



BUILDING MAINTENANCE

management manual

management unit - ministry of health may 1998 - ghana

Preventive maintenance programme

estate management unit -maintenance & preventive maintenance section -ministry of health -ghana

INTRODUCTION

Physical infrastructure constitutes a high proportion of the country's investment in health. It is therefore of primary importance that these facilities are kept in very good physical condition in order that they will perform the required functions of providing a sound environment for patients, staff as well as visitors. It is for this reason that the minister has now launched a Maintenance Programme towards the improvement of the physical conditions of all health institutions countrywide.

Many of our health institutions are in a very poor state of repair due to the lack of any sustained programme of maintenance and/or preventive maintenance. The major reason for this is the inadequate funds for maintenance. However, the lack of commitment or awareness, capable management, inadequate skills for maintenance or preventive maintenance, has variously contributed negatively to the present state of affairs.

The long-term objective of the ministry is to improve and maintain the physical condition of all health facilities in the country. This will no doubt require the direct involvement of every health worker. The process will involve close supervision of day-to-day activities in each health facility and calls for absolute commitment on the part of management as well as the staff.

The preventive Maintenance programme is an active programme of the Estates Management Unit of the ministry of health, within the Health Administration and Support Services Division (HASS). The programme aims to maintain every single health institution in the country by promoting awareness among staff of the ministry and the communities in which they work. Staff will be motivated, and through training, transfer proper maintenance skills and knowledge to appointed maintenance staff in each institution. These will be the focus for the program's sustainability.

In this regard, two maintenance manuals have been developed. The first is practically oriented and provides practical information about maintenance and preventive maintenance. It contains simple illustrative drawings, focusing on materials for construction from relevant building trades and crafts aimed at enabling the heads of institutions and maintenance persons in charge to address themselves to the relevant issues of

What could be wrong?

What can be done?

How can we do it correctly?

Preventive maintenance programme

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The second is about planning and management of maintenance activities, focusing on the administration of the maintenance programme. This first edition of the maintenance manual is not meant to be the final one, but is to be considered as "A never ending story", which will be followed up and revised as we make progress on the programme.

It is the hope of the Ministry that these manuals will be of great value to all heads of institutions, staff identified as maintenance persons, and the general community at large. The ministry's objective in the medium term health strategy is to improve both access and the quality of health care in the country. The role of maintenance and preventive maintenance in this respect is to ensure the longer life of facilities and that the provision of quality care is possible in a pleasant, safe and sound environment.



Director
(Health Administration and Support Services)
May 1998

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MAIN OBJECTIVES

Improve the health status of the people
in CHINA



OTHER OBJECTIVES

- Establish and secure a Country wide maintenance system on all health facilities
- Develop innovative methods and procedures to promote a maintenance culture in the health sector
- Improve the environment on health estates for staff, patients and visitors
- Prolong the life span for health estate physical facilities

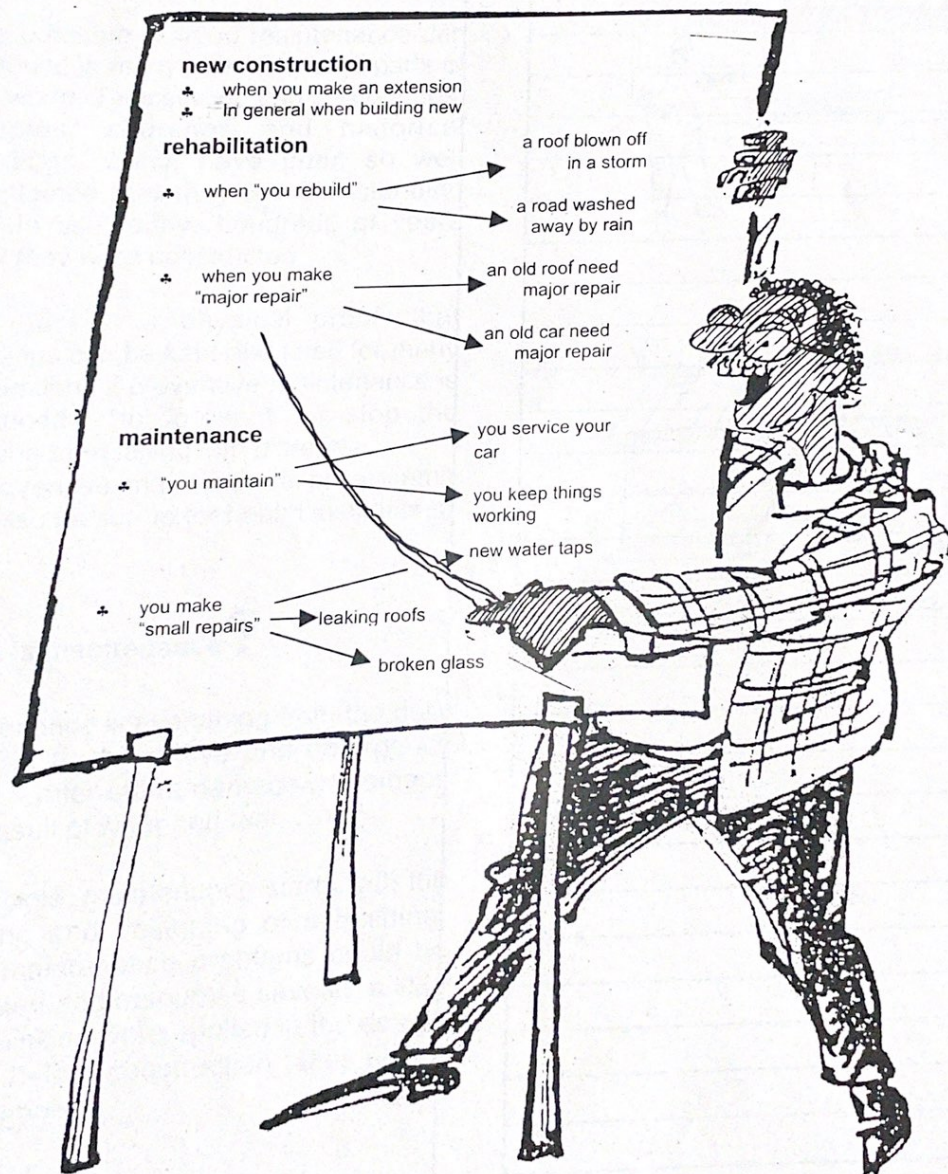
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What is new construction ?

What is rehabilitation ?

What is maintenance ?

These are words that we hear often, and as we will be using a lot in our maintenance programme, let us make the definition clear once for all.



maintenance manual

remarks - additional drawings

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This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Why maintain ?

Building maintenance is mainly done to "take care" of the physical facilities. In this case the buildings of the Ministry of Health.

The outcome of good maintenance can be found in many countries in all parts of the world. Typically we can see bridges, temples, churches and historical buildings, which have been so well maintained that they are still standing and in use today, hundreds of years after they were constructed.

This fact is a physical proof, that buildings can be kept and used for many generations if preventive maintenance is practiced – to "prevent" or stop the building from falling into disrepair.

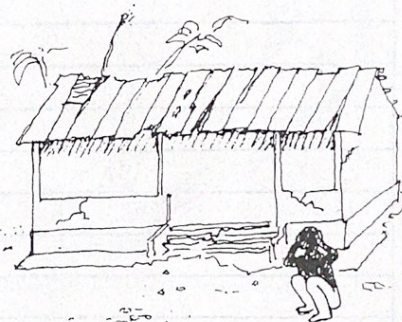
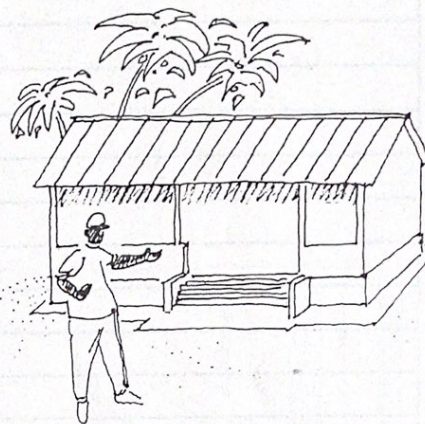
A preventive maintenance programme can also be set-up for health institutions.

What is maintenance ?

Maintenance is everything from the daily cleaning to preventive and emergency repair – after storm damage or damage as a result of wear and tear.

In principle, maintenance starts with the planning and designing of a building. Many maintenance problems could be prevented and resources saved if a little more thinking were applied in the design phase, before construction takes place. For example:

- ✦ Find the right site and location (sun/water and rain).



- ♣ Use a building technique that have been thoroughly tried and tested before.
- ♣ Use long lasting and locally available materials when possible.

A new building need attention from the first day it is taken into use, and from that moment are we talking about maintenance and day-to-day care.

Maintenance is.

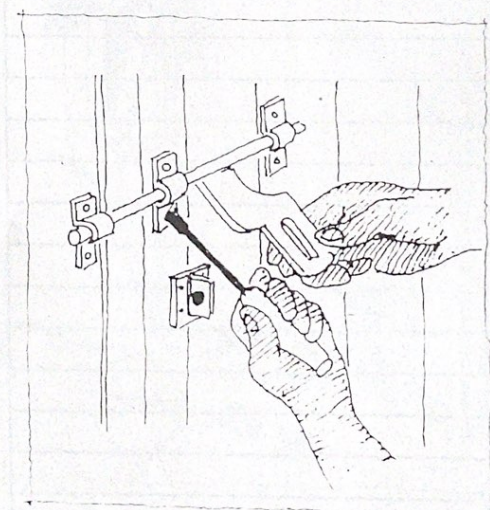
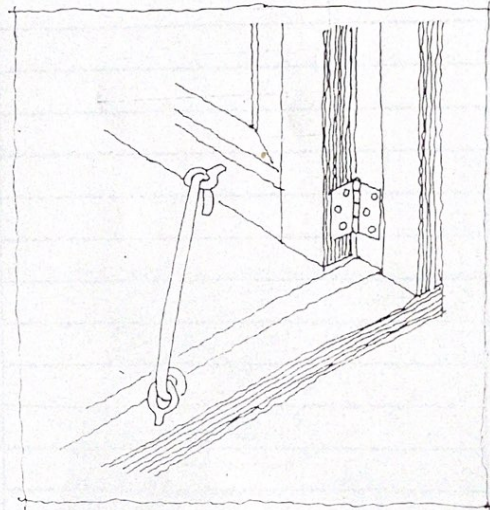
- ♣ Cleaning inside and outside the building

All kinds of minor repairs e.g.

- ♣ Replacing of missing screws and repair of broken furniture
- ♣ Clearing of blocked drains and ditches
- ♣ New gaskets in leaking water taps
- ♣ Repair of all kinds of cracks in walls
- ♣ Replace broken panes in windows
- ♣ Repair of leaks in the roofs
- ♣ Repair of hanging doors and windows

Preventive maintenance is.

- ♣ Daily cleaning inside and outside the building
- ♣ Cleaning of drains, ditches and rainwater channels
- ♣ Regular oiling of hinges, locks and louver carriers
- ♣ Cutting of trees and branches near buildings and roofs
- ♣ Keep steel constructions and furniture painted with anti-corrosion paint



Maintenance - who takes part ?

If a maintenance programme shall function well, then it is essential that all those involved – doctors, nurses and all other health staff – take active part in the work.

Awareness, motivation and action are necessary issues for maintenance of a health institution.

First of all it is important that people using the institution understand what a maintenance programme actually involves. This can be done through an "Awareness Campaign" where a member of the maintenance committee runs a campaign for all those related to the institution. The campaign should give an overview of the work involved.

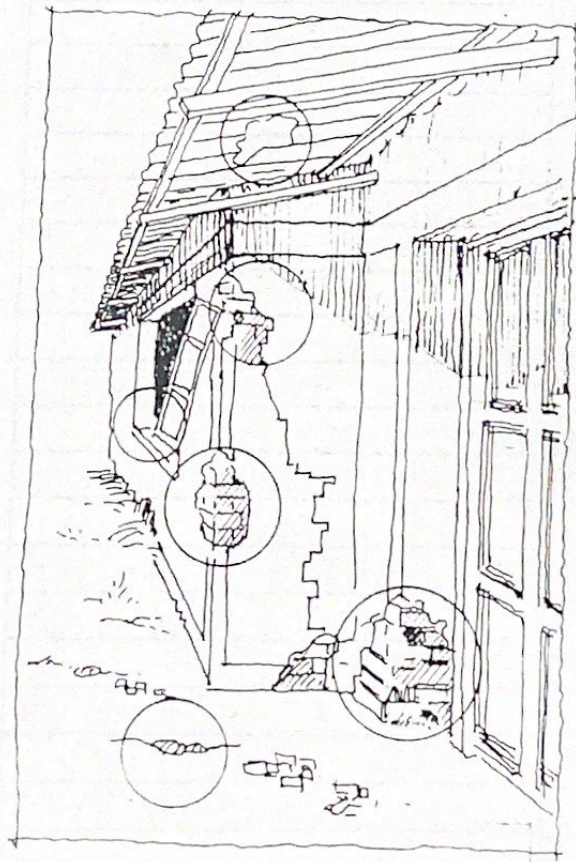
- ✦ What needs to be done?
- ✦ Who will be responsible?

Such a campaign should be started as early as possible in order to get the staff committed to the maintenance programme from the beginning.

Activities that involve the whole institution is also a good way to create a positive attitude to the maintenance programme

- ✦ Tree planting day
- ✦ Clean up day

Two good topics of how a single subject can attract focus. Among others, special attention should also be drawn to facilities that are often damaged –e.g. furniture, sewerage and toilet facilities.



Daily routines



Most people have several tasks that they carry out every day as a routine without even thinking about it. A typical one is to brush your teeth.

Daily routine activities are also important in a maintenance programme to make things go smoothly.

To keep health facilities clean and workable are one of the most important routines to carry out every day.

The staff on the facilities can actually do a lot of maintenance routines without any need of assistance from an artisan. Most important is that you use your eyes and do these small things when detected such as:

- ❖ Setting the casement stays on windows, which are left open.
- ❖ Handle furniture with care to avoid breakage and holes in the wall plaster.
- ❖ Close doors and windows at the end of working hours.
- ❖ Keep your own workplace tidy and in good order.
- ❖ Help cleaning by taking waste paper etc. and drop it in a dust bin.

The economy of maintenance

"MAINTENANCE IS SAVING MONEY"

Buildings and furniture are expensive investments. With limited resources it is obvious that major repairs and large rehabilitation works should be avoided, one way of avoiding this is through preventive maintenance.

Nothing can exist forever, but if maintenance fails, will buildings deteriorate faster and the investment will have to be repeated again and again.

In the worst cases might institutions only last for ten years or even less.

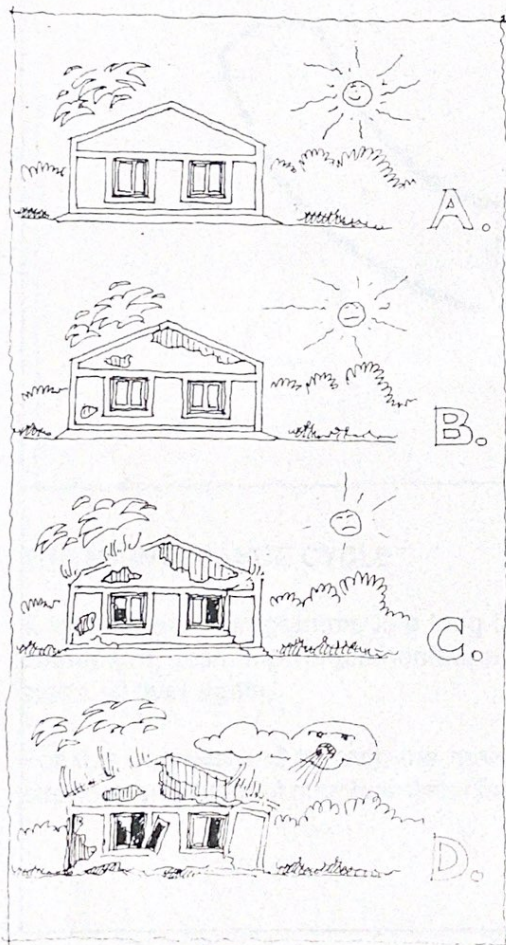
On the other hand, with the right design, proper construction and a well functioning maintenance system, they could last for more than a hundred years.

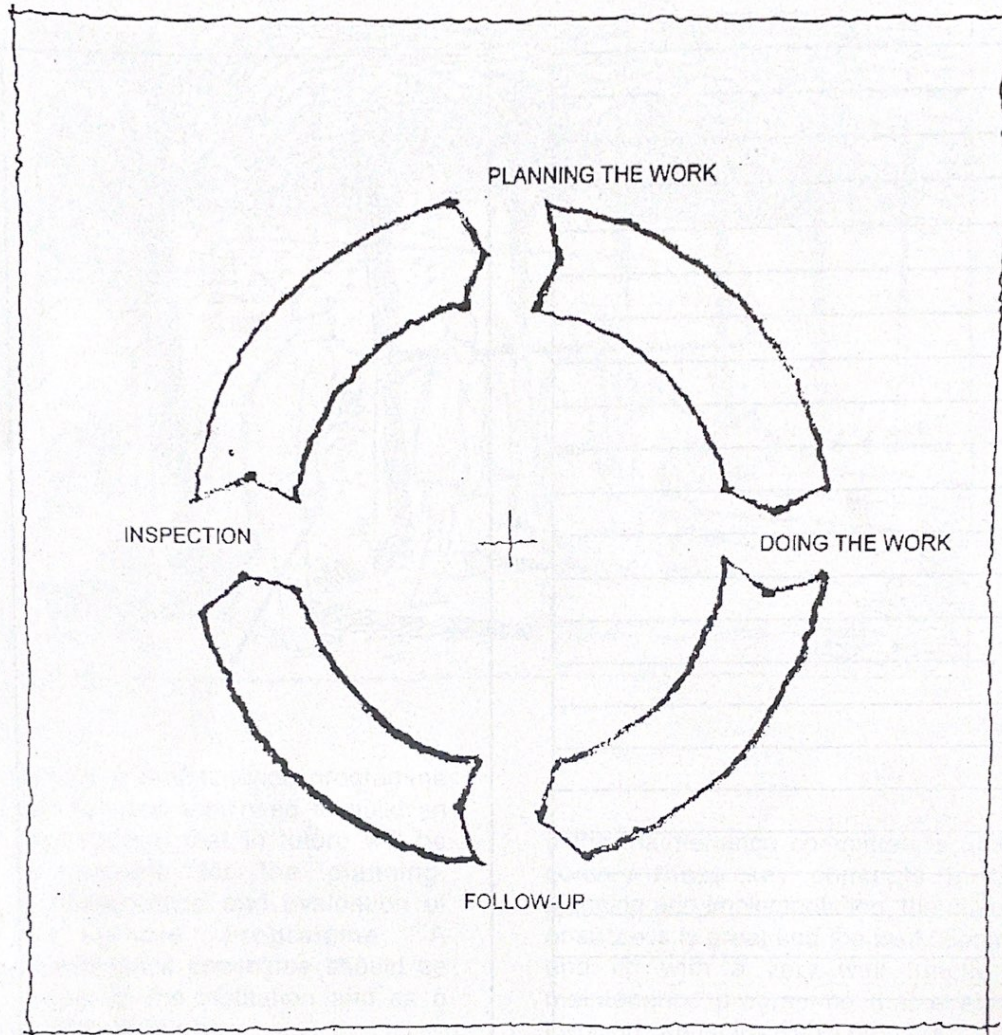
The economy of making an institution last three - four times longer, than if it was not maintained is obvious. If all health institutions were maintained, the savings when added would be remarkable.

Maintenance activities are often very cheap, especially when carried out immediately after a fault is detected.

Early intervention, when defects are minor, can prevent larger and more costly rehabilitation works e.g. if a roof leaks, ceilings, walls, floors and furniture may be damaged extensively requiring replacement at great cost.

The illustration at the left from A to D shows the steps to a final destruction from where a new construction might be the only solution.



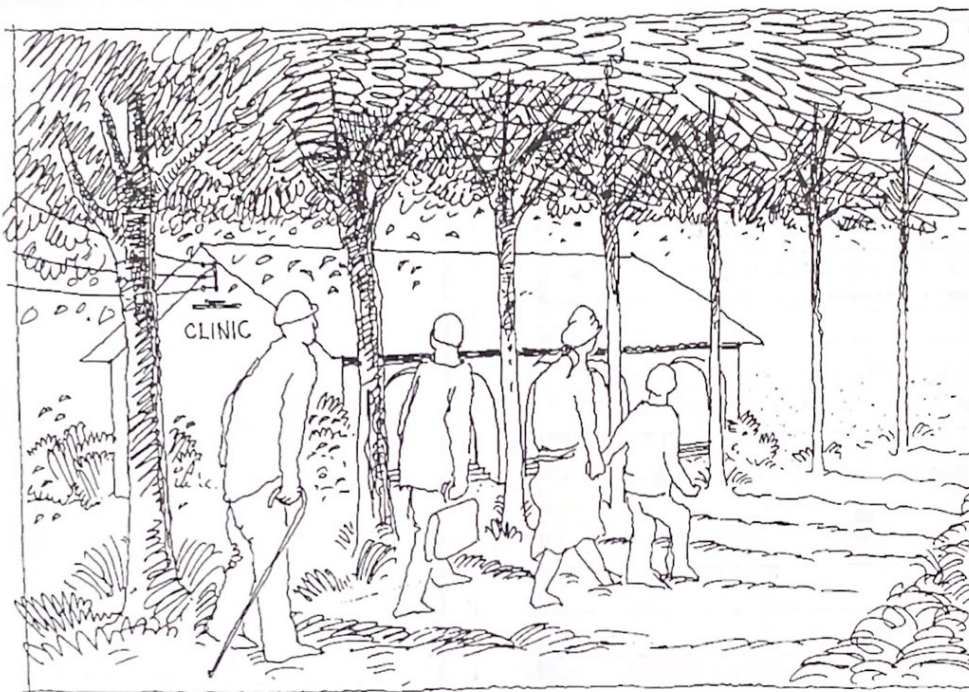


THE MAINTENANCE CYCLE"

A maintenance programme is a long-term plan. The process is a continual cycle of inspection, planning, implementation, follow-up and inspection, where the cycle starts all over again.

For this process and to keep the maintenance wheel "spinning" it's vital, to have a strong organizational structure with clearly defined areas of responsibility.

"MAINTENANCE COMMITTEE"



Before a maintenance programme can function you need to build an organization that in future will be responsible for the planning, implementation and evaluation of the whole programme. A maintenance committee should be set-up in the institution and as a start the following key issues should be given high priority:

- ♣ AWARENESS
- ♣ MOTIVATION
- ♣ COMMITMENT
- ♣ RESPONSIBILITY
- ♣ ACTION
- ♣ FOLLOW-UP

If the maintenance committee is able to convey these key concepts in their planning and implementation, the chances of success is great and the institutions will end up with a very well functioning maintenance programme that everyone involved can be justifiably proud of.