

# OPERATION AND MAINTENANCE MANUAL for public schools



Relocated school in Golmadevi 2019 © Daniel Schwitter

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## **Preface**

The operation and maintenance (O&M) of public school buildings and WASH infrastructure can be a challenge if not managed well, if resources are insufficient and if the materials used cannot be replaced or repaired easily. The aim of this publication is to equip caretakers, as well as local civil society organizations, and local governments with the relevant know-how on O&M to ensure not only long-term sustainability of the infrastructure but also the well-being of the students and teachers. It is also expected that staff of NGO's and INGO's use this manual as a resource to design programs and plan capacity building activities making sure that O&M is integrated in the project management cycle.

This manual outlines a process for the operation and maintenance of school buildings and wash infrastructure with a focus on managerial aspects. That means that the manual not only includes recommendations on technical aspects for the maintenance of infrastructure but it also provides a guide on important social dimensions of O&M such as, the management of staff, awareness raising and human resource management.

This manual is a living document, which will be further developed and revised through the experiences and lessons learnt collected through its application.

## **Acknowledgements**

This manual is the result of the cooperation between Caritas Switzerland and Skat Foundation with the financial support from Lotteriefonds St. Gallen and Solaqua Foundation.

Thanks to the financial support of the Lotteriefonds St. Gallen this manual will contribute significantly to the efforts of improving the operation and maintenance of public school infrastructure on local, national (Nepal) and international level. Thanks to the support of Solaqua Foundation, key aspects of the O&M of WASH infrastructure have been included in the manual.

Caritas Switzerland and Skat Foundation would like to thank all the people and partners that participated actively in the elaboration of this manual. We acknowledge specially the contributions of interviewed caretakers, school teachers, members of the child clubs, ward presidents, school management committees, representatives of the O&M and WASH committees and representatives of parents and teacher associations, who contributed significantly to this publication by sharing their experiences and ideas for improving O&M. Much has been learnt thanks to these exchanges and it has been encouraging to see that many are striving to raise the standard of O&M in their schools.

We also want to thank to all of the individuals and agencies involved in enriching this publication such as: Helvetas Swiss Intercooperation office in Nepal.

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## Abbreviation

Caritas Switzerland	CACH
Community Development and Environment Conservation Forum	CDECF
Local Partner non-government organisation	LPNGO
Mahila Aatma Nirbharta Kendra	MANAK
Miniature Circuit Breaker	MCB
Operation and Maintenance	O&M
Parents Teacher Association	PTA
School management Committee	SMC
School Improvement Plan	SIP
School Water Supply System	SWSS
Water, Sanitation and Hygiene	WASH

## 1. Background of the O&M Manual and Objectives

Key for the long-term usability of schools is an effective Operation and Maintenance (O&M) system.

This Manual is a tool to support the development and implementation of O&M processes in schools to ensure long-term usability of the school building infrastructures, and Water, Hygiene and Sanitation (WASH) infrastructures, as well as a sustainable child-friendly learning environment.

In the scope of the School Rehabilitation and Reconstruction Project (2015-2019) in Nepal Caritas Switzerland (CACH) rehabilitated and reconstructed 36 public schools in Sindupalchok district, in Nepal. As the sustainability of public/government schools is one of the most important aspects, in order to provide children access to education for generations, CACH developed this O&M Manual and supports the implementation of an O&M system in schools, with participation of the schools, local community and civil society organisations.

In comparison to cities, teachers and students in remote areas face other challenges regarding maintenance of schools. Spare parts, technicians and finances are difficult and sometimes even impossible to access. Access to government funding for maintenance is more complicated by the distance to the authorities in the capital city.

Taking these circumstances into account, this manual aims to provide guidance on various important aspects to consider while implementing O&M in public schools.

### *Objective and Structure of the Manual*

The manual intends to serve staff of local government, other government authorities, NGOs, INGOs, civil society organisations, local community groups, individuals, and any other stakeholder interested or responsible for O&M in schools.

This manual is a learning document, which will be adjusted over time. It aims to provide a basis for the implementation of O&M in public schools.

- The first part of the manual highlights the importance of policies regulating maintenance of public institutions and provides the background of O&M.
- The second chapter includes practical examples on awareness raising activities among students on O&M.
- The third chapter describes how an O&M Plan is being developed individually in each school.
- The forth chapter, contains information on the caretaker training and the follow-up on capacity building for O&M staff.
- The fifth chapter includes a description on monitoring and review of O&M in schools.
- O&M tools, checklists and templates, to facilitate the O&M system in schools are included in the annexes of the Manual.

This Manual is the result of a mutual learning process of Mahila Aatma Nirbharta Kendra (MANK), Tuki Association Sunkoshi (TUKI), the Community Development and Environment Conservation Forum (CDECF), Caritas Switzerland, Helvetas Swiss Intercooperation and Skat Foundation.

## 1.1 O&M of schools in national policies in Nepal

In order to ensure sustainability of public infrastructure financial resources in form of maintenance budgets are necessary. Responsibilities regarding the management and maintenance of public infrastructure are set out in national policies.

The School Sector Development Plan as well as the Local Government Operation Act 2074 addresses the management of maintenance of schools in Nepal. The selected passages are focusing on the responsibilities of the government authorities in view of maintenance of public buildings and infrastructures.

Title/Year of policy	Name of Department	Chapter
School Sector Development Plan 2016-2023	Ministry of Education, 2016	(Chapter 7.2 ff)
Local Government Operation Act 2074		
<b>extract of specific paragraphs of the Local Government Operation Act</b>		
Chapter 3: Function, duties and rights of Rural Municipalities and Municipalities (Gaunpalikas and Nagarpalikas)		
Clause 7: Local level development plans and projects.		
Sub-clause 7: “Construction, operation, maintenance and management of the government buildings, schools, community buildings, conference hall and other public buildings and infrastructures”		
Clause 8: Basic and Secondary Education		
Sub- Clause 13 : “Educational infrastructure development of community school, operation, maintenance & management”		

## 1.2 Background on current practices on O&M in public schools

At this stage, the Government of Nepal does not foresee an annual O&M budget for public schools for maintenance. Public schools can develop a proposal, incl. a budget request, and submit it to the municipality once a year (early March). The municipality then decides if the criteria to receive an emergency budget for maintenance are fulfilled. If it is a maintenance emergency, the budget will be released.

CACH and its local partner NGOs have been lobbying and persuading the local government authorities to establish the annual O&M fund in order for the schools to carry out effective maintenance.

## 1.3 Important factors influencing O&M in schools

Considering some factors, which are influencing O&M in schools can enhance efficiency of the O&M system. Therefore, it is important to be aware of the following influencing factors.

<b>Financial (O&amp;M fund)</b>
<ul style="list-style-type: none"><li>• Availability of funds for O&amp;M at the school</li><li>• Assistance from government and non-government sources</li><li>• Establishment of O&amp;M fund and regular operation</li></ul>
<b>Resources:</b>
<ul style="list-style-type: none"><li>• Availability of skilled and trained human resource and appropriate material</li><li>• Availability of tools and spare parts,</li></ul>

<b>Administrative:</b>
<ul style="list-style-type: none"> <li>• Priority of O&amp;M for the school management &amp; required skills</li> <li>• Institutionalization of O&amp;M at school (how to conduct maintenance of the school)</li> <li>• Rules &amp; policies of local government</li> </ul>
<b>Ownership and support from Government authorities:</b>
<ul style="list-style-type: none"> <li>• Support of the Government authorities for sustainability</li> <li>• Availability of clear policies and plan on local level</li> <li>• Availability of O&amp;M monitoring and evaluation mechanism at the local level</li> </ul>
<b>Ownership and perception of users and the community:</b>
<ul style="list-style-type: none"> <li>• Caring for school facilities should be the concern of all who use and need them. This means using facilities for their intended purpose and in a proper manner. It involves active participation of all users. Both awareness and action are needed from all users to maintain school facilities.</li> <li>• Perception of community people towards public properties like schools</li> </ul>

## 1.4 Types of maintenance

**Preventive maintenance:** Preventive maintenance is planned and carried out on a regular basis to maintain and keep the infrastructure in good condition, such as network inspection, flushing of the well, cleaning and greasing of mechanical parts and replacement of items with a limited lifespan. For example, regular painting of CGI sheets before it got rusted, replacement of a damaged wire even if it is still functional, to tighten the screws of the roof to avoid that water enters, implement rainwater management<sup>1</sup> before the monsoon starts and prepare the surrounding- are preventive maintenance activities. In order to ensure that preventive maintenance is carried out, the caretaker conducts a monthly inspection, identifies the maintenance demand and maintains the infrastructure. If done correctly and on a regular schedule, preventive measures can reduce the risk of costly repairs. Preventive maintenance includes “equipment maintenance”, namely to ensure that there are maintenance personnel with clear responsibilities and all required tools. It is also essential to schedule preventive maintenance such as once a year the roof should be inspected in order to maintain it before it is irreparable.

**Corrective maintenance:** Corrective maintenance refers to replacing or repairing something that was done incorrectly or that needs to be changed in order to improve; an example is the reallocation of a pipe route or replacement of a faulty pump or if the glass of the window is broken, it needs to be replaced to prevent a larger damage.

**Emergency maintenance:** Emergency maintenance is a reaction to a crisis or public complaints; it normally occurs as a result of failures and the malfunctioning or breakdown of equipment. For example, if a CGI sheet of a roof is blown away by heavy wind, it needs to be immediately maintained. If the roof cannot be properly fixed immediately the roof should be meanwhile covered with a tarpaulin, until the CGI sheet gets replaced. Landslides are a high risk in the area. If a landslide occurs, immediate measures are to be taken to avoid any risk of harm to the structure and users. Emergency maintenance prevent larger damages and ensures safety of the users of the school.

**Periodic maintenance:** Some components of the infrastructure need to be maintained periodically, e.g. every 10 years or 25 years. For example, painting of the whole building once in 10 years, changing all the roofing (CGI) sheets one in 25 years.

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<sup>1</sup> Rainwater- or storm water management refers to O&M activities which are necessary to implement due to heavy rainfall to avoid flooding and water damages. The activities consist of digging drainages to lead the water underground, building walls to avoid landslides, cutting trees to prevent risk by tree damage and others.



## 1.5 Minor prevention and maintenance activities

There are several components of the school building and the WASH infrastructure that need to be taken care of. Some of the most common minor preventive and maintenance activities are tabled below:

### I. School Building:

possible defects which are <b>roof-specific</b>	Major prevention measures and maintenance activities
Leakage due to damage in CGI sheet	<ul style="list-style-type: none"> <li>- Do not throw or let throw hard things on roof</li> <li>- Repair immediately small leakages by changing washers of screw</li> <li>- CGI sheet must be replaced in case of big leakage</li> </ul>
Loose screw and bolts in trusses	<ul style="list-style-type: none"> <li>- Tighten loose screws and bolts whenever found</li> <li>- Keep checking for such point, periodically</li> </ul>
Leakage and blockade of roof gutter and connected vertical pipe.	<ul style="list-style-type: none"> <li>- Ensure Periodic cleaning of gutter</li> <li>- Clear all debris</li> <li>- Check if pipe is fixed well</li> <li>- Repair small leakages if found</li> </ul>

possible defects in <b>fiber board ceiling</b>	Major prevention measures and maintenance activities
Breaking and Dark spot caused by roof leakage	<ul style="list-style-type: none"> <li>- Do not hit or let anyone hit or push the ceiling board</li> <li>- Put a mechanism to check periodically any dark spot on the ceiling</li> <li>- Repair it only by skilled manpower</li> <li>- Seal leakage and paint dark spot</li> </ul>
Screw can be visible and loose hence rust eventually fall of board.	<ul style="list-style-type: none"> <li>- Tighten immediately the loose screw and cover it by small amount of white putty filler followed a coat of white paint.</li> </ul>

Possible defects in <b>paint</b>	Major prevention measures and maintenance activities
Scratches on and fading of paint	<ul style="list-style-type: none"> <li>- Don't scratch paint with sharp objects, renew paint</li> </ul>
Peeling off of the paint	<ul style="list-style-type: none"> <li>- Prevent the entering of moist in the walls</li> <li>- In case of peeling, remove the peeled part that has come off.</li> <li>- Paint with same color of paint (Color code is provided in the O&amp;M Plan).</li> </ul>
Graffiti and vandalism on wall	<ul style="list-style-type: none"> <li>- Educate students to prevent any graffiti on walls.</li> <li>- Teach them to report in case a student paints on walls.</li> </ul>

Possible defects in <b>wall plaster and ventilations</b>	Major prevention measures and maintenance activities
Hair Cracks , Hollow sound	- Minor repair of plaster can be done by cutting the part little wider and repairing by rich mortar
Nailing, posters	- Avoid unnecessary nailing and sticking posters on walls
Ventilation	- Ensure the holes are unobstructed and properly open
Wooden cladding on wall and floor	- Check proper nailing, paints, twisting of planks

Possible defects in <b>door and windows frames and shutters</b>	Major prevention measures and maintenance activities
Loosen of hinges, broken window shutter stopper hook, tower bolts, doorstoppers, door pad lock/Latch, handles, and glasses.	- Soft closing of door and window without banging is important - In case of breaking replace immediately. Cleaning of window shutter regularly
Twisted door and window shutters	- Keep door and window shutter closed as much as possible for few months after fixing, until it's completely dry, to avoid twisting
Loose window grills, faded color, broken welded joints.	- It prevents window shutter hit from balls so it need to be checked properly

Possible defects on <b>floors</b>	Major prevention measures and maintenance activities
Cracks and hollow sound on floor, voids might be found	- Do not hit or let hit or drop heavy things on floor - In case of damage need to break the defected part and repair with rich cement mortar
Dusty floors, slippery floors.	- Regular sweeping of floor and keep floor dry
Wheel chair Ramp and its Hand rail	- Ramp should always be maintained accessible, rough with all grooves clear - Handrails should be fixed without shaking. It should not be slippery

Possible defects in <b>steps and hand rails</b>	Major prevention measures and maintenance activities
Paint in handrail might fade, rust and shaking handrail.	- Use handrail to hold only, do not use it to slide. In case faded, repaint it before it rusts
Slippery steps might cause accident	- Do not spill oily things on steps in case of spilling clean immediately

## II. Tap Stand and drain

Possible defects in <b>water point, taps and drains</b>	Major prevention measures and maintenance activities
Leakage in tap , breaking of tap, blockade of pipe, silting in drain gully	<ul style="list-style-type: none"><li>- Immediate tightening leaking taps,</li><li>- Replace broken taps</li><li>- Clear the drain/gully</li></ul>
Drain gutter	<ul style="list-style-type: none"><li>- It prevents leg to go inside drain</li><li>- Ensure it is properly placed</li><li>- Check all the members are stable, if paint is faded or members rusted</li><li>-Paint in case of rusting and fix properly</li></ul>

## III. Furniture

Possible defects in <b>furniture</b>	Major prevention measures and maintenance activities
Writing and scratching on chair and tables, white boards and working bench.	<ul style="list-style-type: none"><li>- Work on student awareness on using furniture carefully</li><li>- Involve them in regular cleaning of furniture</li><li>- Prevent students from writing on furniture</li></ul>
Wobbling, shaking furniture	<ul style="list-style-type: none"><li>- Tighten immediately the loose screw, nails or joints</li><li>- Prohibit climbing and playing on furniture</li><li>- Defective furniture removed to prevent further deterioration then repaired or get replaced</li></ul>
Loose laminate (Formica)	<ul style="list-style-type: none"><li>- Glue it back in place</li></ul>

## IV. Toilet Blocks and plumbing services

Possible defects in <b>toilet block</b>	Major prevention measures and maintenance activities
Tiles breaking and peeling off	<ul style="list-style-type: none"><li>- Don't nail or hit by any hard tools on tiles</li><li>- Replace tiles by same type if broken (code of tile is mentioned below)</li></ul>
Clogged pan or sinks or drain pipes	<ul style="list-style-type: none"><li>- Flush the toilet adequately after use</li><li>- If blocked use plunger to open blockage</li></ul>
Breaking of any toilet fittings like pan, sink, tap, pipes	<ul style="list-style-type: none"><li>- Replace the broken item as soon as possible</li></ul>
Leakage of pipes or taps	<ul style="list-style-type: none"><li>- Tighten the leakage part or change washers</li></ul>
Disturbance in water supply	<ul style="list-style-type: none"><li>- Check the pipes from toilet to RVT to find where it is blocked and repair accordingly</li></ul>
Septic Tank and soak pit might be full immediately if rain water enters	<ul style="list-style-type: none"><li>- Check during rainy season and divert rainwater far from the septic tank and soak pit</li></ul>
Septic tank over flow	<ul style="list-style-type: none"><li>- Need to check level of sludge (solid) and empty manually if necessary on time. Clogged pipes, bad smell, around and healthy bushes around septic tank might be the sign of full septic tank. It might need to empty 1<sup>st</sup> time in 5-10 year</li></ul>

Soak pit over flow as saturated.	- Overflow of the soak pit might happen after years, flooding might be visible. The soak need to be filled completely and a new one should be constructed.
Air vent pipe	<ul style="list-style-type: none"> <li>- To avoid smell around septic tank, air ventilation pipe must be functional so check if it's clogged in case of bad smell around</li> <li>- We can open it using PVC pipes of smaller diameter by inserting it in vent pipe</li> <li>- Provide Cowell in top of vent pipe to prevent things and rats falling inside the pipe</li> <li>- Height of vent pipe must be higher than human height</li> </ul>
Incinerator	<ul style="list-style-type: none"> <li>- Ensure that pipe from incinerator to toilet is clear</li> <li>- Burn the pads regularly before it is full after school time</li> </ul>

## V. Electrical services

Possible defects in <b>electrical services</b>	Major prevention measures and maintenance activities
Fused bulbs, Short circuits, fused MCB, loose connection	<ul style="list-style-type: none"> <li>- Regular inspection of electrical services needs to be done</li> <li>- Replace fused bulbs and if any loose connections tighten immediately</li> </ul>
Dust covering of light fittings	- Regular dusting is essential
Switch, socket wire loose and sparking	<ul style="list-style-type: none"> <li>- Confirm connections are tight</li> <li>- If found any spark tight it immediately</li> </ul>
High voltage might damage appliances like computers, smart boards.	<ul style="list-style-type: none"> <li>- Use volt guard and check if functioning well</li> <li>- Look for any sockets overloaded</li> </ul>
Dropping of MCB	<ul style="list-style-type: none"> <li>- In case of short circuit or use of high voltage appliances, MCB might drop</li> <li>- Switch off the appliances and lift up the MCB</li> </ul>

## VI. Playground

Possible defects in <b>playground</b>	Major prevention measures and maintenance activities
Puddles and scoring of ground during rain	<ul style="list-style-type: none"> <li>- Necessary drainage system should maintain</li> <li>- Appropriate slope should be maintained</li> <li>- Filling of potholes with suitable materials</li> </ul>
Dumping of garbage at ground	<ul style="list-style-type: none"> <li>- Daily cleaning of the ground is advisable.</li> <li>- Provide enough dust bins</li> <li>- Aware users to use dust bins</li> </ul>
Retaining structures and steps	<ul style="list-style-type: none"> <li>- Weep holes must be clear all the time, -Remove bushes,</li> <li>- Check for any cracks in structure</li> </ul>

## 1.6 Monthly inspection of the school and WASH infrastructure

A monthly inspection of the infrastructure is carried out by the caretaker using the monthly O&M inspection checklist (**see Annex 5 of the O&M Plan**). If possible, the inspection is scheduled to take place during the O&M and WASH Committee meetings. In order to raise awareness on O&M, PTA members, and a child club representative should be invited to take part in the monthly inspection.

The results of the inspection are shared and discussed during the monthly/bi-monthly meetings of the O&M and WASH Committee. The head teacher signs the monthly inspection checklist and confirms therewith that he/she is aware about the condition of the infrastructure.

The O&M and WASH Committee supervises the work of the caretaker according to the inspection checklist and recommends maintenance activities if necessary. The caretaker includes the recommended O&M activities into the O&M Workplan of the following weeks, incl. the list of materials or tools to purchase in case of need.

A regular inspection will secure that all structures are checked regularly and seriously by the caretaker. Carrying out inspections allows the caretaker to be aware about the condition of the facilities and to adapt the O&M Workplan's if necessary.

Regular inspections will

- Keep interruptions at a minimum
- Prevent break downs
- Allow to order material and organise skilled labour before the structure breaks down
- Inform users about inappropriate use of infrastructure
- Keep the responsible persons informed about the condition of the infrastructures
- Provide the possibility to compare newly detected problems with previous records
- Inform the budgeting and budget request process

## 2. Awareness raising on O&M in schools

Awareness raising among schools is one important step to an effective O&M system in schools, leading to **sustainability of the infrastructure**. Awareness raising leads to **informed users** of the infrastructure and brings the topic of O&M in schools on the agenda of the School Management Committees (SMC's), government officials and other entities.

The first step of effective implementation of O&M in schools is to provide information on O&M to raise the understanding of the importance. Therefore, it is necessary to provide information on O&M on various levels:

- Education unit in municipalities
- Resource Persons (RPs)
- Department of Education (DoE in case of Nepal)
- Palikas (Municipalities)
- Wards
- Schools
- Local community groups
- Other NGO's working in the area

### **Reward system**

Setting up a reward system (e.g. prize for best O&M management) to ensure that all levels are following certain guidelines to ensure effective O&M in schools is essential. Reward systems can include the provision of extra funds through the government authority to the schools who are fulfilling a national O&M standard or carrying out monthly monitoring of their school and WASH infrastructure. A reward can give prestige to a school leading to increased school enrollment, higher revenue for the school and the possibility to maintain and even improve the school- and WASH infrastructure.

## Awareness raising activities on O&M in schools

There are various **audiences**, which should be addressed through awareness raising activities in schools:

- Students
- Child clubs
- Head teacher
- Teachers
- Parents and Teacher Associations
- Caretakers
- School management Committees
- O&M and WASH Committees

Students are the rightful beneficiaries of the school infrastructures who can play a crucial role in O&M. Student-centered activities can be designed and implemented aiming their meaningful participation. In the following, some examples for practical awareness raising activities for better O&M in schools are provided:

### *Code of conduct for O&M*

It is recommended that as part of the awareness raising activities, a code of conduct for O&M of the school is developed by the O&M and WASH Committee and the child club with the support of the Focal Teacher (or caretaker). The code of conduct for O&M sets out the rules every student and teacher has to follow in order to keep the school in a good condition. The code of conduct should be introduced and hand out to all students during the O&M Information Session (see below) and should be presented in a classroom session led by the teacher of each class.

### *O&M Information Session at school admission*

During the time of school admission, the child club organises an O&M information session for newly enrolled students on O&M of the school. If no code of conduct exists, a pamphlet or an information brochure is developed to inform every student about how to maintain their school and how to use the facilities in an appropriate way. The information brochure should include concrete examples of maintenance of the school including a list of Do's and Don'ts (see below).

### *School decoration aimed to raise awareness on O&M*



Posters and stickers illustrating how to use and maintain the school facilities are placed in the most prominent places around the school such as: toilets, the handwashing station and on the playground or compound.

Posters should illustrate messages to encourage the O&M in: classrooms, toilet blocks, in the area of waste management. Posters can illustrate and explain the blue school concept<sup>2</sup> or others can raise awareness and encourage students and teachers to keep their school child-friendly, such as cleaning the playground or keeping the compound safe for everybody.

<sup>2</sup> The Blue School concept was pioneered in 2007 by the International Rainwater Harvesting Alliance (IRHA) in 52 schools in 13 different countries in Asia, West Africa and Latin America and was further developed by the Swiss Agency for Development and Cooperation (SDC). A Blue School promotes a school garden 'as a practical place to demonstrate the relationship between food production and an efficient management of water; as well as a demonstrative place for watershed and land management practices'.

If students like to use a facility their motivation to maintain it will increase. Thus, it is important to decorate the school in such a way that promotes O&M activities, for example:

- Painted figures in different parts of the facilities can guide students and influence their behavior towards O&M, for example: figures on urinal walls can train children to keep the toilets clean.
- Decoration such as a sink with colorful hands or a mirror above the handwashing station can motivate students to wash their hands. If students wash their hands regularly the school facility will stay cleaner. The handwashing station should also have a soap at all times.



*Floor paintings for awareness raising at a toilet block*

- Painted walls make the school facilities attractive. In addition, colorful paint improves a child-friendly learning environment and protects the walls.
- Framed drawings on the wall will protect the walls as students are more aware not to touch the walls.
- Plants in the classroom can encourage students to take care of the classroom environment.

#### *List of Do's and Don'ts on notice board*

Publish a list on O&M Do's and Don'ts in a prominent place like the notice board of the school, close to the school compound to inform students and teachers about what is appropriate or not regarding O&M of schools. Some examples are in table below; add more do's and don'ts as per requirement.

Do's	Don'ts
Keep your school clean	Do not damage the facility or any property of the school
Inform your teacher if something is broken	Do not stick paper with glue to the walls
Throw garbage in the bin	Do not paint on the walls and furniture's
Clean/water the toilet after using it	Do not play with fire
Act like a role model	
Help other students	

#### *Classroom routine*

Every class teacher can develop a classroom routine together with his/her students. It is important that the students take part in the activity and create their own routine. They are more likely to follow the routine, if it is created by themselves.

The classroom routine includes guidance and activities to ensure that each classroom is kept clean and maintained over time. A classroom routine contains duties such as:

- Throwing waste in the bin
- Closing the windows after the school ends
- Proper handling of the furniture
- Sweeping the floor and more

#### *O&M led by students*

There are several O&M activities, which can be implemented directly by the students, student groups or child clubs. These activities will not only ensure that the school is better maintained but they will also raise awareness and the ownership of students on the O&M for their school. The active participation of students in O&M of the school can be organised in several ways. Many schools use the rotation method, job card etc. where a group of students or a class take turns to

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conduct specific maintenance activities (listed below). One class is in charge of the activity for one week and the other class is in charge the week after. The class teacher needs to supervise the O&M activity.

The O&M activities that can be carried out by students are the following:

- Cleaning the toilet blocks (girls/boys)
- Collecting and managing waste
- Cleaning class rooms, library, computer, storage and other rooms
- Teaching younger students how to wash hands properly and how to keep handwashing area clean
- Maintaining the water filter (refilling and cleaning)
- Maintaining the school garden
- Monitoring of the O&M activities

Additionally, students can be in charge of carrying out other awareness raising activities:

- Development of awareness raising programs for the school to raise awareness on O&M
- Development of a cleaning campaign concept for the school. For example, one particular day can be “cleaning up day”, where students clean their classroom or the whole school.
- Creating ideas on how to improve their classroom, garden, compound

#### *Students teach students*

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Every student in primary school should be assigned to a senior student as an O&M Guardian. The senior student answers questions related to the O&M responsibilities of students. The O&M Guardian has the responsibility to guide his/her primary school colleague in O&M issues and to teach her or him how to conduct different O&M activities.

#### *O&M awareness raising campaign's*

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With the support of the Focal Teacher, schools should design and implement O&M awareness raising campaigns.

The O&M awareness raising campaign in form of a yearly school cleaning up and maintenance campaign for example. Such a campaign can raise awareness through different activities conducted during one day up to one week. Student representatives from every class should be engaged in the design of the campaign. If possible, other schools in the area can be involved as well.

#### *Extra curriculum activities and lesson plan*

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O&M activities should be included in the extracurricular activities of the school such as: street drama, an art or writing workshop on the O&M of Schools.

#### *Curriculum*

---

O&M activities should be included in the daily lessons plans of teachers. Before the lesson starts students and teachers do a quick check up of their classroom: for example, if something is broken, if the windows were left open overnight or if the waste bin is emptied. If there is a damage or a problem, students and teachers should try to find a solution. Students should be encouraged to report vandalism or bad maintenance of facilities to their class teacher or to the head teacher.

#### *O&M Competition*

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Competitions are a great way of raising awareness among students on O&M of their school. There are various types of competitions which can be carried out, such as:

- Debate and poetry competition
- School project competition



- 
- **Art competition**  
i.e posters on O&M can be designed and developed by the students with support of their class teacher. An art competition can be organised so that students design posters on O&M messages and then a jury can decide on which poster illustrates the most useful message. The winning poster can be framed and published on the school noticed board
  - **Best O&M award to school**

A competition can be carried out in one school and among various schools in the region.

An annual school competition among various schools can help to build knowledge and awareness on O&M of the schools. To achieve the mission, the schools collaborate closely with various relevant stakeholders such as the local media and the Ministry of Education (MoE), which assists by notifying schools about the competition and ensuring that competition topics are suitable. The ward or municipality provides trophies and certificates for the winners as well as appropriate materials.

#### *Learning and exposure visit*

---

Similarly, learning and exposure visits among the schools, can be helpful to learn from each other and to improve O&M further.

#### **Frequency of awareness raising activities**

Awareness raising activities on O&M should be integrated in **daily school routine**.

The establishment of a class room routine, a discussion on O&M in the class room led by the teacher and the integration of O&M activities into the extra curriculum activities, raises awareness and does not include additional expenditure.

Conduct one or more **annual campaign(s) on O&M** in your school per year and link the campaign to global awareness raising campaign days, such as:

Global Handwashing Day, Girls Day, World Toilet Day, Teachers Day, Menstrual Hygiene Day, World Children's Day, Human Rights Day. Advantages are that the global awareness raising days are motivating people around the whole world to focus on one important topic, to share their knowledge and to join hands in finding solutions. A lot of useful material for schools about each global awareness raising day can be accessed online.

### 3. The O&M Plan

The O&M Plan (see sample *O&M Plan in Annex 1* attached) is an individually designed plan for guiding the operation and maintenance of schools, developed by every school with the support of local organisations (if applicable), engineers, technicians, programme engineers, ward chair persons or other resource persons.

In the case of CACH the following participatory development process was followed to develop and implement the O&M Plan with public schools.

#### **O&M Plan Development process**

##### **Step 1: Designing the O&M Plan with all relevant O&M stakeholders**

Programme engineers (PE) and WASH & Blue School engineers collect and provide the technical information such as the table of most common maintenance issues.

LPNGO organize an O&M Plan design workshop with the District Office Coordinator (DOC), PE, Caretaker, representative of the SMC, head teacher, WASH officers and resource persons (RPs) and/or ward chairpersons. After the establishment of the O&M and WASH Committee at each school, the Committee will take the leading role in the development of the O&M Plan. The Committee receives support from social mobilizer of local organisations throughout the process.

##### **Content of the O&M Plan workshop:**

A workshop is conducted, aiming to introduce the O&M Plan content to a wider school audience.

In the beginning of the workshop, the objectives are clarified, followed by a presentation including pictures of damages, causes and good practices to highlight the importance of O&M.

A discussion about all school infrastructure components from roof to ground of the building, intake to tap of the water supply system, toilet including possible damages, mitigation plan, repair plan and responsible persons takes place. The WASH engineer or WASH officer facilitates the water supply part. The programme engineer or technical officer facilitates the part about the school infrastructure.

After collection of the technical inputs, the administrative component of O&M is discussed.

The discussion on the O&M fund is facilitated by the Resource Persons. If he/she is absent, the social mobilizer from the LPNGOs facilitates the discussion.

The budget for O&M is estimated, the funding sources are discussed and the O&M and WASH Committee taking on the responsibility to manage and monitor the fund is instructed.

##### **Step 2: Finalising the O&M Plan**

The LPNGO compiles and drafts the O&M plan based on the O&M Plan Workshop and hands it over to the O&M and WASH Committee, the Caretaker and the SMC. The Committees, incl. the Caretaker conduct a meeting to add missing aspects, develop a detailed Workplan, to fill out checklists and develop specific content for the O&M Plan.

The draft of the O&M Plan is submitted to the CACH office and the SMC through the head teacher. WASH officer, programme engineers and the O&M Coordinator of CACH review the O&M Plan and provide feedback to the LPNGO. The feedback is then incorporated and the O&M Plan is finalized by the LPNGO.

### Step 3: Implementation Workshop and Endorsement of O&M Plan

#### I. Endorsement Workshop/ Meeting

The endorsement Workshop is facilitated by the head teacher with the support of the LPNGO. All O&M stakeholders are invited to attend the endorsement Workshop in order to raise awareness of the relevance of the O&M Plan. With the endorsement of the O&M Plan, the school commits to implement an O&M system in their school and to follow the O&M Plan.

During the Workshop, the final version of the O&M Plan is presented and then integrated into the School Improvement Plan (SIP) to not replicate efforts.

One copy of the O&M Plan is submitted to the school, one to the care teacher, one copy belongs to the LPNGO and one copy is kept by CACH. A pen-drive with all relevant documents as soft copies is handed over to the responsible person in order to allow the easy use and update of the documents and templates.

#### II. O&M Plan Implementation Workshop

The LPNGO organizes an O&M Plan Implementation Workshop with the head teacher, the O&M and WASH Committee, the caretaker(s) and the SMC. During the O&M Plan Implementation Workshop the Plan is presented and set into action. Chapter by chapter the plan is carried out, as intended to build the capacity of the caretaker, O&M focal teacher, the O&M and WASH Committee members, the SMC members and any other O&M responsible person to implement the plan independently.

##### Workshop objectives

The objectives of the workshop are that

- All O&M stakeholders are clear about their roles and those of the other stakeholder in O&M of the school.
- All O&M stakeholders know how to use the O&M Plan

#### III. Integration in School Improvement Plan (SIP)

The O&M plan is eventually integrated in the SIP. This process is facilitated by Resource Persons. Once it is integrated in the SIP, it is included in the document of government authorities recognised and followed by the schools.

## 4. Capacity building and training of O&M caretakers for schools and WASH facilities

Capacity building on O&M among all O&M stakeholders is of importance in view of sustainability of the infrastructure.

### 4.1 Caretaker training

In case of the CACH project, a three days' caretaker training is conducted to train caretakers in maintenance of the school and WASH-infrastructure. The training consists of a mix of theoretical and practical sessions and include group works, exposure visits to best practice schools (if possible) and exchange among other schools.

The training is carried out by technicians and engineers, with support of social mobilizers of the LPNGOs. Two caretakers, or O&M Focal Teacher, of every school take part in the training. A group of 20-25 caretakers from approx. 6 schools are attending the training. The content of the training covers major maintenance aspects of the school - and the WASH infrastructure.

It is strongly suggested to introduce the O&M Plan and the practical use of the O&M Plan during the training and to hold a session on the administration of O&M (roles and responsibilities, O&M and WASH Committee, use of checklists and repair request form, accountancy of O&M fund and others).

### **Caretaker training content**

#### **A. Motivation and Theory**

- What is O&M, Why O&M, or what is the advantages of O&M and disadvantages of not having O&M system?
- Different types of infrastructures and maintenance
- Importance of water and sources
- Important Factors for Sustainable Water Supply Systems (SWSS)
- Structures of SWSS
- Common problems in SWSS and preventive measures
- Tools and uses
- Water quality

#### **B. Skills for carrying out O&M activities at buildings**

- Inspections and using facilities
- Cleaning and their frequencies
- Repairing / fixing
- Safety for the caretakers and the users
- Recording, reporting, reviewing and their frequencies

#### **C. Skills for carrying out O&M activities for water supply systems**

- Identification of different type of pipes and fittings
- Assembling of different type of pipe and fitting
- Observation of the key structures on the site

#### **D. Administration of maintenance**

- Roles and responsibilities
- Finances (repair request form, O&M fund and its use incl. yearly cost estimation)
- Recording (monthly inspection, repair request form, Workplan's)

### **4.2 Follow-up training**

In the best case, wherever possible, a follow-up training of the caretaker training is organised after approx. 1-2 years by the LPNGO bringing together technicians, engineers and caretakers. It is important to organize capacity building activities every one or two years to capacitate the O&M caretakers. If the capacity is not sufficient, the school will not be successfully maintained because of a lack of knowledge. The follow-up training should cover the technical aspects of O&M but also the administrative aspects. It is recommended that the LPNGO, with support of the government authorities, organises the follow-up trainings for caretakers. The training should be facilitated by engineers and other skilled craftsman.

## 5. Monitoring and Review of O&M in schools

### Monitoring and review provide:

- Information on what an intervention is doing, how well it is performing and whether it is achieving its aims and objectives;
- Guidance on future intervention activities;
- Accountability to stakeholders;
- Guidance on advocacy, lobbying and awareness raising at the local government level to increase understanding of the importance and willingness to support the schools.

### Annual monitoring of O&M in schools

Monitoring of O&M in schools is the collection of information about all O&M activities. It is used as a method to check if O&M activities are being implemented and followed according to plan. It also helps identifying and solving problems quickly.

Thus, monitoring should support the caretaker to keep track of O&M in the following areas:

- activities;
- reporting and documentation;
- finances and budgets.

The monitoring is led by the SMC and by the O&M and WASH Committee. The head teacher as well as the caretaker should attend a monitoring session, but do not lead the process. It should be carried out in February each year, based on the yearly monitoring checklist (Annex 7) before the yearly O&M and WASH Committee planning meeting takes place.

### 5.1 Capacity building of Government authorities and collaboration

Nepal has adopted a Republic Federal System in 2015 and local governments have more power and responsibilities than ever before. The humanitarian and development agencies who are working in the sector may facilitate the dialogue with the local governments authorities in policy making on O&M and support the public properties like schools regarding their maintenance system. The agencies may collaborate and support the local government authorities to build their capacity through training, orientation and workshops in O&M.

This will enable local government authorities to:

- be aware about the importance of O&M
- plan and allocate funds for O&M
- create a sense of accountability and responsibility
- support their development plan
- building their capacity to implement, monitor and supervise the implementation of the O&M plan

### O&M review in schools

A review of the O&M activities serves the purpose of assessing if the objectives are being achieved and if there are any observed changes in the behaviour of stakeholders regarding O&M in their school. The review seeks to understand if the O&M activities are successful or not and what could have been done better or differently. The O&M and WASH Committee organises and conducts the review with support of the caretaker and head teacher.

Reviews take place at specific times. The annual O&M review meeting is led by the SMC, organised with the O&M and WASH Committee, the head teacher and other O&M stakeholders. Before the review meeting takes place, the records (O&M Workplan, monitoring checklist, monthly inspection

checklists, O&M fund accounting) need to be collected and analysed by the O&M and WASH Committee with the support of the caretaker. The caretaker provides all information based on the records kept.

During the **O&M review meeting** the following points are discussed:

**Agenda for annual O&M review meeting**

- Purpose of the annual review
- Expected outcomes of the meeting
- O&M performance, including the following:
  - Meetings (frequency)
  - Monitoring results, O&M Workplan, and other records
  - Budget: O&M fund management and procedures (allocation, release of budget)
  - Communications among stakeholders
  - Roles and Responsibilities: practices and effectiveness
- Special achievements
- Problems and issues and their possible solutions
- Lessons learned

The annual O&M review meeting is suggested to take place at least 2 weeks before the yearly planning meeting. This will provide the opportunity to share the results within the yearly O&M and WASH Committee planning meeting. The review report is filed in the respective folder for future references.

# Operation & Maintenance (O&M) Plan Template

**Add a picture of the school**

*Published in*

*Next update:*

*Published by*

*Name, Contact, Address*

**CARITAS** Schweiz  
Suisse  
Svizzera  
Svizra



**HELVETAS**  
Swiss Intercooperation

NEPAL

**skat**\_foundation

*Supported by:*

*Local Partner NGO*

## Abbreviations

Local Partner non-government organisation	LPNGO
Mahila Aatma Nirbharta Kendra	MANK
Operation and Maintenance	O&M
Parents Teacher Association	PTA
School management Committee	SMC
School Improvement Plan	SIP
Water, Sanitation and Hygiene	WASH



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## 1. General information of the school

Number of students, teachers and school staff per \_\_\_\_\_ (fill in date)

	female	male	total
# of students admitted to the school			
# of teachers			
Caretaker or O&M responsible person			
other staff			

### School building and water supply infrastructure

The school consists at the time of development of the O&M Plan of the following infrastructure:

Infrastructure	Amount	Size, other details and remarks
classrooms		
store room		
teacher room		
handwashing station incl. 2 taps		
sinks in the toilet block		
Total # of individual toilets		
# of individual girls toilets		
# of individual boys toilets		
# of individual teachers toilets		
<u>of those:</u> # of toilets for disabled students and teachers		

Incinerator		
Playground		
Waste burning pit		
Water supply system		
Hostel		
<b>Furniture</b>		
Classroom benches		
Chairs		
Tables		
Shelves		
others		
<b>Equipment</b>		
Whiteboards		
Keyboard (holder)		
Waste bins		
others		

## 2. Description of the O&M Plan

The Operation and Maintenance (O&M) Plan supports the implementation of an O&M process (activities, methods and tools) and aims to ensure a child-friendly school environment (safe, clean and comfortable). It is used as a tool to support the maintenance of the School infrastructure and School Water Supply System (SWSS) facilities to ensure long-term usability.

The implementation of the O&M Plan will lead to the following advantages:

- healthy learning environment for children and teachers
- lower financial burden of the school
- an increased school attendance of children
- an increased responsibility of the school and the local government authorities

The O&M Plan is prepared by **(Name of the school)** with the support of a LPNGO, **(Name of the LPNGO)**, and CACH. The O&M Plan is endorsed and owned by the School Management Committee (SMC) and by the School. The O&M is eventually integrated in the School Improvement Plan (SIP). A yearly review of the O&M plan is recommended to keep it up-to-date. The O&M and WASH Committee will use the O&M Plan to implement the O&M process in schools in cooperation with the caretaker or the O&M responsible person.

## 3. O&M in public schools

The chapter on the O&M in public schools describes all activities which are part of the O&M system of the school. It covers the awareness raising component and presents the O&M management organigram including a description of the O&M management structure and the responsibilities of all involved stakeholders.

### 3.1 Definition

Operation and maintenance refer to all of the activities needed to run a school except for the construction of new facilities. The overall aim of the operation and maintenance is to ensure efficiency, effectiveness and sustainability of the school infrastructure and WASH facilities.

#### Operation

Operation refers to the direct use of the system by the user (e.g. using the chairs in the class room).

#### Maintenance

Maintenance, on the other hand, is to do with the technical activities, which are needed to keep the school and WASH infrastructure working. Maintenance requires skills, tools and spare parts, as well as a proper plan to guide the process.

### 3.2 Types of maintenance

**Preventive maintenance:** Preventive maintenance is planned and carried out on a regular basis to maintain and keep the infrastructure in good condition, such as closing the doors and windows after school ends, flushing of the well, cleaning and greasing of mechanical parts and replacement of items with a limited lifespan.

**Corrective maintenance:** Corrective maintenance refers to replacing or repairing something that was done incorrectly or that needs to be changed in order to improve.

**Emergency maintenance:** Emergency maintenance is a reaction to a crisis or public complaints; it normally occurs as a result of failures and the malfunctioning or breakdown of equipment.

**Periodic maintenance:** Some components of the infrastructure need to be maintained periodically (such as the cleaning of the drinking water source), biannually, others once in 10 years or 25 years.

Examples of these different types of maintenance are included in the O&M Manual in chapter 1.4.

### 3.4 Awareness raising on O&M in schools

The success of O&M in schools depends heavily on the teachers' and students' (the main users of the facilities), motivation and commitment to make it work. Teachers need to be regularly trained and supported with adequate teaching aids.

**Awareness raising activities** aim to:

- Inform students and teachers about **how to use the school facilities** (school building and WASH) in an appropriate way so that it can last for the intended lifespan.
- **Improve the way how students and teachers take care of the facilities** in order to keep the school in good condition.

Awareness raising can have a positive **impact on the maintenance of school facilities in the long-run**. An attractive classroom, a beautiful playground and clean facilities will receive more care from everybody than dirty, smelly and non-functional facilities. Students and teachers need to acknowledge that **everybody is responsible to keep the school child-friendly** and that they are directly benefitting from a healthier learning environment.

Examples of practical awareness raising activities for the successful O&M in schools are presented in chapter 3 of the O&M Manual.

### 3.5 Roles and Responsibilities in O&M

In order to organise the O&M of schools in a systemic manner and to hold the responsible persons accountable, the clarification of roles and responsibilities of each stakeholder and the respective Committees related to O&M of the school is crucial.

A format for the contact list, including name and address of the O&M stakeholders is attached in Annex 2.

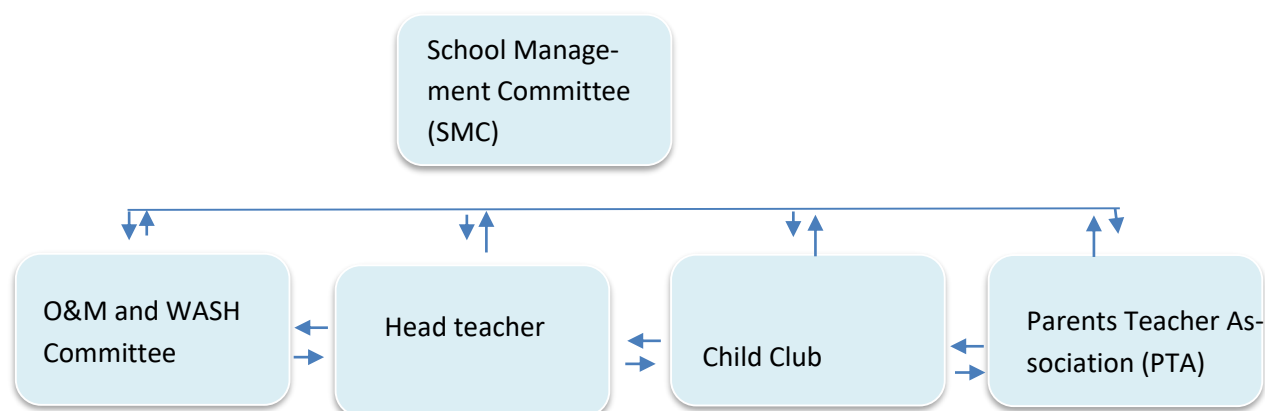
It is important not to assign too many people to different tasks **to keep the O&M Management structure practical**. The structure should also ensure that staff is replaced with reasonable dispatch, when necessary.

The following Graph includes all main O&M stakeholders. They are linked through arrows indicating the line of communication and reporting.

## O&M stakeholders

The organigram below is one **example of a O&M management set-up of a school**.

**Instruction:** Visualize the main O&M stakeholders in the organigram. Link the stakeholders with arrows indicating the line of reporting.



## Roles and responsibilities

The following table includes the roles and responsibilities of the O&M stakeholder in the school.

After the development of the organigram roles and responsibilities of the O&M stakeholders are identified and assigned. This process is suggested to be conducted by the O&M and WASH Committee. The **roles and responsibilities** need to be **as clear as possible** in order to hold the responsible person accountable. One task should be assigned to one person instead of many persons.

## **O&M stakeholder and their responsibilities**

### **O&M and WASH Committee**

Composed of: SMC, Head Teacher, Child Club, member of SMC and PTAs. The focal teacher leads the O&M and WASH Committee and the Head Teacher in overall support.

The O&M and WASH Committee in school is a Sub-Committee of the School Management Committee (SMC).

The O&M and WASH Committee works as a steering committee to establish a functional O&M System in the school and to carry out the O&M activities as planned. This committee also serves the objectives of the WASH Guideline in school, which calls for the formation of a WASH Coordination Committee in schools. The O&M and WASH Committee, thus combines the responsibilities of the O&M and WASH Coordination Committee.

The O&M and WASH Committee has the following responsibilities:

The O&M and WASH Committee should not be involved in day to day O&M problems.

### **School Management Committee** – supervised by the education unit of municipality

The SMC is the legal body in charge of monitoring and supporting the overall administration of a school. It has a provision to form the O&M and WASH Committee if needed. It is however, highly recommended that the SMC of each school sets-up an O&M and Wash Committee.

The SMC has the following responsibilities:

### **Head teacher-** supervised by SMC and by the O&M and WASH Committee

The role of the head teacher in O&M in schools is very important since he/she is responsible that the school is well maintained in the long-run and he/she supervises the staff of the school. The head teacher has the responsibility to hold the staff of the school accountable of their activities and to monitor if the tasks assigned, are fulfilled as planned.

The main responsibilities of the head teacher in the O&M of the school include:

**O&M focal teacher**- supervised by head teacher

The O&M focal teacher has the following responsibilities:

**caretaker**- supervised by O&M focal teacher or head teacher

The caretaker should be hired by the head teacher and should have the following qualifications and skills:

- Literate, basic mathematical understanding
- Skilled artisan with experience in the management of building and water supply infrastructure

The caretaker has the following responsibilities:

**Child club** - supervised by focal teacher

The child club has the following responsibilities:



<p><b>Parents Teacher Association (PTA)</b> - supervised by head teacher &amp; SMC</p> <p>The PTA has the following responsibilities:</p>

A contact list, including name and address of the O&M stakeholder is attached in Annex 2.

## 4. O&M and WASH Committee Meetings

### 4.1 Yearly O&M and WASH planning meeting

The main objective of the yearly O&M and WASH planning meeting is to identify O&M activities, which need to be conducted during the school year at daily, weekly or monthly basis. The objective of this meeting is to prepare/update the O&M Workplan. In this meeting, the responsibilities of each stakeholder are clarified and the budget for O&M is calculated and agreed upon. The meeting should take place in the end of the fiscal year, in March, before the beginning of the new school year so that it helps the committee to request the budget from the local government in advance.

**Example of an agenda** for the yearly O&M and WASH planning meeting:

1. Assess the standard of O&M achieved the previous year and suggest changes if required
2. Establish O&M priorities for the respective Fiscal Year.
3. Develop a yearly, and a daily, weekly or monthly O&M Workplan
4. Estimate the annual budget
5. Prepare budget request for the government
6. Plan fundraising events and assign responsibilities

### 4.2 Development of O&M Workplans

#### Yearly O&M Workplan

The yearly O&M Workplan provides an overview of all O&M activities which have to be carried out by the different stakeholders during the year. This plan will ensure that the Caretaker is especially aware of all preventive measures needed for the proper O&M of the school.

To start preparing the O&M Working Plan it is important to take into consideration the following questions:

- What maintenance is needed in the coming year?
- Who should do it?
- When should it be done?
- What materials have to be purchased?
- For which task do we need to contract somebody?
- How much does it cost?

Besides the O&M activities, the yearly O&M Workplan should include

- school holidays/public holidays
- local government deadlines/events
- awareness raising campaigns and global awareness days
- fundraising events
- timing for budget request from the government
- Yearly Monitoring of the O&M system
- SIP review
- Annual Review of the O&M system of the school
- others

The ***monsoon season should be taken into consideration*** in order to bring awareness on the importance of proper drainage maintenance and the preparation of the school surrounding in view of landslides.

A format to develop the yearly O&M Workplan is in Annex 3.1 and is based on the O&M activities list in Annex 1. The O&M Workplan should be developed taking into consideration the specific needs of the school. It is important to choose from the list only the O&M activities that are relevant to the respective school. New activities can be added if necessary.

During the development of a yearly O&M Workplan it is important to **review the monthly inspection checklists** of the past year to identify most common O&M challenges which might be linked to a specific time.

In July the inspection checklist might show that rainwater was a challenge. A solution to prevent damages due to rainwater then is to be prepared and to manage it. Accordingly, rainwater management activities should be added to the yearly Workplan.

### Monthly, weekly and daily O&M Workplan

After the development of the yearly O&M Workplan a more detailed O&M Workplan: monthly (Annex 3.2) or weekly (Annex 3.3), or daily (Annex 3.4) is suggested to be developed following a similar process. These plans need to be updated accordingly in the regular O&M and WASH Committee meetings.

### 4.3 Regular O&M and WASH Committee meeting

The O&M and WASH Committee should conduct monthly or bi-monthly meetings. During these meetings the O&M and WASH Committee, the SMC, the head teacher and the caretaker, as well as other important stakeholders (such as PTA representatives and Child Club representatives), review the daily, weekly, or monthly O&M Workplan, and plan the O&M activities of the coming month(s).

The meetings ensure regular exchange among the main O&M stakeholders and provide a platform for steering the O&M process, to adjust responsibilities, to take decisions, to discuss challenges and to find solutions together. The updated O&M Workplan is implemented during the coming weeks until the next meeting takes place. Furthermore, the O&M budget is monitored and the fundraising activities are planned and implemented.

## 5. O&M Implementation

### 5.1 Data collection: School master plan, manuals for the water supply systems and contacts

The information about the school facilities to be maintained is important for preparing the Workplan, the budget, and for handing over any responsibilities to a new person. Data is regularly collected, filed and updated (once a year recommended).

The following information should be included:

- A school building master plan (see Annex 4.1) allows the caretaker to oversee which components belong to the school, to estimate the material needed for certain maintenance activities. The master plan of School- and WASH facilities includes drainage system, electrical wire system, site map, and map of critical points in the school such as evacuation areas and is updated once a year.
- Manuals of all machines, equipment or appliances used at the school should be collected.
- File colour code in order to buy the right tone for repainting the school
- A list of contacts of all spare part dealers and skilled craftsman in the area (see template Annex 4.2).
- A list of O&M tools is provided in Annex 4.3 to ensure that the tools are checked and maintained as well.

### 5.2 Workplan implementation

The caretaker is responsible to implement the Workplan. The following tools can support his/her work.

#### Monthly inspection of the school and Water and Sanitation infrastructure

A monthly inspection of the infrastructure is carried out by the caretaker using the monthly O&M inspection checklist (see Annex 5). If possible, the inspection is scheduled to take place during the O&M and WASH Committee meetings in order to involve the O&M and WASH Committee in practical O&M.

#### Repair request

The caretaker needs financial resources to conduct O&M activities, specifically to purchase materials and tools or to pay for human resources. The caretaker fills out a repair request form (see Annex 6) and submits this form to the head teacher (or O&M Focal Teacher). The head teacher approves the request and sends it to the O&M and WASH Committee which approves and releases the money of the O&M fund for maintenance. It should not take more than 3 working days from submission of the repair request form until the release of the money.

In emergency cases, the money from the O&M fund should be released immediately. It is suggested that the caretaker has an emergency / contingency budget to be able to access money quickly.

#### Record keeping

In order to build a standardised inspection system, it is essential to keep records.

The following O&M records should be kept and systematically be filled & updated:

- O&M Workplan: The caretaker uses the O&M Workplan, fills it out and files it. The collected O&M Workplans provide a record of maintenance activities carried out in the school
- Repair request forms
- The monthly inspection checklists
- The annual O&M monitoring checklists/reports
- Annual review reports which will be included in the annual school report and presented on school day

These records are useful for the development of future O&M Workplan's and to support budget requests. The records contribute to informed-decision making in O&M of the school.

### 5.3 Most common maintenance issue table

Table 1 provides an overview of the most common maintenance issues and the related O&M activities. This table aims to support the O&M responsible persons by providing information on O&M activities and tools used to maintain the most common maintenance issues in their school.

**Table 1: Most common maintenance issues: School infrastructure**

Topic	O&M Activities	Materials and tools
<b>Rainwater management/drainage system</b>		
Rainwater damages the ground, path, road, which effects the school	Build proper drainage system around the school and the compound (and clear from debris, especially before monsoon!)	Broom, shovel
<b>Doors</b>		
Door locked and no key available	Organize and manage keys, place keys always in key board after use, have back-up copies	Key board
Lead of door damaged	Replace the lead if damaged, fix lead	Lead for door, screws and screwdriver
Door hinges squeak when closing and opening, much effort needed	The hinges need to be lubricated in order to ensure smooth opening and closing.	Oil, fat or other lubricant
<b>Windows</b>		
Windows are open after school ends	Close windows	
Lead of windows crack/ frame cracks	Maintenance with necessary materials and human resources	Contact skilled craftsman
Damage of hook and knot	Fix the new hook and knot	Hook, knot, screwdriver
Window glass damaged	Fix with the help of an artisan	Contact skilled craftsman
<b>Bulb and switch</b>		
Bulb damaged	replace	Bulbs
Wire damaged	replace the damaged wire	Wire

Meter box damaged	replace the meter box	Meter box
Other electrical problem occurs	Manage maintenance with the help of an electrician	Contact electrician
<b>Furniture</b>		
Damage or break down of parts of furniture	repair	Wood, nails, screws
Dust and dirt	Clean with cotton and broom	Cotton, broom
<b>Wall</b>		
Damaged	Fill holes	Cement, filling materials and paint
Dirt, painting	Clean as per need	Soft cloths, detergent powder
<b>Floor</b>		
Damage of the floor	Maintenance/ plastering	Cement, filling materials and mason
<b>Roof</b>		
CGI connection to frame: loose the knot and bolt	tighten the knot and bolt	Knot, screwdriver
Rusting in CGI roof	Paint, replace damaged parts	Brush and paint, replacement sheets of CGI
Covered with dust and waste	Sweep Wash with water	
<b>Compound</b>		
Plastics, papers and other waste materials may gather on the ground	Collect all the papers, plastics and other things and lit the fire in it in a waste burning pit	Waste burning pit
Old furniture, scrap is lying around	Manage scrap in a proper way, dismantle, store properly	Gloves to protect the hands from being cut
Landslide	Dig drains, plant trees and manage garden	
Walls damaged because of undercut by water, landslide or other hazards	Rebuild and build proper water drainage system	

**Table 2: Most common maintenance issues: School drinking water and sanitation**

Topic	O&M Activities	O&M tools and information
<b>Source and connection to school</b>		
Blockage of water source by leaves and plants	Clean the surroundings of the source	<b>Water source/ intake:</b> water source is the main point of drinking water supply system which is supplied through the pipeline. The water source is protected by railing from top to bottom. A dynamic filter covered with plastic has been installed underground to protect the water source during monsoon.
Damage by land slide and flood	Storm water management: Build drainage, check and clean	Shovel, spade
Blockage of wash out	Open the wash out	Air valve is necessary to take out the air from the pipeline. This is the supportive tools of washout.
Displacement of wash out	Refitting the wash out	
GI crossings incorrect placement (due to landslide, mud, rain)	Refitting	GI crossings are placed in river, stream and slide areas. Generally, they are placed every 20 meters (maximum). GI crossings have been placed in two places.
Crack in transition pipe	Change the pipe, with support of artisan	New pipe/transition line, contact to artisan
Transition pipe blocked	Clean the pipe, with support of artisan	<b>Transition line:</b> The main pipeline which is used to carry the water from source to RVT is called transition line. There are 2096 meter of transition line.  Contact to artisan is blocked
Reservoir tank blocked	Clean the reservoir tank	<b>Reservoir tank (RVT):</b> The water collection tank coming from the source through transmission line is called RVT. There is a 5 cubic meters RVT constructed in Palchok Basic School.  Clean with broom, stick
<b>Tap stands</b>		

Taps are open	Close	The taps are distributed in the community and there are altogether <b>453 public taps</b> distributed in community sharing the same source of Palchok Basic School. The community is responsible for cleaning the public tap stands. If taps are open close them and request users to close the taps regularly.
Water is leaking from taps	Check seals	Replace seals
Water does not drain from area under taps	Unblock drainage spillway	Shovel, spade
<b>Toilet and sinks</b> (toilet block with three toilets)		
Blockage in pan/syphon	Push with a long wire, pipe or anything similar and pour water	Wire, brush or similar
Sink and surrounding of sink is dirty	Clean	Brush and water
Dirty toilet pan, floor and walls	Clean	brush, harpik and water
Bad smell	Pour bucket of water/put fennel	Water, fennel
Incinerator of girls' toilet	Burn it in morning and remove the ash regularly.	Fire, lighter
<b>Hand washing area (2 taps)</b>		
Handwashing area is dirty	Clean deposits	With brush and water
Leakage of tap	Change the washer/seal and tap	Replacement parts (tap, handles, washers, seals, etc.)
Loss of soap	Provide new soap	Soap stock
Water under the syphon/hand washing basin	Check plumbing and connections	Replacement parts for plumbing
<b>Water filter:</b> Water filters have been provided for clean drinking water, consisting of two recipients and at least one filter candle each.		
Blockage	Clean the filter	Water and soft brush (wash hands with soap previously)
Loose washer	Tight the washer	Wash hands with soap previously

Candle is damaged	Replace candle	Filter candle
<b>Septic tank:</b> The underground tank where toilet wastewater is collected is called septic tank.		
Leak, wall crack	Seal, maintenance of wall with cement	Cement
Wastewater from toilets does not drain to septic tank	Check if tanks is full – if full, it needs to be emptied (usually only every 5 years) by a specialist	Need to know location of septic tank, contact to specialists

## 6. O&M fund: Budget estimation, budget request and funding sources

An adequate budget for O&M is crucial to carry out effective O&M at the school and to keep the school in a good condition. The school need to set aside a budget exclusively for repair and maintenance.

Therefore, an O&M fund is established by the school management, which is managed by the O&M and WASH Committee.

Caretakers, parents, teachers, students and the community should be aware about the O&M fund in order to advocate for its importance on different levels.

### 6.1 O&M budget estimation

The O&M budget is estimated during the yearly O&M and WASH planning meeting (see chapter 4). Based on the yearly Workplan, which includes all O&M activities planned for the coming year, which results into the items and tools needed for maintenance, the budget is estimated. The budget for hiring additional human resources is included, as well as an approximate additional amount for emergency maintenance.

O&M budget estimation				
Items	Unit	Rate	Month	Total (NRPs)



<b>Total</b>				

## 6.2 O&M budget request and funding sources

The O&M and WASH Committee requests the budget from the ward and municipality and steers the fundraising activities for the O&M fund. The budget request to the government should be submitted every year, in early March as to coincide with the budget allocation procedures of the local government (Palika). The fundraising activities of the school are planned during the yearly O&M and WASH Committee planning meeting and are led by the O&M and WASH Committee (see Chapter 4.1 for the proposed agenda).

### Financial sources for O&M

- Municipality/Palika maintenance budget
- Donations are collected during cultural programmes
- Child club organises fundraising events
- Parents and community contribute labour and/or materials to the maintenance of the school
- Monthly or annual financial contributions from parents
- Private donations from individuals
- Local organisations such as women's group, forest user group, water user group and others can be requested to donate some funds for O&M of the school
- Other sources

The following table includes the funding sources identified for the O&M of **(Name of school)**

Income source in NPR				
Source	Unit	Rate	Month	Total (NPR)
<b>Total revenue</b>				
Difference of budget estimation and financial source				

## 7. Annual monitoring and review of O&M

(see chapter 5 in the O&M Manual for more information)

### Annual monitoring of O&M

provides:

- information on what an intervention is doing,
- guidance on future intervention activities;
- accountability to stakeholders.

Monitoring of O&M should be conducted once a year during the O&M and WASH Committee meeting using the annual monitoring checklist in Annex 7.

### Annual review of O&M

The annual review of O&M looks at

- how well it is performing and whether it is achieving its aims and objectives.

An annual O&M review meeting should take place to review O&M documents, activities and to adjust and improve the O&M system. The suggested Agenda for the meeting is under Chapter 5 in the O&M Manual.

### **List of Annexes of O&M Plan**

Annex 1	O&M activities in schools
Annex 2	Contact list of O&M responsible persons
Annex 3	<b>Workplans</b>
3.1	Yearly Workplan template
3.2	Monthly Workplan template
3.3	Weekly Workplan template
3.4	Daily Workplan template
Annex 4	<b>Data Collection</b>
4.1	School Master Plan, additional plans
4.2	Contact list Craftsman and Supplier
4.3	Types of tools for maintenance
Annex 5	Monthly O&M inspection checklist
Annex 6	Repair request form
Annex 7	Annual O&M monitoring checklist

**O&M activities in schools****School building**

S.N	Activities
<b>1</b>	<b>School building</b>
1.1	Open doors every morning before school and lock all outside doors as soon as daily activities are over
	<b>Compound and surrounding</b>
1.2	Ensure evacuation area is accessible at all times
1.3	Ensure safety for the students and teachers (i.e no dangerous tools accessible to children, no open fire where children are playing)
1.4	Clean and maintain the compound, ensure that school premises is free from scrap (i.e old furnitures)
1.5	Check entire area for vandalism and report to the O&M focal person
1.6	Clean all entrances and sidewalk
1.7	Clean and maintain the compound
1.8	Sweep staircase and the porch
1.9	Inspect school compound and surroundings for mud/dirt, blocked drainage, or other hazards, especially before and during monsoon
1.1	Maintain concrete benches (remove dirt, maintain if damaged)
1.12	Maintain any glass damage immediately for the safety of the students and protection of the building
	other
	<b>Classrooms, staff room, multipurpose rooms</b>
1.13	Fill the water (filter) buckets
1.14	Sweep the floors
1.15	Clean whiteboard, ensure that board marker and duster is available
1.16	Empty all trash cans (rinse or wash if needed) and collect waste in waste pit
1.16	Make sure rooms appear orderly, arrange chairs and tables correctly in each classroom (check inventory is complete)
1.17	Shut windows which are left open after school ends
1.18	Empty all trash cans (rinse or wash if needed) and put waste in respective area
1.19	Check if doors and windows are opening and closing well, if the handle, the lock and the hinge are intact, the frame is intact
1.20	Clean all equipment after use (e.g., mop, buckets)
1.21	Clean shelves, desks and computer screens and keyboards
1.22	Wet mop the floors (hang up brooms and wet mops. Do not stand them against wall)
1.23	Repaint walls, doors and window frames (inner and outer)
1.24	Maintain the floor
1.25	Clean the ceiling
1.26	Check all furnitures
1.27	Check roof and truss, check if false ceiling is intact, tighten screws and wire to fix the roof properly
1.28	Replace defective light bulbs and switches
1.29	Maintain grids and handrails in school building and compound
	other
<b>2</b>	<b>Water supply and sanitation system</b>
	<b>Toilet block, tap stands and RVT</b>
2.1	Ensure water is flowing at all taps and that taps close properly
2.2	Ensure taps are intact
2.3	Ensure pipes are intact (no leakages, water is flowing)
2.4	Check distribution line (no leakages)
2.5	Clean toilet pan and urinal with brush and harpic (detergent)
2.6	Clean hand washing station (surface, drain/wash out) with brush and remove deposits
2.7	Unblock toilet drain in case of blockage
2.8	Sweep floor and walls properly every week
2.9	Burn waste in waste pit
2.10	Burn waste in incinerator
2.11	Check if brushes, buckets and other necessary items are available (one bucket in each toilet cubicle) and replace damaged items
2.12	Check if holding bracket in disabled friendly toilet is intact (if applicable)
2.13	Repaint toilet block (inner and outer walls)
2.14	Check if walls are dry, stop water from entering walls
2.15	Clean doors properly
2.16	Ensure door locks are working
2.17	Check if air valve is clean and open in the toilet block
2.18	Replace defective light bulbs and switches
2.19	Check roof and truss, check if false ceiling is intact, tighten screws and wire to fix the roof properly
2.20	Maintain broken tiles
2.21	Check and clean the water source routinely
2.22	Check Reservoir tank (RVT) (no cracks)
	other
<b>3</b>	<b>O&amp;M administration</b>
3.1	Conduct monthly inspections
3.2	Implement awareness raising activity
3.3	Conduct O&M and WASH Committee Meeting
3.4	Monitor O&M budget
3.5	Request O&M funds
3.6	Check records (monitoring, repair requests, work logbook)
3.7	Manage materials: clean, arrange, restock material stock (tools, hygiene products)
3.8	Ensure keys are well organised
	other

Contact list: O&M responsible person

Position	Surname, Name	Phone	Address
Head teacher			
Resource person			
Maintenance in-charge			
<b>SMC</b>			
<b>Water user group</b>			
<b>O&amp;M and WASH Committee</b>			
<b>Child Club</b>			

## Yearly O&amp;M Workplan

Name:

New Year, Fiscal Year begins, admission time  
Dashain, Tihar

New Year, Fiscal Year begins, admission time  
Dashain, Tihar

## Monthly O&amp;M Workplan (weekdays Sunday-Friday)

Name: \_\_\_\_\_

[illegible][illegible]

## Annex 3.3- O&amp;M Plan

## Weekly O&amp;M Workplan

Date:

Name:

S.N	Activities	Su	Mo	Tu	We	Thu	Fri
1	<b>School building</b>						
1.1	Open doors every morning before school and lock all outside doors as soon as daily activities are over						
	<b>Compound and surrounding</b>						
1.2	Ensure evacuation area is accessible at all times						
1.3	Ensure safety for the students and teachers (i.e no dangerous tools accessible to children, no open fire where children are playing)						
1.4	Check entire area for vandalism and report to the headteacher						
1.5	Clean all entrances and sidewalk						
1.6	Clean and maintain the compound						
1.7	Sweep staircase and the porch						
1.8	Inspect school compound and surroundings for mud/dirt, blocked drainage, or other hazards, especially before and during monsoon						
	<b>Classrooms, staff room, multipurpose rooms</b>						
1.9	Fill the water (filter) buckets						
1.1	Sweep the floors						
1.11	Clean whiteboard, ensure that chalk/pens are available						
1.12	Empty all trash cans (rinse or wash if needed) and collect waste in waste pit						
1.13	Make sure rooms appear orderly, arrange chairs and tables correctly in each classroom (check inventory is complete)						
1.14	Shut windows which are left open after school ends						
1.15	Empty all trash cans (rinse or wash if needed) and put waste in respective area						
1.16	Check if doors and windows are opening and closing well, if the handle, the lock and the hinge are intact, the frame is intact						
1.16	Clean all equipment after use (e.g., mop, buckets)						
1.17	Clean shelves, desks and computer screens and keyboards						
1.18	Wet mop the floors (hang up brooms and wet mops. Do not stand them against wall)						
	other						
S.N	Activities	Su	Mo	Tu	We	Thu	Fri
	<b>Water supply and sanitation system</b>						
1	<b>Toilet block, tap stands and RVT</b>						
1.1	Ensure water is flowing at all taps and that taps close properly						
1.2	Ensure taps are intact						
1.3	Ensure pipes are intact (no leakages, water is flowing)						
1.4	Clean toilet pan and urinal with brush and harpic (detergent)						
1.5	Unblock toilet drain in case of blockage						
1.6	Sweep floor and walls properly every week						
1.7	Burn waste in waste pit						
1.8	Burn waste in incinerator						
1.9	Check if brushes, buckets and other necessary items are available (one bucket in each toilet cubicle) and replace damaged items						
1.10	Check if holding bracket in disabled- friendly toilet is intact (if applicable)						
1.11	Ensure door locks are working						
	other						
2	<b>O&amp;M administration</b>						
2.1	Implement awareness raising activity						
2.2	Conduct O&M and WASH Committee Meeting						
2.3	Monitor O&M budget						
2.4	Request O&M funds						
2.5	Check records (monitoring, repair requests, work logbook)						
2.6	Manage materials: clean, arrange, restock material stock (tools, hygiene products)						
2.7	Ensure keys are well organised						
	other						



## Annex 3.4- O&M Plan

### Daily O&M Workplan

Name:

Date:

S.N	Activities	Check
1	<b>School building</b>	
1.1	Open doors every morning before school and lock all outside doors as soon as daily activities are over	
	<b>Compound and surrounding</b>	
1.2	Ensure evacuation area is accessible at all times	
1.3	Ensure safety for the students and teachers (i.e no dangerous tools accessible to children, no open fire where children are playing)	
1.4	Check entire area for vandalism and report to the headteacher	
1.5	Clean all entrances and sidewalk	
1.6	Clean and maintain the compound	
1.7	Sweep staircase and the porch	
1.8	Inspect school compound and surroundings for mud/dirt, blocked drainage, or other hazards, especially before and during monsoon	
	<b>Classrooms, staff room, multipurpose rooms</b>	
1.9	Fill the water (filter) buckets	
1.1	Sweep the floors	
1.11	Clean whiteboard, ensure that chalk/pens are available	
1.12	Empty all trash cans (rinse or wash if needed) and collect waste in waste pit	
1.13	Make sure rooms appear orderly, arrange chairs and tables correctly in each classroom (check inventory is complete)	
1.14	Shut windows which are left open after school ends	
1.15	Empty all trash cans (rinse or wash if needed) and put waste in respective area	
1.16	Check if doors and windows are opening and closing well, if the handle, the lock and the hinge are intact, the frame is intact	
1.16	Clean all equipment after use (e.g., mop, buckets)	
1.17	Clean shelves, desks and computer screens and keyboards	
1.18	Wet mop the floors (hang up brooms and wet mops. Do not stand them against wall)	
2	<b>Water supply and sanitation system</b>	
	<b>Toilet block, tap stands and RVT</b>	
2.1	Ensure water is flowing at all taps and that taps close properly	
2.2	Ensure taps are intact	
2.3	Ensure pipes are intact (no leakages, water is flowing)	
2.4	Clean toilet pan and urinal with brush and harpic (detergent)	
2.5	Unblock toilet drain in case of blockage	
2.6	Sweep floor and walls properly every week	
2.7	Burn waste in waste pit	
2.8	Burn waste in incinerator	
2.9	Check if brushes, buckets and other necessary items are available (one bucket in each toilet cubicle) and replace damaged items	
2.10	Check if holding bracket in disabled-friendly toilet is intact (if applicable)	
2.11	Ensure door locks are working	
	others	
3	<b>O&amp;M administration</b>	
3.1	Implement awareness raising activity	
3.2	Conduct O&M and WASH Committee Meeting	
3.3	Monitor O&M budget	
3.4	Request O&M funds	
3.5	Check records (monitoring, repair requests, work logbook)	
3.6	Manage materials: clean, arrange, restock material stock (tools, hygiene products)	
3.7	Ensure keys are well organised	

Contact list: Craftsman and Supplier

## Types of tools for maintenance

Brushes for sweeping, dusting, scrubbing, painting, removing rust.



Buckets for carrying, mixing paints



Chisels for shaping wood, to break concrete, plaster.



Drills to make holes in wood, masonry and even metal.



Files to smoothen sharp edges, sharpening tools.



Floats (Chakka, gurmala) to level and smoothen plaster



#### Annex 4.3

Hacksaw and Hand saw for cutting metal and plastic



Handsaw for cutting wood



Hammers and claw hammers to break and drive in or remove out nails.



Ladder to climb up.



Measuring tapes for measurement.



Nails and screws of various sizes and types for various purposes.



Various size nuts and bolts to fix things together.



#### Annex 4.3

Plier for cutting and pilling wires.



Plier to screw nuts



Plunger to unblock sink, floor pans.



Screw drivers and screws to replace or tighten loose screws and fix things together.



Shovel and picks for digging and mixing cement mortar.



#### Annex 4.3

Spanners to tighten or loosen nuts and bolts.



Sprit level or water pipe level.



level



Trowel (karandi) for masonry work.



Wheel barrow for transporting.



#### Annex 4.3

Safety precautions like goggles, Helmets etc. for safety of worker.



#### **Cleaning products**

Floor cleaning cloth



Broom and dustpan



Broom



## Annex 4.3

duster



Buckets for cleaning



Dust bin



Cleaning cloth



Cleaning gloves





## Monthly O&M Inspection Checklist

Name of the school:

..... Municipality / Rural Municipality, Ward no. ....District.....

Date of inspection:

### 1.School Building

S.N.	Major infrastructures	Condition (Just tick if it is Good)	Problem / things to improve	Brief description of the problem	Correction works/ Planning for next month
1.1	Evacuation area				
1.2	Condition of roof				
1.3	Condition of truss				
1.4	Condition of false ceiling				
1.5	Window (Frame, shutter, grid & glass)				
1.6	Door (Frame, shutter, door stopper)				
1.7	Wall				
1.8	Plaster in wall and ceiling				
1.9	Floors				
1.10	Concrete bench (If applicable)				

Annex 5

S.N.	Major infrastructures	Condition (Just tick if it is Good)	Problem / things to improve	Brief description of the problem	Correction works/ Planning for next month
1.11	Ventilation block				
1.12	Stair case, railing and porch				
1.13	Switches, lights and wires				
1.14	Furniture (Chair, table, side table, white board)				
1.15	Playground				
1.16	Entrances and sidewalks				
1.17	Fences and door locks				
1.18	Trash bins				
1.19	Waste burning pit				
1.20	Equipment (tools, stock, mop)				
1.21	Class rooms overall (routine followed)				
1.22	Equipment				

## 2. School Water Supply and sanitation

S.N.	Major infrastructures	Condition/ Good	Problem / things to improve	Brief description of the problem	Correction works/ Planning for next month
2.1	Water source				
2.2	Drinking water taps				
2.3	Drainage system				
2.4	Pipes				
2.5	Wash out				
2.6	Air valve				
2.7	Crossing				
2.8	GI crossing				
2.9	Transmission line				
2.10	Reserve Ware Tank (RVT)				
2.11	Distribution line				
2.12	School tap & public taps (if provided to public)				
2.13	Drinking water filter				
2.14	Toilet (Pan, Urinal, Incinerator)				
2.15	Tiles and walls in the toilet				
2.16	Toilet block roof and ceiling				

Annex 5

S.N.	Major infrastructures	Condition (Just tick if it is Good)	Problem / things to improve	Brief description of the problem	Correction works/ Planning for next month
2.17	Hand washing point in toilet				
2.18	Hand washing point outside of toilet				
2.19	Septic Tank				
2.20	Soak Pit				
2.21	Equipment (brush, bucket in toilet)				
2.22	Blue School (if applicable)				
<b>O&amp;M administration</b>					
3.1	Recording: All records organised				
3.2	O&M fund and expenditure				
3.3	Keys, storage and tools organised				
3.3	Awareness raising on O&M conducted				

In order to **monitor the O&M Fund** the amount is recorded during the monthly monitoring.

Amount in O&M Fund at the date of monitoring: \_\_\_\_\_ (NRS)

The O&M and WASH Committee together with the School Management Committee should plan the O&M activities based on the need of the school using the School O&M plan. Every month, the maintenance in-charge with the support of the O&M focal teacher (if applicable), in participation of the child club representatives, PTA members conduct the monthly O&M monitoring. Planning of O&M activities for the upcoming month need to be

## Annex 5

conducted during the O&M and WASH Committee meetings. The monitoring checklist is used as a basis for the planning of O&M activities. The records of the monitoring checklists are kept in the respective folder, accessible to the O&M responsible persons.

Caritas Switzerland, Helvetas Nepal and its partner NGOs have been trying to develop the O&M system and institutionalize it in your school. However, this is the sole responsibility of the school to make it sustainable, clean and beautiful.

.....	.....	.....	.....
Name, Surname	Name, Surname	Name, Surname	Name, Surname
Maintenance in-charge	O&M focal teacher(s)	Representative of Child Club	Head Teacher
Additional comments/ feedback from SM:			
			.....
			Name, Surname, Signature

## O&amp;M repair request form

Maintenance in-charge	Date
Items to be repaired	
Location	
Description of the damage	
Proposed repair	
Comments maintenance in-charge	
Material/human resources needed for maintenance	
<b>Approx. cost</b>	
Comments by the head teacher	
Description of the work executed	
Date:	
Cost:	
Pay date:	
Maintenance in-charge:	Head teacher:
Date:	Date:

## Annual O&amp;M Monitoring

Activities	Applies fully	Applies most of the time	Applies	Applies some time	Does not apply
An O&M system is set-up (management, human resources, O&M fund, O&M Plan endorsed and actively used)					
A care taker is assigned					
A O&M focal teacher is assigned					
<b>O&amp;M implementation</b>					
The code of conduct on O&M is developed					
A yearly Workplan is developed and followed					
A daily or a weekly Workplan is developed and implemented					
A monthly Workplan is developed and implemented					
O&M activities are carried out based on the Workplans					
Conditions of facilities and equipment are assessed monthly (inspection)					
The yearly monitoring is carried out					
The care taker solves maintenance needs fast					
The school is kept clean and tidy					
There is no scrap lying around on the school premises					
The toilet block is functional and clean					
The water supply system is functional					

## Annex 7

Activities	Applies fully	Applies most of the time	Applies	Applies some time	Does not apply
Waste management is functional					
Soap for handwashing is available at the handwashing station					
Chemicals are disposed safely					
The O&M and WASH Committee Meetings take place bi-monthly					
<b>Records</b>					
A protocol of the O&M and WASH Committee Meetings is accessible					
A record system exists and contains					
<ul style="list-style-type: none"> <li>• Workplans</li> </ul>					
<ul style="list-style-type: none"> <li>• Repair request forms</li> </ul>					
<ul style="list-style-type: none"> <li>• Monthly inspection checklists</li> </ul>					
<ul style="list-style-type: none"> <li>• Yearly monitoring checklist</li> </ul>					
<ul style="list-style-type: none"> <li>• Bi-yearly evaluation report</li> </ul>					
The number of forms, checklists for inspections, requests is adequate					
The record management system is maintained and records are easy to access					
The code of conduct on O&M is updated annually					
The O&M Plan is updated regularly if changes occur (at least annually)					



Activities	Applies fully	Applies most of the time	Applies	Applies some time	Does not apply
<b>Finances</b>					
The O&M Budget is monitored monthly during inspections					
Expenditures for O&M are evaluated annually					
All O&M stakeholders are aware of the O&M Fund and the amount					
Maintenance expenditure are accounted and booked properly for easy reference					
Accounting is managed transparently by the O&M and WASH Committee (yearly financial audit)					
Budget release by the O&M and WASH Committee is effective and timely (not more than 3 working days)					
Budget request is prepared and submitted to the local government authority annually					
Fundraising activities are carried out as planned in the yearly O&M and WASH Committee planning meeting					
The annual maintenance budget is adequate to implement the maintenance Workplans					
<b>Roles and Responsibilities</b>					
The O&M and WASH Committee fulfills its responsibilities					
The care taker fulfills his/her responsibilities					
The other O&M stakeholder fulfill their responsibilities					

## Annex 7

Activities	Applies fully	Applies most of the time	Applies	Applies some time	Does not apply
<b>Awareness raising on O&amp;M</b>					
Awareness raising activities on O&M among students are conducted					
Students and teachers are actively engaged in O&M					
A class room routine is followed by every class					
The code of conduct on O&M is known by all students, teachers, care taker and other staff					

General comments:

Monitoring done by:

Name, Surname

Signature

Date: