

**TRAINING IMPLEMENTATION GUIDELINE (Draft)**

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Department of Water Supply and Sewerage Management

National Water Supply and Sanitation Training Center

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# Introduction

This Training Implementation Guideline (hereinafter referred to as “Guideline”) describes the administrative procedures of trainings for Water Users and Sanitation Committees (hereinafter referred to as “WUSC”) in semi-urban towns by the Department of Water Supply and Sewerage Management (hereinafter referred to as “DWSSM”), and National Water Supply and Sanitation Training Center (hereinafter referred to as “NWSSTC”) under DWSSM. Furthermore, it is expected that the Guideline shall be utilized not only to conduct the trainings for improvement of WUSC’s capacity but also to enhance the interaction of trainings conducted by NWSSTC.

The following points shall be considered to plan/conduct trainings for WUSCs in semi-urban towns.

1. In order to learn basic knowledge and skills for sound management of water supply service through proper operation and maintenance (hereinafter referred to as “O&M”), lectures as “Basic Training” will be conducted.
2. Lectures and trainings will be planned/conducted for WUSCs in semi-urban towns (not for large and small scale WUSCs).
3. Training contents are focused on management and O&M of water supply facilities in WUSCs.
4. The acquired knowledge and skills in the Basic Training will be applied by the WUSCs through the “On-site Training”.
5. The goals of the On-site Training are 1) to understand the current condition of their water supply facilities, 2) to recover/improve its function, 3) to analyze the current management situation and 4) to make improvement plan by the WUSCs.
6. Opportunity to share information and exchange opinions among the WUSCs will be provided in “Refresher Training/Observation and Interaction Workshop”.
7. Interaction among the participated WUSCs in the Refresher Training will be ensured through the above the trainings.

# Outline of Trainings Implemented by NWSSTC

This Guideline covers the following four trainings. The outline of these trainings is shown in the following table. These trainings shall be conducted by DWSSM/ NWSSTC/ FWSSMPs in accordance with the annual training plan prepared by NWSSTC.

1. **Training of Trainers (ToT)**
2. **Basic Training**
3. **On-site Training**
4. **Refresher Training / Observation and Interaction Workshop**

| **Item** | **Contents** | |
| --- | --- | --- |
| Training of Trainers  ToT | Objective | * To enhance teaching skills and knowledge necessary for the Basic Training. * To provide updates on syllabus and training materials. * To share evaluation results and feedbacks from the previous training activities. |
| Trainer | Trainers who experienced both ToT and Basic Training |
| Trainee | Trainer candidates selected by DWSSM/NWSSTC |
| Facilitator | NWSSTC |
| Training Period | 1 to 2 days (standard period) |
| Outline | Key points of “Standard Operating Procedure (SOP)”**\*1** and “Management” as well as updates on syllabus and training materials are provided by lecture and exercise. Evaluation results and feedbacks from the previous training activities are shared. |
| Goal | Teaching skills and necessary knowledge for the Basic Training are acquired.  Trainers for the Basic Training are developed. |
| Supplemental  ToT | Objective | * To enhance teaching skills and knowledge necessary for the On-site Training. * To provide updates on syllabus and training materials. * To share evaluation results and feedbacks from the previous training activities. |
| Trainer | Engineers of FWSSMP (Federal Water Supply and Sewerage Management Project) who experienced both ToT and Basic Training |
| Trainee | FWSSMP Engineers nominated by DWSSM/NWSSTC  (Participants: Engineer/staff of MoPID (Ministry of Physical Infrastructure Development), WSSDO (Water Supply and Sanitation Division Office) and Local Government) |
| Facilitator | NWSSTC |
| Training Period | One day (standard period) |
| Outline | Key points to conduct the On-site Training as well as updates on syllabus and training materials are provided by lecture and exercise. Evaluation results and feedbacks from the previous training activities are shared. |
| Goal | Teaching skills and necessary knowledge for the On-site Training are acquired. |
| Basic Training | Objective | * To learn/understand “SOP” and “Management” for independent management of water supply facilities to provide safe drinking water to consumers stably and efficiently. * To analyze the current management situation and make improvement plan from the viewpoint of stability, efficiency, safety and independence. |
| Trainer | Trainers nominated by DWSSM/NWSSTC |
| Trainee | Manager (1)  and/or incase that manager position is vacant, key board member (1) and key technician (1) of the nominated WUSCs |
| Sponsor | NWSSTC |
| Training Period | 4 days (standard period) |
| Outline | Provide practical skills and knowledge for water supply management and O&M of facilities.   * The management component will introduce/explain checklist for qualitative analysis, key performance indicators (KPIs) and benchmarking for quantitative analysis in order to prepare business plan. * The O&M component will explain the SOPs of water supply facility, water quality management, distribution network, and water meters management in order to conduct preventive maintenance. |
| Goal | WUSCs in semi-urban towns will be able to provide safe and sufficient water in sustainable, efficient, and accountable ways. |
| On-site Training | Objective | To practically learn how to apply the knowledge and skills acquired from the Basic Training. |
| Trainer | Trainer(s) nominated by DWSSM/NWSSTC |
| Trainee | Key board member, manager and key technician of the nominated WUSCs |
| Facilitator | NWSSTC/ FWSSMP  (Participants: Engineer/staff of MoPID, WSSDO and Local Government) |
| Training Period | 1 day for 1 WUSC (standard period) |
| Outline | Check/confirm whether the actual activities of WUSCs are carried out in accordance with the SOP and management procedure which provided by the Basic Training. Necessary instruction, suggestion and advise will be provided by the trainer(s), and it will be shared among the WUSCs. |
| Goal | WUSCs in semi-urban towns apply the knowledges and skills acquired from the Basic Training continuously. |
| Refresher Training/  Observation and Interaction Workshop | Objective | * To introduce new subjects/topics which are not covered by Basic Training. * To obtain feedback on Basic Training and On-site Training. * To share good practices & key issues of WUSCs in semi-urban towns. * To learn proper O&M and management of water supply with model WUSC’s\*2 introduction and visiting the facilities. * To introduce policy and technology related to water sector * To facilitate interaction among WUSCs in semi-urban towns and support organizations. |
| Trainer | Chief and/or engineer of NWSSTC, chairperson of the model WUSC, guest speaker |
| Trainee / Participant | Board members and manager of WUSCs near the model WUSC region, engineers/staffs of FWSSMP, MoPID, WSSDO, Local Government etc. |
| Facilitator | NWSSTC and the model WUSC |
| Training Period | 1 to 2 days (standard period) |
| Outline | NWSSTC shall select a model WUSC to conduct this training and to introduce the O&M and management as good practice to participated WUSCs.  This training provides an opportunity for WUSCs in semi-urban towns to update and share their experience and good practices of O&M and management, and facilitate interaction among WUSCs, DWSSM, NWSSTC and other related organizations to incubate innovate ideas for improvement of water supply sector. |
| Goal | The above objectives will be achieved. |

\*1) “SOP” has developed for the following purposes:

* To introduce the standard O&M procedure of water supply facility for WUSCs in semi-urban towns.
* To provide safe and effective O&M procedure for WUSC staffs.
* To ensure the quality of O&M activities performed by different staffs.

\*2) “Model WUSC” is considered to implement the best practices of community-based water supply management in semi-urban towns. DWSSM/NWSSTC are primarily responsible for selection and coordination with the model WUSC.

Basically, the above mentioned trainings are carried out in order to provide not only necessary knowledge and skill for sound management of water supply through proper O&M, but also required instruments/essential equipment to WUSCs in semi-urban towns. Furthermore, it is desirable that the WUSCs will utilize the acquired knowledge and skills from these trainings and publicize safe and reliable water supply to stakeholders including consumers.

The relationship of these four trainings is shown in the following figure.

Implementation

**On-site Training**

**Refresher Training /**

**Observation & Interaction Workshop**

**ToT**

**Basic Training**

Evaluation/Feedback

**Supplemental**

**ToT**

(If necessary)

# Procedure to Conduct Each Training

## Common Procedure

### Training Needs Assessment

#### NWSSTC shall conduct a training needs assessment so as to optimize the training plan (hereinafter referred to as “Annual Plan”) and syllabus of the training for WUSCs in the semi-urban towns.

### Formulation of Annual Plan and Securing Budget

#### NWSSTC shall prepare the Annual Plan of the next fiscal year based on the results of training needs assessment and evaluation/feedback from the completed trainings.

#### The Annual Plan shall include the following information:

* Name of training course
* Objectives
* Venue
* Target trainees (board member, manager, operator, plumber, meter reader, accountant etc.)
* Approximate number of trainees/participants
* Training period
* Budget/ Estimated cost

#### NWSSTC shall request the necessary budget based on the Annual Plan to DWSSM.

#### DWSSM shall secure the sufficient financial allocation to implement the Annual Plan in this fiscal year.

### Formulation of Syllabus

#### NWSSTC shall prepare the Syllabus of each training as specified in the approved Annual Plan.

#### The Syllabus shall include the contents as shown in **Appendix-1**.

#### The Syllabus shall be finalized at least two weeks before implementation of each training.

### Assignment of Trainers/Guest Speakers

#### NWSSTC shall prepare the list of trainer candidates for each training based on the Syllabus.

#### DWSSM shall select the eligible trainer candidates in consideration of their availability, level of knowledge and experience, attitude and disciplines.

#### If any guest speaker is required to implement the training, DWSSM/NWSSTC shall select the speakers among those who have appropriate level of knowledge and experience required to conduct the training.

#### The list of trainer candidates shall be finalized at least two weeks before implementation of each training.

### Development of Training Materials

#### NWSSTC and the nominated trainers shall prepare the training materials.

#### NWSSTC and the nominated trainers shall review the standard training materials and update them if necessary.

#### If any new training material is required for the planned training, such training materials shall be prepared by the trainers/speakers who will conduct the training. NWSSTC shall support them.

#### NWSSTC shall review the prepared training materials and finalize the materials at least two weeks before implementation of each training.

### Selection of Trainees

#### DWSSM/NWSSTC shall finalize the selection of the trainees of each training based on the Annual Plan and the Syllabus at least two weeks before implementation of each training.

### Preparation before Training

#### NWSSTC shall ensure the venue, accommodation and transportation etc. according to the Syllabus at least two weeks before implementation of each training.

#### NWSSTC shall make a training schedule and send notification letters including necessary information (schedule, venue etc.) to all participants at least one week before implementation of each training.

#### NWSSTC and/or the model WUSC shall prepare the following items before implementation of each training.

* Handout of training materials
* Stationery
* Necessary instruments/materials for the training
* Arrangement of the training place to accommodate participants
* Preparation of lunch and light meals

### Implementation

#### NWSSTC shall comprehensively manage and proceed the trainings according to the Syllabus and schedule.

#### The nominated trainer shall conduct each part of training.

#### NWSSTC shall support the training activities if necessary.

#### NWSSTC shall prepare a training record by using the specified format and taking photo and/or video during the training.

#### NWSSTC shall issue the certificates to the fully participated trainees at the closing session.

#### NWSSTC shall allow necessary expenses to the participants in accordance with NWSSTC’s norm.

### Evaluation

#### NWSSTC shall evaluate the training including the trainer’s performance by using the specified format (questionnaire sheet is shown in **Appendix-2**).

### Feedback

#### NWSSTC shall obtain feedback from the trainees immediately after the training.

### Reporting

#### The trainer shall submit a brief report to NWSSTC immediately after the training by using the specified format as shown in **Appendix-2**.

#### NWSSTC shall compile a report including the evaluation results, the analysis of feedback from trainees and the report from the trainers. The report shall be submitted to DWSSM within one month after implementation of the training.

## Training of Trainers (ToT)

#### Training programs shall be updated/revised based on the evaluation and feedback of the trainings implemented in the previous fiscal year.

#### NWSSTC shall select candidate trainers from the related organizations and make a plan of ToT.

#### NWSSTC shall conduct ToT to develop and recruit trainers.

## Basic Training

#### Training programs shall be updated/revised based on the evaluation and feedback of the trainings implemented in the previous fiscal year. However, under the COVID-19, the training shall be online.

#### Basically, Basic Training shall be conducted at NWSSTC in Nagarkot.

#### Manager of the nominated WUSCs shall be invited to Basic Training. However, in case that manager is absence or not designated, one board member and one key technician shall be invited.

#### The maximum number of trainees shall be within forty considering the capacity of classroom of NWSSTC in Nagarkot and to be for thoughtful and scrupulous instruction.

#### Each lecture shall be conducted by one trainer and one assistant. In case of practical training, one trainer shall manage within ten trainees, and backup trainers can assist trainees in the practical training session.

## On-site Training

#### Training programs shall be updated/revised based on the evaluation and feedback of the trainings conducted in the previous fiscal year.

#### Basically, the On-site Training shall be conducted at WUSC sites.

#### The trainer(s), key board member, manager and key technician of WUSCs shall check/confirm with management check sheet (refer to **Appendix-3**) whether actual activities of WUSC have been carried out in accordance with the SOPs and management procedure. The manager and/or key technician of WUSC shall explain actual O&M and management activity for the trainer(s). Necessary instruction, suggestion and advise will be provided by the trainer(s) according to the results, and it will be shared with the trainees.

## Refresher Training / Observation and Interaction Workshop

#### Training programs shall be updated/revised based on the evaluation and feedback of the trainings implemented in the previous fiscal year.

#### Refresher Training / Observation and Interaction Workshop shall be conducted at model WUSCs as shown in the Annual Plan.

#### Basically, a model WUSC shall be nominated for the training/workshop by NWSSTC, and the WUSC shall hold the training/workshop with NWSSTC and arrange the study tour such as visit of water treatment plant, intake sites, water distribution facilities and so on.

#### Participants shall be the suburbs of the model WUSC.

## Basic Training (Online Training)

### WUSC with PC & Internet

#### Confirming WUSCs whether they own a PV and can connect to an internet to attend the online training. In case that WUSCs are NOT in environment where they can take online lecture, see section 3.6.2.

#### A trainer operates PowerPoint and video materials.

#### In order to facilitate lectures, question and answers from participants will be held together after lecture.

#### When some of WUSC participants are unfamiliar with Zoom (online application) operation, how to operate Zoom (microphone/ camera/ on & off) is explained before a lecture starts to prevent the turning on and making noise during the lecture.

#### Because of online training, practical training such as clamp meter, insulation resistance meter and water quality test kit is not possible. Follow them in the On-site training.

### WUSC without PC & Internet

#### WUSC which does not have devices such as PC and internet connection needs to visit near conference room. Conference rooms shall be prepared by DWSSM/NWSSTC

#### Projector to share lectures shall be setup by room owners and/or FWSSMPs.

#### Trainers (DWSSM, NWSSTC and FWSSMPs) do not need to move to sites. Reduce the infection risks to COVID-19, and save the time and money.

#### To confirm WUSCs locations in a map

#### To find proper venue to conduct the training (convenient location to gather WUSCs)

#### Alternative venues: WUSC, FWSSMP, WSSDO, public hall, hotel, etc.

#### To arrange required equipment such as PC, projector and speaker

**Appendix-1 Standard Syllabus**

1. **Standard Syllabus of ToT**

#### Objectives

* To enhance teaching skills and knowledge necessary for Basic Training and On-site Training.
* To share evaluation results and feedbacks from the previous training activities.
* To provide updates on syllabus and training materials.

#### Method

Lecture and exercise

#### Venue

NWSSTC in Nagarkot and/or DWSSM conference room

#### Training Period

1 day or 2 days (depending on the volume of updates and number of participants)

#### Trainer

Trainers who experienced both ToT and Basic Training

#### Trainee

Trainer candidates selected by DWSSM/NWSSTC

#### Modules



1. **Standard Syllabus of Basic Training**

#### Objectives

* To learn/understand “Standard Operating Procedure (SOP)” and “Management” for independent management of water supply facilities to provide safe drinking water to consumers stably and efficiently.
* To analyze the current management situation and make improvement plan from the point of view of stability, efficiency, safety and independence.

#### Method

Lecture, exercise, groupwork and discussion.

#### Venue

NWSSTC in Nagarkot

#### Training Period

approximately 4 days

#### Trainer

Trainers nominated by DWSSM/NWSSTC

#### Trainee

Manager or key board member and key technician of the nominated WUSCs

#### Modules







1. **Standard Syllabus of On-site Training**

#### Objectives

To practically learn how to apply the knowledge acquired from the Basic Training

#### Method

Observation, inspection and providing necessary instruction/suggestion/advice

#### Venue

WUSC’s site

#### Training Period

1 day (according to the site situation)

#### Trainer

Trainer(s) nominated by DWSSM/NWSSTC

#### Trainee

Board member, Manager and key technician of the nominated WUSCs

#### Modules

##### Module 1: Water Treatment Plant (Water Supply Facility)

###### Standard Time: half to one day (according to the site situation)

###### Contents:

* Inspection of O&M procedure/activity for main facility/equipment
* Inspection of O&M records
* Inspection of inventory management for spare parts
* Providing necessary instruction, suggestion and advice

##### Module 2: Water Supply Management

###### Standard Time: half day

###### Contents:

* Collection of KPIs data
* Conduct of interview survey to board members and/or manager with the management check sheet
* Confirmation of the schematic flow diagrams (water supply system drawings)
* Detection of required essential equipment such as flow meter, chlorination unit, valve and so on
* Confirmation of essential equipment installations
* Inspection of water quality test record
* Inspection of distribution network maps
* Inspection of annual report including financial statements and internal audit
* Inspection of customer complaints register
* Providing necessary instruction, suggestion and advice

#### Local Government engineers shall be invited to observe WUSC.

1. **Standard Syllabus of Refresher Training / Observation and Interaction Workshop**

#### Objectives

* To introduce new subjects/topics which are not covered by the Basic Training
* To obtain feedback on the Basic Training and On-site Training
* To share good practices & key issues of among participated WUSCs in semi-urban towns
* To introduce policy and technology related to water sector
* To facilitate interaction among participated WUSCs in semi-urban towns and support organizations

#### Method

Forum style

#### Venue

Model WUSC meeting room or suitable places (hotel, hall etc.)

#### Training Period

Basically 2 days (according to the number of training modules)

#### Trainer

Chief and/or engineer of NWSSTC, chairperson /manager of the model WUSC, guest speaker

#### Trainee / Participant

Board members and/or Manager of the invited WUSCs, engineers of FWSSMP, MoPID, WSSDO and Local Government etc.

#### Modules

The modules shall be designed and developed according to the results of needs assessment, the evaluation and feedback of the trainings implemented in the previous fiscal year. The following examples shall be modified accordingly.

##### Example Module 1: Water Sector Policy

###### Objectives: To familiarize with recent movement of water sector policy and possible impacts on WUSC in semi-urban towns

###### Standard Time: within 60 minutes

###### Trainer: 1 guest speaker

##### Example Module 2: WASMIP-II Achievements and Lessons Learnt

###### Objectives: To share the achievements and best practices of WUSC in semi-urban towns which are benefited from WASMIP-II

###### Standard Time: within 60 minutes

###### Trainer: Chief of NWSSTC

**Appendix-2 Training Evaluation Questionnaires**

1. **Evaluation Questionnaire for WUSCs**





1. **Trainer Comment**



**Appendix-3 Management Check Sheet for the On-site Training**









