonomous business unit has been described as a goal by some. If this direction is taken, several additional decisions need to be made before an information system can be designed.

- The LMIS mediates the flow and correlation of information between operational functions. What operational functions will the autonomous unit assume? Will they include procurement and delivery?
- The LMIS must support sound financial management. What are the financial responsibilities of the organization? How much of the operational overhead will this unit assume? Is it a parastatal or a commercial enterprise?
- The LMIS must facilitate the flow of information between the Ministry and the autonomous unit. What are the transactional relations with the Ministry? How does the Ministry order supplies and equipment through the autonomous unit, and what are the regulatory mechanisms to ensure performance standards?

### 1.1.2 Within the Ministry

Another management model discussed places logistics related operations within the Ministry. With this model also, several decisions need to be taken before developing an LMIS.

- The LMIS must supply information to manage and coordinate operational units like procurement and supplies. What exactly are these operational units? Where do they fall in the Ministry's organizational structure? Where is the operational coordinating unit?
- The LMIS must facilitate the transfer of information between the logistics and technical service delivery units. What is the model for integrating these units?

- The LMIS must support management decisions taken to improve the cost-effectiveness and performance of the logistics operation. Who makes these decisions and sets the performance standards?

**Recommendation:** *Before an integrated logistics management information system can be developed, the structure and operation of the Ministry's logistics support mechanism must be defined.*

### 1.1.3 Logistics Operations and Distribution at the Periphery

The organizational decisions mentioned in the preceding paragraphs will influence operations, particularly distribution, at the periphery of the logistics system, such as regions, districts, and facilities. For example, it would be possible to decide that an autonomous CMS would be responsible for delivery down to the regional level or lower, or that the Ministry would assume distribution responsibility from the center to the periphery. Even if it were determined fairly quickly that the Ministry would assume responsibility for distribution from the center outwards, some additional decisions need to be made before a distribution support system could be designed.

It has been reported that the Ministry plans to convert Regional Medical Stores (RMSs) from intermediaries in the purchasing chain to warehouses for CMS, eliminating the revolving fund operation at the regional level. Many interviewed believe that this move would be successfully resisted by Regional Directors who wish to retain control over the inputs into their operations.

If the RMSs are converted into CMS depots, a centrally organized distribution system will need to be developed to resupply the RMS in a timely and cost-effective manner. This new system would likely require additional resources like vehicles, and perhaps more drivers and other support personnel; these decisions would need to be made before a distribution system could be designed. Automated support has been planned to project resupply needs based on stock levels at the regional warehouses and to determine optimal distribution routing. These methodologies, including both restocking algorithms and options for automated support, are well known from experience in both the public and private sector. Developing a distribution system to restock regional warehouses should present no technical difficulties.

Given the questions regarding the degree of institutional will required to turn the RMSs into warehouses for CMS, it would seem premature to develop a distribution system before this conversion has been agreed by all of the concerned parties.

Another set of issues regarding extension of the distribution network to the periphery revolves around the question of district stores. The number of district stores is said to be increasing; some have estimated the number at around 20, but no authoritative count could be found.

Some of these stores originate from the Bamako Initiative, and some have been started to make drugs and supplies more readily available at subdistrict facilities. There are sound arguments for establishing district stores, but there is also potential for introducing additional overhead into the logistics system. This is an area of the logistics system in which policy and guidelines should be reviewed and published.

**Recommendation:** *Before developing a centrally organized distribution system, the center, regions, and districts should agree on the role of regional and district stores and the operational and financial transactions that guarantee timely and cost-effective resupply.*

## 1.2 LMIS in Decentralized Management System

Major steps have recently been taken to move towards an integrated, decentralized management system: the establishment of Budget and Management Centers (BMCs) with responsibility for planning, budgeting, and implementation, and the use of the Medium Term Expenditure Framework (MTEF) for integrating planning both within and between BMCs. Operationally the Ministry appears to be in a transition period: decentralized, integrated management is quite strong, particularly at the Regional level, while the divisions within the Ministry, which have a vertical management structure, also retain their power and authority.

Drugs and supplies are delivered to health facilities through several different logistics systems, some decentralized (sometimes called "pull" systems) and some centralized (sometimes called "push" systems). Drugs and nondrug consumables are procured using a decentralized model, with each stores unit making its own decisions on procurement based on expected demand and resources for purchase. This model, called the "cash and carry system", relies on a revolving fund that is replenished by sales to patients (at facilities) or to institutional buyers (at CMS, RMS, and district stores). Vaccines and contraceptives, on the other hand, are procured and distributed using a centralized, vertical logistics system.

To understand the implications of choosing a centralized or decentralized information system, it is useful to review the strengths and weaknesses of these strategies.

### 1.2.1 Vertical management and information systems.

Until recent years, a vertical approach to program management and the supporting information systems has been customary in many health service delivery systems.

**Strengths:**

5. Vertical reporting systems rely on detailed information reported upwards through channels that lead directly to national program managers. In a strong vertical program this information can be of good quality and provides the ability to micro manage operations and to control resources and activities from a higher level.

6. Because vertical information systems have been used in many settings, their characteristics and operations are well known.

**Weaknesses:**

1. The multiple reporting channels characteristic of vertical reporting systems lead to fragmented and inconsistent data. Often the same piece of data must be recorded on several forms. Mistakes are inevitable and result in inconsistent data reported at the center. Especially at the facility level itself, the data burden for the provider is quite high, usually leaving no time for local analysis and use of the data, and often cutting into time that could be spent in providing client services.
2. The vertical model does not translate well to a model such as the cash and carry system, where procurement decisions are made locally on the basis of both need and available resources to purchase.

### 1.2.2 Decentralized management and information systems.

The reporting model that supports decentralized management is usually based on a group of performance indicators that are monitored to ensure that the functional management unit is operating according to standard and meeting the operational targets it has set. This panel of performance indicators should be closely tied to the targets used in planning and budgeting. Usually the detailed information required for routine operations remains within the discrete management unit and is not reported upwards as it would be in a strongly vertical system. If an indicator suggests that a unit is not meeting standards or planned objectives, then the unit's own managers, perhaps with the support of specialists from a higher level, investigate and take corrective action. This model is akin to the panel of indicators in an automobile: the driver relies on routine maintenance to keep the vehicle running and uses the oil and fuel gauges to warn when action is required.

The health reform process has sometimes been compared to the corporate re-engineering undertaken by many businesses to make operations more cost-effective and products more competitive. The decentralized management and information model described above is that used by many re-engineered organizations.

**Strengths:**

1. Even though vertical programs remain very strong within the Ministry, many steps have been taken to move towards the decentralized model, for example, the BMCs and MTEF planning process. It is the Ministry's stated intention to decentralize, and its actions accord with that statement. Looking towards the future, it makes sense to design an information system that follows the decentralized rather than the vertical model.
2. A single routine reporting channel is used, so that duplicate reporting is eliminated, along with the errors associated with this type of reporting.

3. The reporting burden at facilities is reduced to the minimum amount of data required for performance monitoring.

**Weaknesses:**

1. The decentralized management and information systems model is not well known or understood by those with experience in vertical management; this includes most health professionals.
2. This management strategy requires retraining to implement, and a strong supervisory system to sustain itself. Implementation requires a substantial initial investment in training. The experience of Central Region may be cited as an example. Central is one of the regions where the integrated and decentralized MQHA system was pilot tested. The Region has observed that the decentralized information system coordinated with decentralized management supports incremental improvements in performance in districts where people have been trained; in districts where new staff, untrained in the systems, have assumed posts, the management strategies and information system work less well. Therefore the regions and districts will invest their own resources in training on decentralized management strategies during the second half of this year. The fact that regions and districts are willing to invest scarce resources in this exercise is strong evidence that the decentralized model works. The importance of training and supervision in introducing the decentralized model (and the attendant initial investment), are also lessons learnt from the decentralization experience in Kenya and Zambia.

### 1.2.3 National health management information systems

Performance indicator panels are already used in Ghana. The *Health Sector Five Year Programme of Work: 1997 Review* uses an indicator panel to assess health sector performance; drug availability is one of the indicators used. The MQHA system, which has been pilot tested in three regions, uses a similar panel of indicators to monitor activities. (This panel does not include logistics indicators.) The objectives derived from the MTEF planning process suggest yet another panel of indicators. All of these indicator panels need to be rationalized and harmonized, so that a consistent set of indicators is used throughout the system. For example, the MQHA panel would need to be expanded to include indicators of logistics, human resources, and financial management, in order to provide a comprehensive indicator panel for a health management information system. The objective is to develop a set of indicators so that functional management units which are underperforming can be readily identified and supported.

Information systems, like the management systems they support, are mixed between vertical and integrated models. An integrated MQHA was introduced on a pilot basis in 1992 in three Regions: Upper West, Upper East, and Central. Nationwide implementation of this system

has apparently not been scheduled. In the meantime these three regions maintain two distinct reporting protocols: the integrated system and the earlier multichannel vertical system.

**Recommendation:** *Several specific steps should be taken to strengthen and implement the information system that supports decentralized management:*

1. *Agreement on performance indicators between the major technical divisions (public health, institutional care, drugs and supplies, human resources, and finance) for each type of facility and management unit.*
2. *Identify and strengthen the channel for information flow and dissemination.*
3. *Train staff at all levels in decentralized management techniques and the supporting information system.*
4. *Information disseminated from the decentralized system replaces the information produced from the vertical system.*

### 1.2.4 Logistics management information systems

The preceding recommendation to integrate the collection and analysis of health system indicators into a uniform panel is not new. The testing of the MQHA system suggests that the Ministry has supported the idea in the past. More recently, in 1997, a similar recommendation was made by a team of consultants, who produced a detailed plan of action (GoG / MoH / International Records Management Trust, 1997).

It is not clear why the Ministry has not yet acted to implement a decentralized information systems model nationwide, nor is it clear that the decision has been taken to implement such a system. In the absence of explicit direction from the Ministry, it may be prudent for SSDM and its affiliates to explore its own approach to information and indicators to support logistics management.

Two vertical logistics information systems have long been used to provide commodities quite successfully in Ghana: the EPI vaccine logistics system and the family planning contraceptive logistics system. These systems have apparently been considered as models for an effective logistics system for drugs and other health materiel. However, neither the contraceptive nor the vaccine logistics systems operates with a revolving fund model like the cash and carry system. The vaccines and contraceptives are in fact purchased with information; the commodities are exchanged for a tightly controlled estimate of need based on client consumption (dispensing data). (While the client pays a fee for contraceptives, which is close to the prevailing price of highly subsidized contraceptives available through the Ghana Social Marketing Program, these fees are not revolved to purchase more contraceptives; instead they are used for other items such as sterile gloves or activities related to family planning.)

In contrast, there is little if any incentive to report consumption in the cash and carry system, where commodities are purchased with currency instead of information. There is evidence

that the existing reporting system for drugs issued from facility stores has fallen into disuse. Central Region has not received a single report from facilities in 1998, and a similar situation has been reported from Brong-Ahafo. No issues reports from Greater Accra have been received at the central Pharmacy Unit in 1998; other regions were not reviewed. (At the national level, there was so little interest in these issues data that no one had noticed that the reports had not been submitted.) The lack of incentive for accurate reporting of drug use data is further suggested by the response to the Pharmacy Unit's collection of data for five tracer drugs in 1997. The previous ILMIS mission found that the same single round figure was reported for each month.

The consultants on this mission were asked to explore staff competencies for organizing a pilot study to collect facility level dispensing data on essential drugs. There is no question that the competencies exist in the Ministry for organizing such a study. There is a Pharmacy Issuing Register that is sometimes kept in small facilities that have a formulary of fewer than 20 drugs, which records the amount of each drug dispensed daily. This register is used by auditors to verify transactions. In exploring techniques for obtaining dispensing data from larger facilities, and in particular hospitals, it was generally agreed that it would be extremely labor intensive to record dispensing data in a pharmacy that does not already have automated transaction support. It was also considered extremely unlikely that one could obtain reliable and complete dispensing data on a routine basis.

A major reason for collecting dispensing data is to better predict consumption, and hence allow more rational procurement at the national level. While this methodology may be ideal, it was noted that the contraceptive logistics system in Kenya resupplies based on national issues data. The system is reported to work well, even though this methodology is considered to be inappropriate by many family planning logisticians.

The logistics information systems for drugs that have been discussed in the past are apparently based on vertical management models, in which procurement decisions are controlled and reviewed by a higher level. While such a system could be set up in Ghana, the consultants are, frankly, skeptical that the data reported would be in any way accurate or complete.

The consultants were also asked to assess the speed with which data could be transmitted from the periphery of the system (institutions) to the center in Accra. This seems highly variable and dependent on whether the information is perceived as useful by the reporting institution. For example, as reported above, the issues data from facilities is appears to go unreported. The situation is different in systems where the information appears to be used and fed back. The Central Region reports that data reported via the MQHA system is complete and analyzed at the region within a month after the end of the quarterly reporting period; MCH reports that the reports are complete at Accra within two months after the end of the 6 monthly reporting cycle.

In the decentralized logistics management information systems model, two types of information are available: the information required to operate the logistics system within the management unit, which is often not reported outwards; and the information required to assess the efficiency and quality of logistics management, which is reported to other management units. Internal management of the system is addressed by some of the recommendations in Section 3. Immediate Information Systems Issues, below. It should be noted that the internal management of the logistics system, both the cash and carry (pull) side and the vaccine and contraceptives (push) side, are perceived as working fairly well in meeting the objective of drug availability at the facility level. The baseline study soon to be undertaken by the Ghana National Drug Program (GNDP), the investigation proposed below, in Section 2.2.2 Management use of CMS information system, and routine use of a panel of logistics indicators, as proposed in this section, could confirm this perception and monitor logistics management at each level.

While the integrated performance panel as recommended in the previous section is the most desirable model, the institutional will and schedule for implementing such a solution have not yet been articulated. In the meantime, logistics performance indicators could be defined and tested. If the Ministry decides to retain the vertical, multiple channel reporting model, the panel of performance indicators could still be introduced as a unique channel vertical reporting system. The MCH/FP reporting system provides an example of such performance indicators in a vertical setting. The indicators are used to adjust action plans and identify geographic and technical areas for strengthening.[3] A similar set of performance indicators for logistics management should be developed and used.

As an example of the way the indicator panel works, the performance criteria that GNDP has set for the drug logistics system could be monitored in the following way:

1. Availability: Tracer drugs defined for each level continuously in stock
2. Solvency: Change in net value of revolving fund
3. Rational use: Proportion of antibiotics in small sample using lot quality assurance sample (LQAS) methodology
4. Cost-effectiveness: Number of units expiring on shelf
5. Quality of drugs: Proportion of sample meeting standards
6. Quantification: Variance between issues and expected consumption based on morbidity data

**Recommendation:** *GNDP, in collaboration with SSDM, PU, the Pharmacy Unit, and the Chief Accountant's office, should develop and test a set of performance indicators for logistics management.*

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[3] See *Maternal And Child Health and Family Planning: 1996 Annual Report.*

## 2. Short term Institutional Issues

Several institutional issues can be addressed immediately. Tackling these issues would alleviate some current constraints and provide a solid foundation from which to address the medium term issues discussed in the previous section.

- Coordination between SSDM, technical units, and donors.
- Coordination within SSDM.
- Coordination of information technology development.

### 2.1 Coordination between SSDM, other MoH units, and donors

Integration of SSDM procurement and stock management procedures with similar operations elsewhere in the Ministry, and specifically with contraceptives, vaccines, and biomedical equipment, would create a more cost-effective logistics system. Similar integration of donor initiated procurement and funds would also improve overall cost-effectiveness and eliminate some needless frustration and misunderstanding.

Several examples were cited of unexpected deliveries of commodities, both from donors and from orders originating in SSDM. These situations wasted time and often created unnecessary expenses. Examples were also cited of procurement of inappropriate technology, where trained staff or necessary supplies were not available. The result was often a loss of the investment in technology.

It appears that in most of the examples cited, improved human and institutional communication would have eliminated the problem.

**Recommendation:** *SSDM should convene a procurement and stock management working group. Participants should be invited from MCH/FP, EPI, institutional care, and the biomedical engineering unit, as well as from donor agencies involved in procurement such as DANIDA, DFID, JICA, Netherlands, UNFPA, UNICEF, USAID, and perhaps others. This group should develop written guidelines for coordinating procurement and serve as a forum where issues of immediate concern can be raised.*

### 2.2 Operational Coordination within SSDM

There are several steps that can be taken by SSDM immediately to improve internal coordination and its use of existing information.

#### 2.2.1 Coordinating committee

There are three major units that play essential roles in operating the logistics system: the Procurement Unit (PU), CMS, and the Accountant General's (AG's) office. Communication

between these units is impromptu. Without regular communication and overall management, the activities of each separate unit will certainly not support each other. Situations will inevitably arise where each unit holds its operational pieces of information, which would be extremely useful for another unit. For example, in information systems, development of a transaction system to support stock control has already begun at CMS and development of a database on supplier performance has been proposed at procurement. There is also a clear need to integrate the AG's office more closely into operational decisions, with the objective of establishing financial management procedures. These activities should be coordinated so that the assumptions and plans of each group support each other.

**Recommendation:** *An operations coordinating committee should be established within SSDM, with regular weekly or biweekly meetings. The committee chair should be the acting Director, SSDM; the committee members should include representatives from PU, CMS, AG's office, GNDP, and the Pharmacy Unit.*

### 2.2.2 Management use of CMS information system

CMS has developed an automated stock management and control system that records each CMS drug sales transaction. This system contains a good deal of useful information that is underutilized by managers. For example, during this review the system showed that psychiatric institutions accounted for some 20% of drug sales in 1997. This is an unusual pattern, which will be further investigated. Had logistics management been more integrated with the CMS information system, this investigation would doubtless have been pursued earlier. There are a number of activities that could be undertaken to make better use of the CMS information.

1. Participation in redesign of CMS information system. The system is presently being redesigned to take advantage of new information technology (IT) that is expected. SSDM management, perhaps in the form of the steering committee proposed above, should be a leading force and an active participant in this redesign, so that management information, tailored to its specifications, can be produced from the new system.
2. Monthly consumption estimates. While all transaction data are recorded in the CMS system, monthly consumption estimates are made by a pharmacist who reviews the stock regularly. Apparently this methodology was selected because erratic purchasing patterns led to inconsistent consumption patterns. This methodology is being reviewed, with an eye to analyzing the transaction data and automating the estimate. Monthly (or annual) consumption estimates are key parameters in forecasting future consumption for procurement. SSDM and the PU should be principal advisors in determining this methodology, which should be transparent to all of the related units.
3. Study of reasons for not purchasing from CMS / RMS. It is generally assumed that the main reason for not purchasing from CMS / RMS is that the commodity is not

available. While this certainly contributes to stores and facilities resorting to local purchases, many other reasons have been mentioned by field staff. This study should be coordinated with the baseline study about to be undertaken by the GNDP.

- Pricing. Facilities and district stores may shop around and find better prices through a wholesaler. CMS procures a number of fast moving drugs locally. Of the five top selling items in 1997, which account for 25% of total sales, three are to be purchased locally according to the 1998 procurement plan. After CMS and RMS markups, these same items may well be less costly from a wholesaler.
- Credit. There is a substantial amount of capital lying fallow in credit. Stores that are indebted to the CMS / RMS may not be able to procure from these sources since they cannot pay down their debts. In the private sector, purchases can be made with 30 and 60 days credit, so relatively small purchases can be made and repaid with the proceeds from the sales of the item.
- Drugs not on the essential drug list. Especially in hospitals, medical officers may request drugs that are not on the essential list. While technically this is not permitted, apparently it often happens, and the pharmacist or storekeeper, junior to the medical officer, has little choice but to agree.
- Leakage. There is acknowledged to be leakage in the system, as there is in every procurement system.

**Recommendation:** *Several useful information related activities should be initiated immediately by SSDM and its affiliates: participation in redesign of CMS automated system; review and rationalization of monthly consumption estimates; and study of reasons for not purchasing from CMS / RMS.*

### 2.3 Information technology

Information technology (IT) to support an ILMIS cannot be specified until the ILMIS itself is designed. As discussed above, development of the ILMIS cannot be undertaken before the Ministry itself decides on the structure and management of the logistics operation. In the meantime, several steps can be taken to ensure consistent and cost-effective deployment of IT.

- Formation of an IT policy working group.
- Investment in telecommunications technology should be deferred until the IT policy group has made its guidelines.

During the debriefing both USAID and GNDP expressed an interest in participating in the strengthening the use of information technology and exploring the implementation of an Intranet. Collaboration between these two groups should be established.

### 2.3.1 Information Technology policy guidelines.

It is essential for automated information systems to be able to exchange information. To accomplish this, the systems must use compatible hardware and software platforms. During this review, four different software platforms were observed in use: Excel spreadsheets, dBase, EPIInfo, and Clarion. It would likely not be easy to combine the results of these systems. IT specialists currently working in the Ministry would be the ideal advisors to create IT policy and guidelines.

**Recommendation:** *IME should convene a working group of IT specialists currently in the Ministry to formulate policy and guidelines regarding hardware, software, and telecommunications. These guidelines should include standards for hardware, telecommunications, office suites and database platforms for general purpose use in the Ministry, with a focus on ease of use and support available both within the Ministry and the private sector.*

### 2.3.2 Telecommunications.

Communication among offices in different locations, like regions and the center, is a reasonable near-term goal. While the IT group should make the guidelines for this technology, it is strongly recommended that they consider an Intranet, which is the solution of choice in most countries with a reasonably well developed telephone system. Access to central databases, information, and email becomes extremely cost-effective with a personal computer (PC) and a telephone line. (While it is sometimes difficult for individuals to obtain telephone lines, the Ministry uses PBX lines, and has priority access to additional lines.)

**Recommendation:** *Since telecommunications can be an expensive investment, to avoid potential incompatibilities or unnecessary expenses in comparison with the Intranet technology, the Ministry should refrain from investment in this technology until the IT working group has made its guidelines.*

## 3. Short term information system issues

The issues discussed in this section refer to using information to improve management of logistics within each functional management unit. These issues can be addressed immediately, since they remain essentially the same regardless of the medium term choices made regarding the organization of CMS and information systems and discussed in Section 1.

The cash and carry system is a revolving fund based on client payment for drugs. This system was introduced as a cost recovery mechanism in 1992. Now it supports all drug purchases except for exempted categories of patients (tuberculosis, leprosy, AIDS, cholera, psychiatry, antenatal care, children under 5, adults over 70, and the poor). In 1998, a second revolving

fund for "non drug consumables" (including dressings, laboratory reagents, IV kits, etc) was introduced and capitalized.

Sound management of these funds to assure maintenance of their net worth is essential to sustaining this system, which considerably reduces the amount of public funds that must be used for purchase of drugs and supplies. In the cash and carry system, financial information becomes as important as inventory information in managing the logistics system. In fact, some have observed that the introduction of the cash and carry system is associated with, and to some degree responsible for, improved availability of drugs at facilities.

Each management unit that deals with the procurement or issuing of drugs or consumable medical supplies must also account for financial transactions and manage the revolving fund in such a way that its net worth does not decrease. Many staff who have been given this responsibility have little or no training in financial management. There are several opportunities for improving the use of financial information to support more efficient and effective use of these funds.

### 3.1 Standards and procedures.

The stores procedures manual has not been updated since 1957, although several efforts were made in 1989 and 1993 to develop procedures relevant to the cash and carry system. Standards and procedures for stock and revolving fund management should be developed. Classical stock management techniques often use minimum and maximum stock levels, based on previous consumption. In the cash and carry system, it may not be possible to top up to the maximum (or even minimum) level because the funds necessary to purchase may not be available. Pharmacists who are experienced in management of both resources and stock should collaborate in the development of a procedures manual so that practical advice and guidelines can be given regarding stores management at each level (facility type, district, region, national).

**Recommendation:** *Stores management standards and procedures should be developed and published in an updated store keeping standards and procedures manual for each level.*

### 3.2 Harmonizing accounting and stock management procedures and information.

With the introduction of the cash and carry system, every issue of stock is accompanied by two transactions: an exchange of goods and an exchange of funds. Both of these exchanges are governed by two separate sets of regulations and are conducted by employees of two different Ministries: MFEP (for accounting) and Health (for stock). Without a single post responsible for harmonizing the operations, there is potential for contradiction between the procedures for exchange of goods and funds.

Examples of the inconsistencies in these processes appeared at both the regional and central levels. (The potential for inconsistency also exists at the facility level, but time did not permit investigation at this level.) At the Central Region, introduction of the new Accounting, Treasury, and Financing (ATF) rules in 1998 prompted a change in procedures so that a proper invoice could be raised and processed by the accounting department. The result of the procedural changes was to remove informal checks on credit extension, and the proportion of the fund in credit increased steeply in the first quarter of 1998. Eventually the consequences of the discontinuities were brought to the attention of the Regional Director, who harmonized them in July, 1998.

During the debriefing it became clear that the ATF rules introduce bookkeeping procedures that may not accord with the needs of revolving fund management. The implications of these regulations for the cash and carry system should be thoroughly reviewed.

The procedures of the banking system with regard to collection of funds from rural banks introduces another discontinuity in the system that affects accounts at RMSs particularly. Districts typically pay for purchases with checks. It was said that it could take as long as 3-5 months for these checks to clear and funds to be transferred to the RMS account. It is very difficult to reconcile the balance actually attributed to the account with the record of payment in the regional office. For example, in Central Region, at the end of the first quarter in 1998, the RMS was told its bank balance was some 75 million cedis, while accounts records reviewed during this mission showed some 125 million according to the deposit trail. The difference is substantial.

Discontinuities in accounting and issuing procedures also exist at CMS; these await resolution.[4] In brief, the only financial transactions recorded at CMS are payments for goods sold to customers paying from revolving funds. Payments by the Ministry for exempted drugs purchased through CMS, and all payments for goods received by CMS are recorded by the accounting office at the Ministry, some 20 kilometers distant. There are several consequences of the fact that accounts are not brought together: the net worth of the revolving funds cannot be reviewed on an as needed basis; the unit purchase price and the selling price are normally established based on indents, not the amount paid according to invoice; and overall management of the investments in CMS to improve efficiency is extremely difficult, if not impossible. The inconsistencies at the center are a bit more difficult to resolve than those at the region, in part because of the geographic distance that separates the parties, and in part because the administrative structure of SSDM is still evolving.

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[4] The Deputy Director of GNDP presented practical financial management options for CMS in his MBA long essay. *Financial Management of Cash and Carry.* Francis Aboagye-Nyame. 1997.

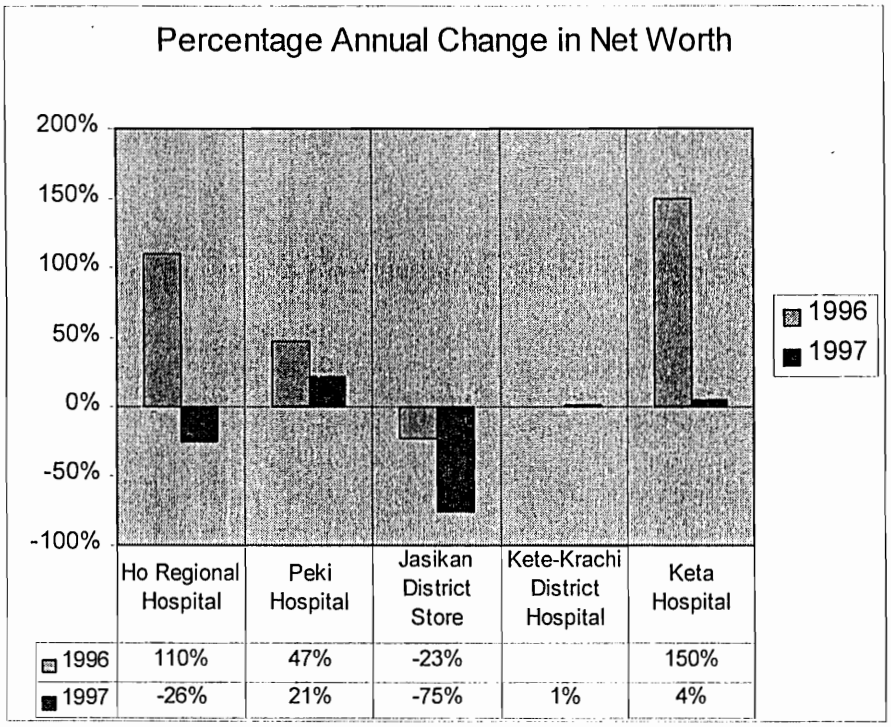
A cost recovery mechanism has recently been introduced, and a fund capitalized, for nondrug consumables. No separate accounting mechanism has been introduced for these items, however, and payments are put into the user fees account. This practice makes it impossible to monitor the cost recovery operation.

**Recommendation:** *At national, regional, and facility levels the role of financial manager of the drug revolving fund and the nondrug consumables cost recovery should be assigned to an existing staff member. This person will be responsible for carrying out the fund management procedures and to harmonize the ATF rules with information required for financial management.*

### 3.3 Monitoring fund management.

A simple first step in routine management of the funds is to monitor increases and decreases in their net values. The Central Region has incorporated this procedure in its routine supervision at district and subdistrict levels. District level experience at Assin indicates that Class A facilities (community based clinics, often modeled after the Bamako Initiative recommendations) have difficulty maintaining their value, primarily because of absconders, while Class B facilities (health centers with professional staff including Medical Assistant or higher qualification) tend to maintain or increase in value. The Chief Pharmacist's office, through the Deputy Minister, has also begun to require changes in net value quarterly from Regional Medical Stores (RMS) and has issued a strong recommendation that districts also monitor this figure.

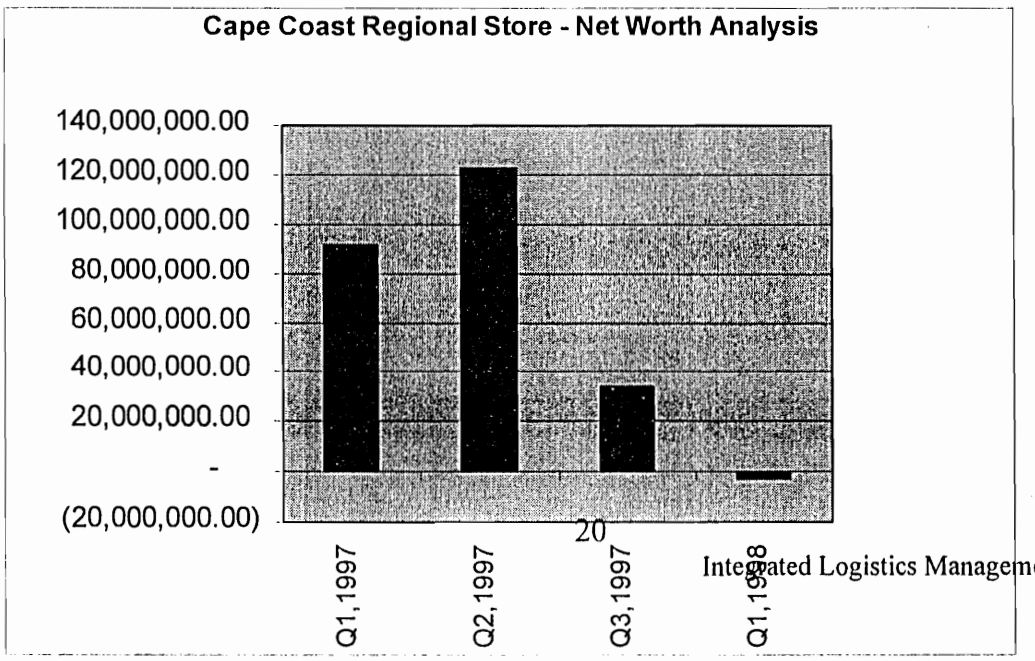
The net worth of the Cape Coast RMS drug fund appears to have fallen fairly dramatically over the past year, partly because of a surge in credit extended that is described in the following section. (These figures should be interpreted with caution because of the discrepancies in bank balance reported in the previous section.)




| | Ho Regional Hospital | Peki Hospital | Jasikan District Store | Kete-Krachi District Hospital | Keta Hospital |
|---|---|---|---|---|---|
| 1996 | 110% | 47% | -23% | | 150% |
| 1997 | -26% | 21% | -75% | 1% | 4% |

An *ad hoc* analysis using data from facilities in Volta and Central RMS show decreases in the rate of increase in the net value of all funds reviewed, and some appear to be decreasing in value.

While there may be valid reasons why the funds' worth is not increasing as rapidly as before (decreased prices, use of proceeds for other activities, etc.), on the face of it, this situation is



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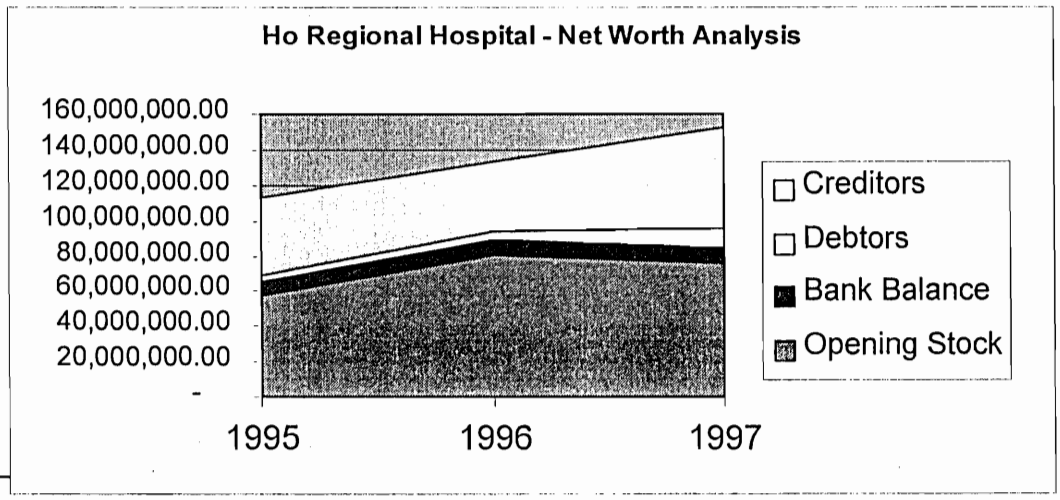
alarming. The practice of monitoring the net worth of revolving funds should be extended throughout the country in such a manner as to produce consistent, comparable data.

**Recommendation:** *Each subdistrict, district, hospital, and medical store should calculate the net worth of the drug revolving fund quarterly and annually*[5]*. The percentage change from the previous reporting period should be reviewed by the management unit and reported to the next higher level.*

### 3.4 Credit.

Credit appears to be extended at each level, without interest charges, and without controls to contain the potential erosion of the funds' worth. For example, in Central Region, the proportion of the drug fund that has been extended in credit increased from 30% to 50% in the first quarter of 1998. The result is that the RMS does not have sufficient funds to repay its debt to Central Medical Stores (CMS) and has not procured drugs from this source for some 3 months. (This sharp increase in credit granted originates in procedural changes which were discussed in 3.2, above.) At CMS, the current debt of all RMS is 10% of the total drug sales to all institutions in 1997.

In 1997 Ho Regional Hospital's debt increased by some 50%, a major factor in the 26% decline of the fund's net worth seen in the previous section.

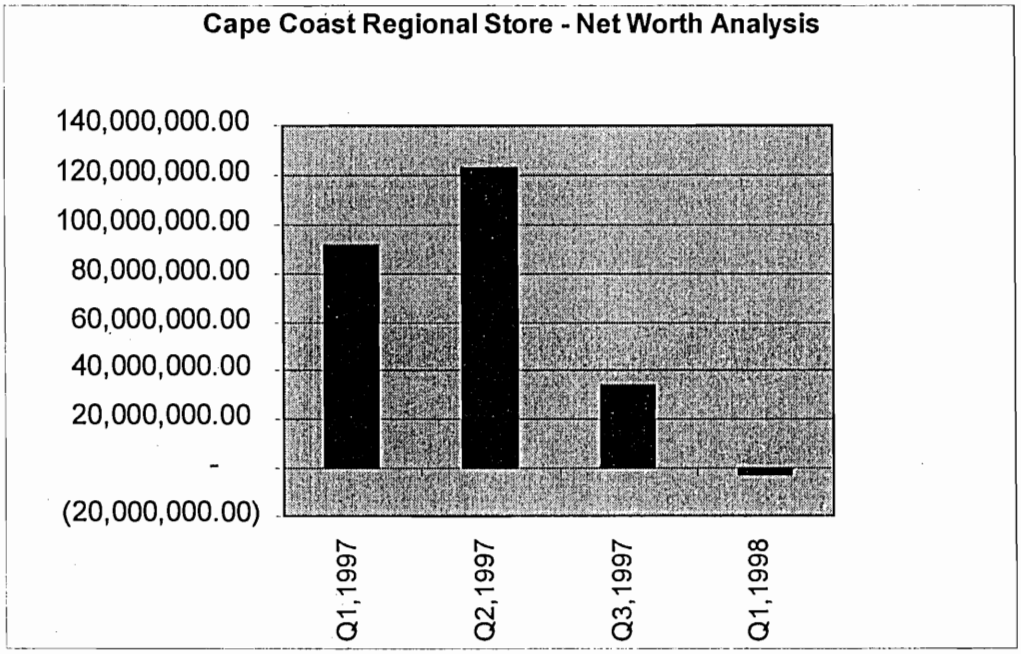



[5] Net worth is defined as the value of stock on hand, plus the cash and bank balances, plus the amount due from debtors, minus the amount due to creditors.

The question of issuing credit in the public health sector is complicated by ethical and cultural considerations. Clearly emergencies warrant the extension of credit in the form of the supply of drugs before payment. At Class A clinics community workers may find it difficult to insist on payment from their friends and neighbors.

A form of credit is also extended when facilities treat exempted patients and are reimbursed through the exemption funds that are routed through the regions. There was no opportunity to investigate this aspect of the system in this mission. However others have raised concerns regarding how efficiently the exemption funds reach the periphery and whether the exemption policies that should support care for the poor operate effectively.

**Recommendation:** *Policy guidelines on credit for each operational level should be*




*established as soon as possible. These guidelines should include a mechanism for prompt recovery of the credit granted between revolving funds and should address exemption funds and the operational definition of clients in the exempted categories, including the poor.*

### 3.5 Pricing policies.

Current pricing guidelines were established some years ago, when the fund was first introduced. CMS adds 45% to the CIF value of offshore purchases and 15% to local purchases. (The 45% markup was determined by the following considerations: 10% for duty;

0.5% for handling; 25% for inflation; 5% for wastage; and 4.5% for distribution.) RMSs add 10% to all, and facilities add 5%. (These proportions are ceilings, and expensive drugs are often marked up at a rate lower than the ceilings.) A number of inconsistencies and *ad hoc* innovations have emerged in applying these guidelines.

A large proportion of CMS sales is to specialty institutions that serve exempted patients. For example, in 1997 some 20% of drug sales were to the exempted category of psychiatric institutions. Haloperidol tablets alone accounted for more than 8% of total sales. Most of these drugs apparently come from offshore purchase, and CMS says that no mark up is applied. It is not entirely clear how the costs of duty, handling, etc are met for these drugs.

Because small change is often not available to return for purchases, prices are commonly rounded up to the next cedi, and sometimes to the next multiple of 5 or 10. Carried over several rounds of markups, this can result in prices that have substantially higher markups than the 30-60% ceilings. In some cases, prices are established by comparison with the local market, often at a level of 75-80% of local market value, rather than by reference to the markup guidelines. While there is nothing inherently unethical with any of these practices, policy guidelines should be established so that the pricing is consistent and transparent throughout the system.

Several proposals for revising the pricing policy have been suggested by those interviewed. Some proposed that the scale of the markups be reversed, with facilities receiving a larger ceiling and CMS a smaller. This proposal merits serious consideration for several reasons. It would give the facilities greater flexibility in pricing, and it would provide more funds at the operational level. Others have proposed a fixed price policy. This would be easier to regulate than the markup system, would tend to control procurement from the private sector, and would promote pricing transparency for the clients.

Pricing guidelines also need to be introduced for the nondrug consumables for which cost recovery has been recently introduced using a revolving fund mechanism. Some of the items in this category, like cotton wool, gauze, laboratory reagents, etc, are not dispensed in discrete units and cannot be priced using the same methodology as with drugs. However, if costs are not recovered for these items, the revolving principle will not continue to support the purchase of nondrug consumables.

In order to establish meaningful pricing guidelines, the objectives of the cost recovery operation should be considered as well as controls on the prices actually set at each point of sales. For example, with drugs, is the objective to provide the client with the lowest price possible consistent with the costs of procurement, distribution, and associated overhead, or is the objective to provide a revenue stream for the health sector? With nondrug consumables, is the objective total cost recovery?

**Recommendation:** *The policy objectives for cost recovery using the drug revolving fund should be reviewed. Pricing guidelines should be established in accord with these policies and with respect to their cost effectiveness, their transparency, and their implications for equity and affordability. The guidelines should also include mechanisms for enforcing and monitoring their observance.*

### 3.6 Sharing experience with revolving funds and information technology.

The cash and carry system has won international respect as an operational, sustainable model for cost recovery. There are many important lessons to be learnt from observing its operation. As a follow up to the previous logistics mission, a CMS representative, Mr. J.B. Annan participated in the Central Warehouse Restructuring workshop in Nairobi in early June of 1998 and shared the experience of Ghana. Now representatives from Kenya would like to observe the system first hand.

One of the consultants, Mr. Nzoka, has been collaborating with the Computer Division in CMS. The current mission was expected to coincide with the delivery of new IT for CMS. This has been delayed, and the collaboration should resume when the IT arrives at CMS.

**Recommendation:** *The Kenya Ministry of Health plans to introduce a cash and carry system for drugs. It would be very useful for policy, planning, and operational specialists from the Kenya Ministry to observe the system in Ghana. The IT collaboration between Kenya and Ghana to support LMIS development should continue.*

## 4. Next steps

Each of the recommendations mentioned above is a next step. Some of these steps are larger than the others. The steps recommended for the Ministry are the largest: define the role of CMS and introduce the decentralized information system.

These Ministerial steps are likely to take longer than the other recommendations. SSDM can begin to act immediately on the recommendations for internal and external coordination in Section 2. GNDP is about to commence a baseline study; conducting this exercise fits nicely with many of the recommendations regarding indicator development and information use. GNDP is the logical group to take the lead in developing and testing an indicator panel for logistics, as recommended in section 1.2.4, and in implementing the recommendations in section 3, regarding standards and procedures, financial management, fund monitoring, credit, and pricing. By virtue of interest, GNDP also seems the logical lead for information technology issues discussed in sections 2.3 and 3.6.

## Annex A: Schedule of Meetings

| | |
|---|---|
| 14 July | M. Church arrives Accra |
| 15 July | USAID |
| | Supplies, Stores, and Drugs Management (SSDM) |
| | J. Amenyah joins team. |
| | Orientation and briefing by Samuel Boateng (SSDM), Francis Aboagye-Nyame (GNDP), Rob Verhage (PU) |
| 16 July | Briefing with Acting Director of Medical Services |
| | Central Medical Stores (CMS) |
| | Chief Pharmacist |
| 17 July | Maternal and Child Health / Family Planning (MCH/FP) |
| | Information, Monitoring, and Evaluation (IME) |
| 18-19 July | Document Review; G. Nzoka joins team on 19th |
| 20 July | Disease Control Unit |
| | Surveillance Unit |
| | Expanded Programme on Immunization (EPI) |
| | Center for Health Information Management (CHIM) |
| | Ghana National Drugs Programme (GNDP) |
| 21 July | Central Region (Supplies, Stores, and Pharmacy) |
| 22 July | Central Regional Hospital (old) |
| | St. Francis Xavier Hospital (Assin Foso District Hospital) |
| | Assin Foso District |
| 23 July | Central Region (Biostatistics) |
| | Central Regional Hospital (new) |
| | Regional and District Directors |
| 24 July | CMS |
| | SSDM |
| | GNDP |
| | Procurement Unit (PU) |
| 25 - 26 July | Report writing. |
| 27 July | Biomedical Engineering Unit: Dr. Asmaah, Head |
| | SSDM. |
| | GNDP |
| 28 July | GNDP |
| | Prepare for debriefing |
| 29 July | Ministry debriefing; expatriate team members leave Ghana |

## Annex B: List of Persons Contacted

**MOH HEADQUARTERS**
Dr. I. A. Tinorgah, , Ag Director of Medical Services and External Aid Coordinator
Mr. Isaac Adams, Head, IME

**SSDM**
Mr. Samuel Boateng, Acting Director, Supplies and Stores

**PROCUREMENT UNIT**
Mr. Kofi Pobee-Hayford, Ag Head
Mr. Rob Verhage, Procurement Adviser

**CMS**
Mr. Donkor, DPSO, CMS
Mr. James .B. Annan, Systems Analyst, CMS
Mr. Harry Okwampah, Systems Administrator, CMS

**GHANA NATIONAL DRUG PROGRAMME**
Mr. Divine Asiama, Programme Manager
Mr. Kofi Aboagye-Nyame, Dpty Programme Manager
Dr. Rene Dubbeldam, Consultant

**OFFICE OF CHIEF PHARMACIST**
Mr. Fofie, Chief Pharmacist

**MATERNAL CHILD HEALTH / FAMILY PLANNING (MCH/FP)**
Mr. Solomon Quaye, Systems Analyst, MCH/FP Unit

**DISEASE CONTROL UNIT (DCU)**
Dr. S.O. Sackey, Head

**SURVEILLANCE UNIT**
Dr. Lawson Ahadzie, Head
Mr. James Addo, Systems Analyst

**EXPANDED PROGRAMME ON IMMUNIZATION (EPI)**
Papa Turkson Obimpeh, Acting Programme Manager

**CENTER FOR HEALTH INFORMATION MANAGEMENT (CHIM)**
Dr. Seth A. deYoungster, Head

**BIOMEDICAL ENGINEERING UNIT**
Dr. Asmaah, Head

**CENTRAL REGION**
Dr. .Sory, Regional Director
Dr. Bonsu, Deputy for Monitoring
Mr. Aggrey, Deputy Director of Pharmaceutical Services
Mr. Anthony Appah, Supply.Officer

Mr. Safifu Mohammed, Regional Pharmacist
Mr. John Techie-Mensah, Accountant
Mr. Zacharia Ali, Deputy Accountant
Mr. Ghartey, Biostatistics Officer

**CENTRAL REGIONAL HOSPITAL (old)**
Dr. K.A. Danquah, Medical Superintendent
Nana Forson, Pharmacist;
Accountant

**CENTRAL REGIONAL HOSPITAL (new)**
Dr. Bannerman, Hospital Director

**ST. FRANCIS XAVIER HOSPITAL (ASSIN FOSO DISTRICT HOSPITAL)**
Sister Angela, Administrator

**ASSIN FOSO DISTRICT**
Dr.Appiah Sakyi, District Director
Mr. Albert Acquah, Disease Control Officer
Mr. Appiah, Manager of District Medical Stores

**USAID**
Mr. Robert Haladay, OPHN
Mr. Lawrence Aduonum-Darko,
Dr. Joseph Awuzu

## Annex C: Scope of Work

When commencing the task, the Ministry sharpened the terms by specifying that the team should focus on logistics, and limit review of other information systems to their relationships to logistics.

**Scope of Work: Assessment of Current Status of Ministry of Health Management Information System (MIS)**

During a recent FPLM team mission to Ghana, 4 - 22 May 1998, an explicit need by the MOH was expressed for an integrated logistics management information system (ILMIS) which will be capable of collecting valid data from District and sub-District levels. Such data should include, among others, consumption (dispensing) data for commodities other than those for family planning such as essential drugs and other health commodities. Further, the Ministry of Health urgently needs valid information from peripheral levels to permit evaluation of agreed performance indicators for the five-year Program of Work of the Medium Term Health Strategy.

At present, the MOH health management information system (HMIS) is weak and does not capture and track comprehensive health data below the regional level. Given the relatively early stages in the ongoing process of health sector reform, decentralization and integration this would be an appropriate time to assess the current status of MIS serving the Ministry of Health and to explore how the system should be further developed to support decentralized management of the health care system.

We propose that a team carry out such an assessment and make recommendations on next steps to further develop the MIS in the Ministry of Health. At the same time, the team will assess current and potential communications technology to support more complete and timely submission of periodic reports throughout the decentralized health care system.

Specifically, the team will:

- Discuss with programs within the Ministry of Health the specifics of their data and information needs and for which purposes;
- Assess the present capacities of the Ministry of Health MIS to capture and transmit data and health information from peripheral units through all levels to the center and back again;
- Assess the present computer capacities in several central level units as, for example, the Central Medical Stores, the MOH Procurement Unit, and the Ghana Drug Program and explore how these separate systems might be linked with a view to serving as initial steps in the development of an integrated logistics management information system (ILMIS);

- Explore capabilities and staff competencies available for formulating a pilot study in the near future to collect consumption (dispensing) data at District and sub-District levels for essential drugs;

- Make recommendations for next steps for the development of Ministry of Health MIS and, more specifically, for the development of an integrated logistics management information system.

For this assessment, it is proposed that the FPLM team be composed of two members for varying time periods to a maximum of three weeks: Mary S. Church, Santa Fe, New Mexico, a consultant with extensive experience in health information systems (3 weeks); and Gideon Nzoka, MIS specialist, FPLM project, Nairobi, Kenya (2 weeks).

# Appendix XI

## Logistics System Assessment to Start a Community Based Distribution in Nampula Province, Mozambique

RLI

REGIONAL LOGISTICS INITIATIVE

# Logistics System Assessment to start a Community Based Distribution in Nampula Province

John Snow Inc./Family Planning Logistics Management Project
Beatriz Ayala and Gideon Nzoka

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Maputo, Mozambique 23 September 1998

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Appendix I Scope of Work

Appendix II List of Principal Contacts

Appendix III MOH Presentation for Donor Support and Commodity Projections for 1999

Appendix IV Ancilliary Information

Appendix V Visit to Nampula Province 13-18 September 1998

## 1. INTRODUCTION

The Mozambican Ministry of Health (MOH) and the USAID Mission have recognized that a weak logistics system is the most serious constraint to the provision of and improvement in Quality of Care for Maternal Child Health and Family Planning (FP) services. This has led to the elevation of logistics as a critical component in MCH/FP service provision.

Consequently, the mission has requested technical assistance from Family Planning Logistics Management Project (FPLM), through the Regional Logistics Initiative (RLI) to address this problem. Previous missions have included a trip to present the Ministry of Health techniques and technologies which have been applied to public sector logistics systems. The Mozambican USAID mission has also previously requested FPLM assistance in forecasting and estimating contraceptive commodity requirements, in collaboration with the Ministry of Health and other donors and stakeholders.

A two week technical assistance during September 1998 was given by Gideon Nzoka MIS specialist from FPLM Kenya and Beatriz Ayala Logistics Advisor from John Snow Inc, FPLM Washington DC. During the technical assistance the consultants spent a week in Nampula in the north of the country to examine the opportunities and challenges of providing community based distribution in this populated and deprived area of the country.

Community based distribution of contraceptive commodities has been recognized as a key to improving clients' continued and continual access to and use of family planning services. Thus it was decided to embark upon the start-up of such activities in pilot provinces of the country.

The purpose of this particular technical assistance trip was therefore to not only continue with building up of the Mozambican MOH and mission capacities in ensuring continuous availability of commodities at the central level but to look critically at issues affecting the startup of a community based distribution project in Nampula province and, having identified these issues, pull resources from MOH, and all other stakeholders and address them.

## 2. OBJECTIVES

During the technical assistance, three main objectives were addressed as per the Scope of Work in Appendix I and the main contact list of those people interviewed are in Appendix II.

1. Assist the mission and MOH in improving their capability to make rational projections of contraceptive needs, and share the growing burden of contraceptive procurement with other donors by serving as a catalyst for the mission/MOH/donor meeting (to be held towards the end of the Technical Assistance) on contraceptive forecasting and thereby facilitate multi-donor, coordinated inputs to sustain the pipeline over the next three years.

2. To meet with USAID and MOH officials in Maputo and to visit the Private Voluntary Organizations (PVO II project) areas in Nampula province to review the constraints of the current logistics system and assist with the design of a logistics system for implementation of a pilot Community Based Distribution (CBD) for contraceptives.

3. Demonstrate available forecasting software (Pipeline Monitoring and Procurement Planning (PMPP), ForeCast and Contraceptive Procurement Tables (CPT)) to the mission, MOH and selected donor staff and install and provide training on the software of choice at the mission, MOH and other donor offices.

## 3. MOH/USAID AND DONOR COMMUNITY SUPPORT

One of the recommendations of previous technical assistance reports (John Wilson, April 1998 and Maureen Comfort, August, 1998) was the formation of a Logistics Improvement Working Group, chaired by the Ministry of Health, and comprising members from the Division of Pharmacy, the major Primary Health Care programmes within the Ministry and those donors already providing public health commodities together with potential new donors. The formation of such a working group would provide a useful forum for the continual presentation and review of commodity requirements projections and identifying and where possible to co-ordinate procurement. Due to the current dire need of donor commitments for the provision of commodities for the year 1999, it was decided that such a meeting was crucial for the Ministry's FP programme.

During the visit, the consultants in collaboration with the USAID mission, assisted the MOH in organizing a meeting of this working group, at which projections of contraceptive commodity requirements were to be brought up, not only for informing all the donors, but also for discussion by all the stakeholders in the provision of commodities for the Ministry of Health's Primary Health Care programmes. The MOH presentation including commodity projections for 1999 is in Appendix III and supportive information is in Appendix IV.

The meeting, chaired by the FP Programme Manager, was attended by the Director of the Division of Family Health and had participants from the MOH, USAID, PSI, World Vision, GTZ, UNFPA, Italian Co-operation and the World Bank.

The FP Programme Manager presented charts showing a summary of the contraceptives commodity offtake at provincial level, from 1993-1997. The projection showed a dramatic increase in the popularity of the injectable method, and a significant increase in the consumption of oral contraceptives, whilst the use of the IUD has been declining since 1995. She also presented a pie chart showing the method mix of contraceptives used in Mozambique during this period, which showed that 55% of contraceptive users were on the Depo-Provera injectable, while pills accounted for 29% of offtake, 21% of users favoured the IUD.

The FP Programme Manager also presented the forecast of contraceptive commodity requirements for the year 1999 and presented the rationale behind each commodity projection. The estimates showed that at the end of 1998, there will be a stock out of all commodities except for Depo-Provera, (with a end of year balance of 73,000 vials) and Copper T units to last the country over five years. The projections included a 12-month buffer stock and showed clearly the US dollar value of the commodities required to meet the commodity shortfall for 1999. A total of about 2 million dollars worth of commodities are required to sustain the FP programme through the year 1999. The Programme Manager explained that the projections had not taken into account any new CBD-related activities or mobile services as provided by World Vision and Safe the Children Fund, and included only modest increases in commodity offtake. After her presentation, a discussion on the issues raised took place.

Issues raised included the fact that it was necessary for the number of commodity donors to be increased (presently USAID and UNFPA) especially to include donors who may not necessarily have enough funds to take the full burden for the provision of any one particular commodity. The idea of the Ministry to facilitate the creation of contraceptive procurement accounts to which donors may subscribe to support the ever increasing demand for commodities may alleviate the lack of commodities. The Ministry undertook to take up this issue with the higher Ministerial levels and with the Pharmacy department of the Ministry.

There is over $25 million available as World Bank IDA credits which could be used for the procurement of contraceptive commodities. The Ministry may be able to tap into these resources available in the grant component of IDA credits.

The meeting agreed that, in order to ensure that contraceptive commodity procurement was given the right priority, especially in the light of the many other seemingly more pressing health sector requirements; it was necessary that the working group was able to meet regularly to plan and procure according to current pipeline needs.

The need to forecast contraceptive commodity requirements for new initiatives such as community based distribution activities, which would give a clear picture of the actual commodity requirements is also important. The promotion of condom use, not only as a family planning method but also STD prevention and HIV infection was also brought up, as was the importance of introducing dual methods (such as condoms and pills for MCH/FP clients) in the face of the HIV pandemic and given that a large number of the countries bordering Mozambique have a very high HIV prevalence rate.

The FP Programme Manager explained that the decrease in the offtake of the IUD was caused by the lack of other necessary consumables such as gloves, lotion and MCH/FP equipment and suggested that IUD insertions be carried out only at facilities that have the requisite commodities and equipment. It was suggested that perhaps the IUD should be repackaged in the form of a kit that would contain all the necessary consumables for its appropriate and beneficial use. The meeting also noted that there were no Norplant implants in the system, meaning that those that needed this method of Family Planning had to obtain them from the private sector.

The Family Planning Logistics Working Group will meet regularly (next meeting to take place on 27th October, 1998) and issues brought up by the participants to be reported and followed up at the next meeting.

## 4. SOFTWARE PROVISION FOR MOH AND USAID

Another specific component of the Scope of Work for this technical assistance was to demonstrate available forecasting software (PMPP, ForeCast and CPT) to the mission, MOH and selected donor staff and install and provide training on the software of choice at the mission, MOH and other donor offices. The CPT and PMPP software were developed by JSI/FPLM for use at field offices to produce USAID Mission Contraceptive Procurement Tables (CPTs) and monitor the flow of contraceptive commodities from planning to delivery, respectively. ForeCast for Windows was developed at the FPLM Kenya field office and is used to monitor the flow of commodities right from donor commitments, through ordering, shipping,

clearing and delivery at the MOH warehouse. The software is also used to bring together key Ministry and donor FP programme players and collaborate in ensuring rational estimation of commodity distribution needs while at the same time making all donors aware of what the FP programme constraints in commodity provision were.

Copies of all the software made available at both the Mission and the Ministry of Health. Unfortunately the diskettes for the DOS-based NewCPT software appeared corrupted and it was thus impossible to install this software at the Mission. The Mission was given the latest version of the PMPP software, which had already been installed on their computer and they were provided with the latest PMPP documentation in English and Spanish since no Portuguese version is currently available.

The consultants met with the mission and Ministry of Health personnel to discuss and demonstrate all the available software. Both the USAID mission and the MOH requested the ForeCast for Windows software to be installed on their computer system, since it is user friendly and met their more immediate forecasting needs. During the technical assistance both users also suggested immediate system improvements which were implemented. Further system improvements will take place following the technical assistance and the enhanced version will be sent to both the Mission and the MOH.

During the two week visit, initial training was also conducted at the Ministry (MISAU/FP) on the use of the above software packages. An earlier intention to translate the software into Portuguese while in-country was deferred until the system has been finalized.

## 5. NAMPULA PROVINCE

The consultants visited the Nampula Province in the north of Mozambique from 13 through 18 September, 1998 (see Appendix V). Throughout their stay, they were supported through Pathfinder's provincial coordinator, Rita Malkki who organized visits to all relevant sites and organizations and were accompanied by the project officer throughout.

Nampula was chosen because it is the second most heavily populated province (according to the 1997 Census, 19.5% of all Mozambicans live in this province). It also has a very low contraceptive prevalence rate (CPR), with an average of 2% of women of childbearing age use a modern method of contraceptive although the country's average is 5.6%. Furthermore, according to the 1997 Demographic Health Survey (DHS) 45% of women and 40.6% of men either wanted no more children or did not want one within the next two years.

According to CARE's unpublished Situation Analysis Report, there are only seven health facilities with maternities which offer family planning services in three target districts in Nampula (Malema, Mecubiri and Ribaue) and health facilities. In 1990, it was estimated there was only one MCH health care provider per 27,200 population in rural areas in Mozambique (UNFPA, 1995).

Since such low CPR is unacceptable, and results in a large unmet family planning demand, a number of PVOs (Pathfinder, CARE, World Vision, Save the Children Fund, PSI, Concern and PACT) and local NGOs (SALAMA and AMODEFA) intend to set up community based distribution systems in the near future. World Vision in Zambesia, SEATS in GAZA province have already started community based activities.



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## 6. FINDINGS

The main problems faced in Nampula Province reflect those of other provinces. Although the consultants made a one week visit to the province, extensive visits and consultations were conducted through the auspices of Pathfinder International and seem to reflect the reality of the country.

Four broad issues have been identified as those which need special attention, in order for the MOH to be able to provide a reasonable level of Family Planning Service to the country as a whole and thus, increase the Contraceptive Prevalence Rate (CPR) of the country.

A. Logistics System

B. Contraceptive Management
- Method mix
- Condoms
- Orals
- IUDs
- Injectables

C. Human Resources

D. Policy Issues

## A. LOGISTICS SYSTEM

Throughout the system examined, central, provincial, district levels and hospital, health centres and health posts there is some understanding of record keeping and contraceptive requisitions. It was observed good compliance with filling the monthly reports and having them accessible for subsequent use. All places were attended even by the bare minimum of health staff and were all very helpful and informative.

Due to lack of an appropriate logistics system, the flow of contraceptives from Maputo to the delivery points have always been haphazard and unreliable. At Provincial level there is no transport to distribute commodities to the districts, and only those fortunate to have vehicles available, are able to go to the Provincial deposit to collect. Likewise, hospitals and health centres are able to pick up commodities if they have some means of transport. Those which are inaccessible have very little opportunity to obtain commodities in a continuous basis.

The stores in which the commodities were kept were usually adequate in space but not always in the appropriate manner as it was found contraceptives either mixed with other commodities or kept in unventilated and disorganized facilities. Lack of cleanliness was also observed.

Since there is no 'formal' logistics system in place, health workers, particularly the MCH nurses have little logistics training, and thus, each facility visited kept their own records and requested as needed. No maximum or minimum stock levels have been established, nor an emergency order point, however, there is an established level of 12 months of stock at the Central Level, 6 at the Province and 4 at the District which are not complied with due to the scarcity of

contraceptive commodities. Requisitions are usually given monthly and provided transport is available, the collection takes place on the same day. If the amount is not sufficient due to unexpected demand or miscalculations, an emergency stock is usually supplied.

## B. CONTRACEPTIVE MANAGEMENT

A number of issues were raised regarding not only the continuous availability of contraceptives, but also the method mix. This section has been divided into each contraceptive currently offered in Mozambique. However, the major issue that affects every type of contraceptive method provided is the lack of coordinated donor support to procure adequate levels of commodities to satisfy the enormous -potential- demand of the country. So far, the Family Planning Programme make do with whatever amounts are given through the assistance of USAID and the UNFPA, however, this has not been sufficient as per recent stock out reports.

- **Method Mix**

Currently, the method mix in Mozambique is very limited. Only one oral contraceptive (lofemenal) was consistently found (some small quantities of microlut and neogynon were also found), injectable depo-provera, condoms and IUDs. There were no progestin only orals for lactating mothers or vaginal foaming tablets (VFTs) at the MOH's sites visited. At the time of the visit MEDIMOC Nampula had available VFT for purchase.

- **Condoms**

Condoms requested for family planning, are usually taken from the STD/HIV stocks, as there is no provision for condoms for family planning. Culturally, there is a strong reluctance for condom use in Mozambique, and therefore, their use has not been encouraged so far by the Ministry of Health as a viable family planning method.

- **Orals**

Currently, lofemenal is the only low dose pill available continuously, however, microgynon and microlut have been available intermittently. Oral contraceptives are 27% of the total contraceptive mix.

- **Intra Uterine Devices (IUDs)**

According to the recent report by J Wilson (FPLM 30 March-2 April 1998), and physical stocks at MEDIMOC, the country has at least five years supply given the current trend in demand. During the visit conducted to Nampula Province, there was found a severe lack of medical equipment and material to make IUD insertions possible in a hygienic and professional manner. IUDs are 11% of the total contraceptive mix.

- **Injectables**

62% of the total contraceptive method mix share is taken by depo-provera. Throughout

the consultants visits, depo-provera was always available even if in small quantities.

## C. HUMAN RESOURCES

According to the information gathered in Nampula through CARE, Save the Children Fund and World Vision, there is a severe lack of trained MCH nurses. After the war, due to lack of medical staff, the MOH trained elementary nurses ('enfermeiros elementales') which required one year of training and basic nurses which trained for a further year to provide some health services at health posts.

According to Mozambique regulations, they are unable to provide a comprehensive family planning service because they are not trained in family planning. Many of the PVOs interviewed are currently training healers and traditional birth attendants to enable them to serve the community better. As a result, only a few health centres in every district provide family planning services.

## D. POLICY ISSUES

The MOH family planning programme was one of the first ones to start in Africa, unfortunately, after the war was over, the enormous demand for services have not been accompanied by increased management capacity and resources. The MOH need to establish policies and guidelines to facilitate PVOs and NGOs work through accessible family planning services at community level by enabling non-family planning trained personnel to dispense contraceptives.

As discussed in section B. Condoms are only available for STD HIV/AIDS and not for family planning. In addition, a wider choice in the contraceptive mix should be provided and sufficient contraceptive stocks should be available as there is a huge 'unmet' need.

## 7. RECOMMENDATIONS

A.1. Analysis of the whole logistics distribution system country wide, to establish more 'formal' means of distribution and to enable the newly starting CBDs to obtain on a continuous basis supplies as required. Furthermore, to review their logistics management information systems (LMIS) and set parameters for the information flow at all levels.

A.2. To ensure at the procurement stage, that commodities arriving in Mozambique have an ample shelf life since in a few instances product needed to be discarded and destroyed due to arriving at provincial, district and clinics and health posts with a very short life.

B.1. Conduct a pipeline analysis in the first quarter of 1999 to forecast and procure commodities as per Mozambique's need. Organize a donor meeting in which they would have the opportunity to bid for some of the need, as so far their collaboration is pretty disjointed. In addition, to include community based activities and mobile clinic envisaged requirements.

B.2. To make available a more comprehensive method mix to serve the different needs of existing and prospective clients.

B.3. For the Family Planning Programme to procure (through the donor community) their own condom stock and promote condom use as a viable contraceptive method. Furthermore, with the planned community based distribution projects by PVOs, anticipated requirements need to be included in new projections.

B.4. Medical supplies and equipment should have the same importance as the availability of contraceptives themselves, since their absence results in the inability of family planning nurses to provide the service that clients require. In the specific case of IUDs, if these commodities are envisaged to be scarced, a review should be made to pull resources together and offer IUD insertions at limited delivery points where supplies and hygiene levels are adequate and available.

C.1. For PVOs to continue with the training of health related staff to strengthen family planning service provision.

D.1. The MOH should actively support the efforts of established PVOs (such as Pathfinder) to set community based programmes and ease the pressure from themselves to provide family planning services.

D.2. Government policy to address the issue of condoms for both family planning and sexually transmitted diseases and AIDS and to give them the importance they deserve through IEC materials and either local or country wide campaigns.

D.3. Resources should be available to the Family Planning Programme to conduct a campaign with the assistance of established PVOs to raise the profile of family planning and thus, family planning services. Help could also be provided through the Policy Project of The Futures Group.

D.4. To keep the momentum of the Family Planning Logistics Improvement Working Group by solving the issues raised and follow through those which require a larger donor forum to solve. To continue with regular monthly meetings.

Given the recommendations above, Pathfinder, CARE and other PVOs should continue with their efforts in Nampula province to establish community based distribution systems concurrently with other activities at National level, such as a comprehensive logistics assessment and MOH procurement strategies and planning. Training curriculum should be developed to include basic logistics concepts and practices for health personnel and community based 'activistas'. An estimation of contraceptive requirement should be submitted to the MOH by the beginning of 1999 for the requirement to be included in the yearly forecasting and pipeline planning exercise.

Finally, it is recommended that PVOs submit to the MOH family planning programme, information pertaining their planned CBD activities, to include, geographical area, population, number of clients to be expected to serve and an estimated level of contraceptive consumption envisaged to be used for the period of 1999 and 2000.

# APPENDIX SECTION

## APPENDIX I SCOPE OF WORK

The purpose of the assistance is twofold:

1. To assist the mission and MOH in improving their capability to make rational projections of contraceptive needs, and share the growing burden of contraceptive procurement with other donors. In this regard the TDY team will:

    a. Assess the current contraceptive supply status
    b. Demonstrate available forecasting software (PMPP, Forecast and CPT) to mission, MOH and donor staff
    c. Install and provide training on the software of choice (maybe more than one) at the mission, MOH and possibly other donor offices
    d. Provide a catalyst for the mission/MOH/donor meeting (to be held towards the end of the TDY) on contraceptive forecasting and thereby facilitate multi-donor, coordinated inputs to sustain the pipeline over the next three years.

2. To meet with USAID and MOH officials in Maputo and to visit the PVO II project areas in Nampula Province to review the constraints of the current logistics system and assist with the design of a logistics system for implementation of a pilot CBD project for contraceptives.

## APPENDIX II LIST OF PRINCIPAL CONTACTS

| | | |
|---|---|---|
| V. Coelho | Implementation Specialist | USAID/Maputo |
| R. Osmanski | TAACS Advisor for Health and Population | USAID/Maputo |
| Dr. M. Callu | Activity Manager | USAID/Maputo |
| K. Rockman | Team Leader | USAID/MAputo |
| Dr. A. Libombo | Family Planning Programme Manager | MOH/Maputo |
| M. T. Nictarino | Family Planning Logistics | MOH/Maputo |
| Dr. L. Guarenti | Reproduction Health Advisor MOH | Royal Tropical Institute/ UNFPA Mozambique |
| E. Rwamasheija | Women's Health Advisor | MISAU/UNFPA |
| A. Schrttenbrunner | Advisor | GTZ |
| Dr. R. Malkki | Provincial Programme Coordinator | Pathfinder Int/Nampula |
| M. C. Cabadas | Programme Officer | Pathfinder Int/Nampula |
| Dr. M. Valdez | Technical Coordinator | Pathfinder Int/Nampula |
| Dr. A. Anaumana | Provincial Director of Health | MOH/Nampula |
| L. Do Silva | Provincial MCH Coordinator | MOH/Nampula |
| H. M. Xavier | Provincial Deposit Manager | Nampula Deposit |
| A. M. Gaitoa | Provincial Pharmacy Manager | Nampula Deposit |
| T. Jaime | Elemental Nurse | 25 Sept Health C/Nampula |
| J. Cabral | MCH Nurse | 25 Sept Health C/Nampula |
| M. A. Hilàrio | MCH Nurse and MCH Co-ordinator | 25 Sept Health C/Nampula |
| J. M. Joao | AIDS/DTS Co-ordinator | 25 Sept Health C/Nampula |
| T. Fumo | Manager | MEDIMOC/Nampula |
| Dr. F. Ibo | District Health Director | MOH/Ribaue District |
| A. da C. Monteiro | District MCH Nurse | Ribaue Hospital |
| E. S. Magaia | Nurse | Ribaue Hospital |
| J. Pauleque | MCH Nurse | Iapala Health Centre |
| Dr. Elias | Doctor in Charge | Iapala Health Centre |
| J. Lane | RH Project Manager | CARE/Nampula |
| M. Feeney | Health Sector Coordinator | Save the Children/Nacala |
| F. Ricardito Albino | MCH Coordinator | Save the Children/Nacala |
| Dr. J. Daniel | Clinic Doctor | Dist Hospital/Nacala a Velha |
| Arminda | MCH Nurse | Dist Hospital/Nacala a Velha |
| I. Esquivel | Deputy Director for Health and Nutrition | World Vision/Nampula |
| M. De Souza | Provincial Manager for Health and Nutrition | World Vision/Nampula |
| E. Fulane | Pharmacy Technician | MEDIMOC/Maputo |
| V. Vilanculos | Administrative Director | PSI/Mozambique |
| D. Ferro | Sales and Logistics Assistant | PSI/Mozambique |
| A. Manguele | National Health Director | MOH/Maputo |
| M. I. Newsome | Health Director | World Vision International |
| A. Sitoi | Liaison Officer | World Vision International |
| R. Ronda | | MEDIMOC |
| K. Kostermans | Public Health Specialist | World Bank |
| F. Regúles | Advisor | DF-SDC |
| A. Bortolan | Health Advisor | Coop. Italiana |
| R. Marlene | | MISAU/DEE |
| B. Matavel | IEC Department | PSI/Maputo |

**MINISTRY OF HEALTH**
**FAMILY HEALTH DIVISION**
**Contraceptive Commodity Projections - 1999**

| COMMODITY/METHOD | 1999 Projected Distribution | 12 month Buffer Stock | Total Requirement |
|---|---|---|---|
| DEPO-PROVERA | 566,555 | 566,555 | 1,133,110 |
| LO-FEMENAL | 430,000 | 430,000 | 860,000 |
| MICROGYNON | 630,000 | 630,000 | 1,260,000 |
| COPPER T | 14,000 | 14,000 | 28,000 |
| MICROLUT | 350,000 | 350,000 | 700,000 |
| NEOGYNON | | - | - |
| CONDOMS (for FP) | 10,000,000 | 10,000,000 | 20,000,000 |
| CONDOMS (for Social Marketing) | 26,000,000 | 26,000,000 | 52,000,000 |

| COMMODITY/METHOD | Balance On 21st Sept | Distribution till Dec 31st | Balance at End of 1998 |
|---|---|---|---|
| DEPO-PROVERA | 357,100 | 283,278 | 73,822 |
| LO-FEMENAL | 91,400 | 91,400 | - |
| MICROGYNON | 132,000 | 132,000 | - |
| COPPER T | 50,375 | - | 50,375 |
| MICROLUT | 60,000 | 60,000 | - |
| NEOGYNON | 66,000 | 66,000 | - |
| CONDOMS (for FP) | ??? | ???? | |
| CONDOMS (for Social Marketing) | 1,360,000 | ???? | ????? |

| COMMODITY/METHOD | 1999 Requirement | Commitments from Donors | Shortfall | Unit Cost (USD) | Total Cost(USD) |
|---|---|---|---|---|---|
| DEPO-PROVERA | 1,059,288 | 475,000 | 584,288 | 0.9 | 525,859 |
| LO-FEMENAL | 860,000 | | 860,000 | 0.35 | 301,000 |
| MICROGYNON | 1,260,000 | 350,000 | 910,000 | 0.35 | 318,500 |
| COPPER T | - | | - | | - |
| MICROLUT | 700,000 | 200,000 | 500,000 | 0.4 | 200,000 |
| NEOGYNON | - | | - | | - |
| CONDOMS (for FP) | 20,000,000 | 3,940,000 | 16,060,000 | 0.03 | 481,800 |
| CONDOMS (for Social Marketing) | ???? | ???? | ???? | | |
| Total | | | | | 1,827,159 |

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# MINISTRY OF HEALTH
## Family Health Division

1999 Contraceptive
Commodity Projections

| COMMODITY/METHOD | 1999 Projected Distribution | 17 month Buffer Stock | Total Requirement |
|---|---|---|---|
| DEPO-PROVERA | [illegible] | [illegible] | [illegible] |
| LO-FEMENAL | [illegible] | [illegible] | [illegible] |
| MICROGYNON | [illegible] | [illegible] | [illegible] |
| COPPER T | [illegible] | [illegible] | [illegible] |
| MICROLUT | [illegible] | [illegible] | [illegible] |
| NEOGYNON | | | |
| CONDOMS (for FP) | [illegible] | [illegible] | [illegible] |
| CONDOMS (for Social Marketing) | [illegible] | [illegible] | [illegible] |

| COMMODITY/METHOD | Balance On 31st Sept | Distribution till Dec 31st | Balance at End of 1998 |
|---|---|---|---|
| DEPO-PROVERA | [illegible] | [illegible] | [illegible] |
| LO-FEMENAL | [illegible] | [illegible] | - |
| MICROGYNON | [illegible] | [illegible] | - |
| COPPER T | [illegible] | - | [illegible] |
| MICROLUT | [illegible] | [illegible] | - |
| NEOGYNON | [illegible] | [illegible] | - |
| CONDOMS (for FP) | ??? | ???? | |
| CONDOMS (for Social Marketing) | [illegible] | ???? | ????? |

| COMMODITY/METHOD | 1999 Requirement | Commitments from Donors | Shortfall | Unit Cost (USD) | Total Cost(USD) |
|---|---|---|---|---|---|
| DEPO-PROVERA | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| LO-FEMENAL | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| MICROGYNON | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| COPPER T | - | | - | | - |
| MICROLUT | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| NEOGYNON | - | | - | | - |
| CONDOMS (for FP) | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| CONDOMS (for Social Marketing) | ???? | ???? | ???? | | |
| Total | | | | | [illegible] |

## Notes on Commodity Projections:

DEPO PROVERA:

- 17% distribution increment in 1998/99.
- 1996/97 distribution increment was 32%.
- Projection includes 12-month buffer stock.

## Notes on Commodity Projections:

LO-FEMENAL

- Stockout from March to August, 1998.
- 300,000 received in August will all be distributed by the end of the year.
- Projection does not include new CBD activities.
- Projection includes 12-month buffer stock.

## Notes on Commodity Projections:

MICROGYNON

- Stockout at beginning of year. We have **never** had enough in the system.
- Projection **does not** include new CBD activities.
- Projection includes 12-month buffer stock.

## Notes on Commodity Projections:

Copper T IUD

- Distribution/Consumption has been declining steadily since 1995.
- More than 5 year supply at beginning of 1998.
- Its use in the FP programme needs to be re-considered.

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## Notes on Commodity Projections:

MICROLUT

- Important for lactating mothers.
- Stockout at beginning of year. We have **never** had enough in the system.
- Projection **does not** include new CBD activities.
- Projection includes 12-month buffer stock.

## Notes on Commodity Projections:

NEOGYNON

- High Dose Pill to be phased out of FP program, same as Triphasic pills

## Notes on Commodity Projections:

CONDOMS (for FP)

- not identified as FP method, not promoted as such, needs to be available in poor rural areas
- Client access at facility level questionable
- Difficult to assess actual requirement
- CBD promotion **essential**.

## Notes on Commodity Projections:

CONDOMS (for Social Marketing)

- Immensely important for HIV/STD prevention
- distribution has increased dramatically
- need to identify a way of sustaining availability
- CBD promotion **essential**.

## APPENDIX V VISIT TO NAMPULA PROVINCE

## COMMUNITY BASED DISTRIBUTION (CBD) LOGISTICS SYSTEM ASSESSMENT

The consultants visited the Nampula Province in the north of Mozambique from 13 through 18 September, 1998. Throughout their stay, they were supported mainly through Pathfinder's provincial coordinator, Rita Malkki who organized visits to all relevant sites and organizations.

### 1. Nampula City, Director Provincial de Saúde (DPS)

Visits were arranged to meet with most of these organizations and every opportunity was taken to visit health centres and health posts. Discussions were held with both the Director Provincial de Saúde, and the Provincial Mother and Child Health Coordinator, at which major family planning service delivery constraints were brought up. One major constraint which was evident throughout the facilities visited and was invariably brought up by the MISAU staff interviewed at facility, district and provincial levels, is the acute shortage of staff who are adequately trained to provide MCH/FP services. As a result, only a handful of facilities in the 21 districts of Nampula province are able to provide family planning services. This particular constraint is further compounded by MISAU's insistence that family planning commodities can only be supplied by trained SMI (MCH) nurses.

Another major concern of the province is the lack of client choice as the only oral contraceptive which is provided is the USAID provided low-dose pill, Lo-Femenal. Microgynon, a pharmacologically similar product has been available on and off. The progestin only pill, Microlut, for lactating mothers is also not available, a factor that can have serious repercussions in any family planning programme.

Despite evidence to the contrary at all the health facilities visited, the MISAU Provincial staff indicated that it was official Ministry policy to ensure that condoms were distributed and available at every health facility level.

### ♦ Provincial Deposit

The depository is supplied on a quarterly basis by MEDIMOC, a parastatal which on behalf of the Ministry of Health distributes essential drugs kits and contraceptives up to the Provincial level. Although the province does not receive sufficient stocks to meet their needs, the depository manager rationalizes the resources to ensure that all 21 districts, provincial hospital and state run pharmacies are adequately supplied. The essential drugs and medicines are collected by the individual district, hospital or pharmacy on a quarterly basis. Contraceptives are handled separately by the Director Provincial de Saúde (DPS) except for condoms which are exclusively for the use of the HIV/AIDS programme, the DTS SIDA (Programa Nacional de Dolienças Transmiçion Sexual SIDA) due to scarce supplies.

A physical count was conducted and bin cards were requested to ascertain their stock status and record keeping. All bincards (except the one for condoms, which is kept and maintained by the HIV/AIDS program) were found to be up to date and accurate. 32,000 vials of expired Depo-Provera (1995) were counted. Apparently they were delivered at the store too close to their expiry date. It was mentioned this had been a common problem and therefore they request

regularly the destruction of all expired and damaged commodities.

**Contraceptive Stock Levels**:

Latest Receipt of contraceptives – from MEDIMOC, Maputo - 1st Sept 1998

**Depo-Provera**

| | |
|---|---|
| Issues from 24th April 1998 to 19th July 1998: | 15,000 |
| Received on 1st Sept 1998: | 10,000 |
| Balance on hand | 12,800 (expiry: 1999 and 2002) |
| Months on hand: | 2.45 |

**Lo Femenal**

| | |
|---|---|
| Issues from 24th April 1998 to 10th July 1998: | 11,321 |
| Received on 1st Sept, 1998: | 20,400 |
| Balance on hand: | 21,330 (Expiry: 2003) |
| Month on hand: | 4.84 |

**Neogynon**

| | |
|---|---|
| Balance on 24th April 1998: | 3,000 |
| Issued on 10th July, 1998: | 3,000 |
| Balance on hand: | Nil |
| Months on Hand: | 0 |

**Copper T**

| | |
|---|---|
| Issues from 24th April 1998 to 19th August, 1998: | 400 |
| Received on 1st Sept 1998: | 4,000 |
| Balance on hand: | 5,600 (Expiry: 2000) |
| Months on Hand: | 54.6 |

**Condoms**

| | |
|---|---|
| Balance on hand: | 156,000 (Expiry: 2002) |
| Bincard not available | |

Overall good storage practices were observed and the manager and stock keeper were informed and helpful. The depository consisted of a ground floor and a basement. The ground floor was clean, palletized and racked, displaying labels and expiry dates and up-to-date and accurate bincards. The basement had a water leak and most of the commodities were not palletized or racked. It was here that the bulkier, damaged and expired commodities were stored.

- **Centro de Saúde 25 do Setembro**

At the health centre family planning and maternal and child health care services are provided in addition to pre-natal and post partum care and a maternity with 23 beds. This health centre depicts what might be reality in other centres around the country especially the urban centres.

The very crowded place, full with clients had only one nurse in charge of MCH activities and therefore had to take care of the patients, the records and contraceptive stocks. There was a stock out of Microlut, Neogynon and Microgynon which they tend to obtain at irregular intervals. Lo-Femenal supplied by USAID was the only oral contraceptive available. Since they have a vehicle at their service, assigned to their maternity services, they are able to request and collect monthly requirements of contraceptives from the Provincial Deposit contraceptives whenever they needed to. There is no minimum or maximum stock level set, nor there is an emergency order point. The request takes into account only what has been dispensed that month and the order is for that same quantity for the next month. If the stock is low, they go again to collect more. Being in Nampula city, the requests are supplied that same day and usually they obtain the contraceptives required.

Their store was adequate in size yet unclean and disorganized. Apart from contraceptive stocks (which had no bin cards) there were blankets, rice, soap, oil and sugar all stored together. Condoms are exclusively provided for patients with STDs and AIDS who visit the health post. However, there is no dispensing protocol, no stock management or formal account of condoms dispensed to clients. The medical technician, indicated there were no record keeping of receipts or dispensed to clients. Furthermore, there was no recollection as to the amount of condoms in store as they were kept in various places throughout the centre. The condoms were either provided from the Provincial Deposit or taken from the essential drug kits. Upon inspection of their stocks, they were found to have no expiry date and might have come as a one off donation from South Africa.

**Contraceptive Stocks:**

| | | |
|---|---|---|
| Depo-Provera | 425 | 0.8 months on hand |
| Lo-Femenal Pills | 1,200 | 1.3 months on hand |
| Copper T 380A | 22 | 2.2 months on hand |
| Condoms | 4,000 (approx) | no consumption figures available |

- **MEDIMOC**

MEDIMOC procures and distributes to provincial level on behalf of the Ministry of Health. Their main activity is the export and importation of health supplies both for public and private sectors.

MEDIMOC Nampula has no transport and therefore hires vehicles when supplies arrive by boat at the port of Nacala. They have a provision of contraceptives which they sell in the private pharmacies, namely orals (Microgynon) and vaginal foaming tablets (Rendells). Their stocks were well organized and racked and ranged from common medical compositions to even deodorant sprays. The size and volume of stock at the MEDIMOC warehouse was considerably less than that of the Provincial Deposit.

- **World Vision**

World Vision is the largest PVO in the country since the end of the war. Starting their activities 12 years ago during the emergency period, building temporary hospitals and providing emergency care and child nutrition, they have a substantial impact in the community today by providing services in agriculture, health, water, road infrastructure, microenterprise development and commercialization. The health budget is 15% of the total. Since 1996 there has been a transition in their activities, from emergency to development.

Their main focus in the area of health is the mother and child survival project which will run until the end of 2001, being a five year project, and is communtiy focused. They have two mobile units per district for pre-natal consultations, vaccinations, some family planning and monitoring. The mobile units have an EPI person, a driver, a nurse and a health educator and visit all villages further than 15 kms from the city and visit every village every three months. Some smaller districts made bi-monthly visits.

Largely, the main problem for providing contraceptives from the mobile units which so far are the ones reaching all communities in the Nampula province, is the lack of policy guidelines from part of the Ministry of Health to allow them to dispense oral contraceptives. Currently, the units are able to dispense condoms and injectables, however, under the MOH regulations, only a nurse with Family Planning training is able to dispense orals, as there should be an extensive first consultation provided by a professional. Since the mobile unit visit a village every two or three months, and on the first visit there is only one cycle given, it is impossible under this circumstances to provide oral contraceptive services. Furthermore, MCH nurses are very scarce and there is no more MCH nurse training, therefore, the Family Planning programme and the MOH decision makers should establish policy decisions for the benefit of the community and taking into consideration the resources with which they count.

## 2. Ribaue District, Nampula Province

Throughout the day visit to Ribaue the consultants were accompanied by the CARE Reproductive Health Project Manager, a Pathfinder Programme Officer and the Ribaue District Health Director. Out of six facilities in the district, only two offered family planning services, the Ribaue district hospital and the catholic mission at Iapala.

### ♦ Ribaue District Hospital

At this 32 bed District Hospital (with a 10-bed maternity that sometimes has 15 patients) there was only one nurse to cope with the demand of most of the district family planning services. One other nurse from a USAID funded local NGO - SALAMA - was assisting. Ribaue district has a population of 131,000, however, the hospital provides family planning services to few clients since it is not seen as a culturally acceptable.

Their logistics system had no minimum or maximum stock levels, no resupply period, or emergency stock supply. They however, kept good records and adequate stocks depending on their monthly dispensed to user data, it usually took place every month, but it was not unusual to request contraceptives from the provincial level twice every month or every second month. As the hospital had their own vehicle, they were able to request and collect contraceptives as needed.

**Contraceptive stocks:**

| | | | |
|---|---|---|---|
| Depo-Provera | 200 | 1.3 months of stock | (expiry:1999) |
| Condoms | 200 | 1.2 months of stock | (expiry:2002) |
| Neogynon | 45 | difficult to tell individual months | (expiry:2001) |
| Lo-Femenal | 98 | on hand as they are reported together | (expiry:1999) |
| Copper T 380A | 7 | 0.9 months on hand | (3 exp 1997, 4 exp 2000) |

Depo-Provera and Lo-Femenal were the most popular contraceptive methods available. Copper T IUDs were hardly inserted not because they were not requested, but due to the lack of medical supplies and equipment. Condoms were available but not used for Family Planning. Earlier this year all condoms were distributed at a local secondary school.

- **Iapala Health Centre**

The health centre receives extensive support from the Catholic Mission which ensures a continuous flow of supply by providing transport for the collection of contraceptive commodities and other resources which other health posts cannot count on. According to the nurse they see on average 10 new clients per month.

Depo-Provera and Lo-Femenal are the two main contraceptives they use. Their stocks are kept at the pharmacy *in situ*, and requested monthly from the Ribaue district hospital. Condoms were not available on the day the facility was visited.

**Contraceptive Stocks:**

| | | |
|---|---|---|
| Depo -Provera | 72 | (expiry: 1999) |
| Neogynon | 60 | (expiry:2001) |
| Lo-Femenal | 4 | (expiry:1999) |

No consumption records available, hence it was not possible to calculate months on hand.

## 3. Nacala District

The consultants went to Nacala district accompanied by the Pathfinder programme officer to interview the Save the Children Fund project in Nacala which intends to start their own CBD programmes. The health centres at Nacala was also visited.

- **Save the Children Fund**

The Save the Children Fund (SCF) started its activities in Nacala-Velha, Nacala Alta and Baixa and Memba districts of Nampula province in 1996. Their activities involve basic Public Health Care service provision programmes. The districts were chosen because of the acute dire need of public health services, being the poorest districts in Mozambique. According to the last DHS, children in Nacala were up to five times more likely to die before the attaining the age of five in this district than anywhere else in the country. The level of FP awareness is also very low, with a contraceptive prevalence rate for modern methods of 3%, despite the fact that 55% of the mothers interviewed thought that child-spacing was a good idea and only 60% of them had even heard of child spacing. The one district hospital, two health centres and six health posts are also very poorly equipped.

SCF activities have included training of Community Health Workers. So far they have trained 136 out of 400 targeted in Nacala and they intend to later train another 600 in Memba district. SCF also has nutrition activities and mobile brigades who participate in vaccination, growth monitoring and health education activities. SCF plans to initiate training for traditional birth attendants and healers.

- **Centro de Saúde de Nacala-Velha**

This poorly resourced facility with a 10-bed maternity is located about a half-hour's drive from the port of Nacala. The facility's SMI (MCH) nurse reported that the facility lacked the transport resources to collect commodities from Nampula and was often stocked out for long periods before receiving supplies. On the day visited the health centre had only 2 IUDs in stock and no pills or Depo-Provera, though according to their last report they had 11 cycles of Lofemenal and 6 IUDs at the end of August, 1998. They had a stock of about 180 condoms, 100 from USAID and about 80 that came from the Essential Drugs kit. The facility's only MCH nurse had just come back from maternity leave and it was apparent that no FP activities had been going on in her absence. They complained that though they had clients that came from as far as 50 kilometres away they often had no stocks due to lack of transport resources and supplies.

## APPENDIX IV ANCILLIARY INFORMATION

The figures used for the table in Appendix IV were taken from physical inventories both at MEDIMOC and at PSI's stores and are as follows:

### A. Commodity Balances at the Maputo MEDIMOC Warehouse (Sept 21st)

| | |
|---|---|
| Depo-Provera | 252,100 |
| Lo-Femeenal | 91,400 |
| Copper T | 50,375 |

Condoms stored at another warehouse and not available for counting

Commodities in-country but not yet at the warehouse (UNFPA):

| | |
|---|---|
| Microgynon | 132,000 |
| Depo-Provera | 105,000 |
| Microlut | 60,000 |
| Neogynon | 66,000 |

### B. Balance at PSI Warehouse: 1,360,000

PSI Condom Shipments expected between now and June, 1999 : approx 17,000,000

This report provides findings and recommendations for an improved logistics system able to cope with the huge 'unmet' demand which clearly exists. Furthermore, in an effort to fill the contraceptive pipeline, donor meetings were organised and executed to coordinate and request commodities from the donor community.