# Appendix 2.56

# **Memorandums of Discussion**

# Appendix 2.56.1

# Memorandums of Discussion With DWSSM

# <u>Re: Discussion on the trip to Chautara and Besishahar WUSCs, Sindhupalchowk, Lamjung and</u> Pokhara WSSDO, Western RMSO and comments from DWSS.

Date: 2016/7/15 Time: 11:00 – 12:00 Location: DWSS, Kathmandu

## Attendants:

- 1. Mr. Arun Simkhada, Planning Division, DWSS
- 2. Mr. Kamal Adhikari, Sociologist, DWSS
- 3. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 4. Mr. Mikita Amano, Team Member, WASMIP Team
- 5. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 6. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 7. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- > The main problems in Chautara and Besishahar WUSCs are listed below:
  - Lack of effective and periodic chlorination. The chlorination is normally done when e coli is detected in intake or service taps.
  - No flow meters in intake, WTP and reservoirs which leads to absence of data on collected and distributed water.
  - No intake valves to stop flow in case of contamination in source water.
- The planning division chief Mr. Arun Simkhada mentions that the chlorination method in chautara is temporary one as the permanent facility is destroyed in earthquake. He further adds that the destroyed unit will be re-established.
- According to Mr. Arun Simkhada the flow meters are not installed in old facilities. But, the meters are installed in new and latest facilities.
- > Mr. Arun Simkhada promises to address all the problems listed above from his side.
- The DWSS has the pre-construction and post construction training manuals. But, the manuals are needed to be revised.
- According to Mr. Kamal Adhikari, the WSSDO conference in DWSS is to be held 3 weeks later. The final date is still to be finalized.
- There is also going to be a workshop on disaster risk reduction organized by UNICEF. The meeting is going to be held in July 24 to 29. Mr. Kamal Adhikari will consult with Mr. Rajeeb Ghimire and inform the WASMIP team if they can join the workshop or not. He will also search information on the agenda of the workshop.
- The sanitation meeting is not fixed yet. The last meeting was organized by Ministry one year ago.

# Re: Discussion on the revision of SOP, training programs and comments from DWSS.

Date: 2016/8/16 Time: 11:00 – 12:00 Location: DWSS, Kathmandu

## Attendants:

- 1. Mr. Rajeeb Ghimire, Chief, NWSSTC
- 2. Mr. Arun Simkhada, Planning Division, DWSS
- 3. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 4. Mr. Yusaku Namujiri, Team Member, WASMIP Team
- 5. Mr. Akira Hasebe, Team Member, WASMIP Team
- 6. Mr. Kozo Hayashishita, Team Member, WASMIP Team
- 7. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 8. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- Mr. Rajeeb Ghimire has prepared Sector Development Plan (SDP) and has forwarded to the ministry for further process. This plan is a 15 years' plan prepared under ministry and funded by UNICEF.
- Mr. Rajeeb Ghimire suggested the revised SOP to be simple and easy to understand. He also added that the SOP and manuals should be separate.
- Mr. Rajeeb Ghimire also advises to include management plans like customer satisfaction and billing.
- Mr. Arun Simkhada advises to follow the cascade model for the training purpose. He also suggests to include mechanical and electrical trainings.
- Mr Rajeeb Ghimire explains that NWSSTC has a very high demand on electro mechanical trainings.
- Mr. Rajeeb Ghimire suggests WUSC lab be also included other than NWSSTC and DWSS labs for training purpose.
- The District engineers are transferred to other districts, regional office and DWSS office. They are not transferred to other departments such as the irrigation department.
- Most common problems observed in WUSCs are:
  - o No flowmeter
  - o No O&M records
  - No manuals and specifications of mechanical and electrical equipment.
  - Lack of manpower
  - Maximum setting of safety relays in electrical panels
  - o Inadequate chlorine dosing and/or No equipment
- So to address these problems following things may be included while revising SOP:
  - Making SOP simple and easy to understand
  - Visualization of SOP in facilities
  - o Creating a sample table to input basic data on mechanical and electrical specifications
  - Daily O&M records table
  - Basic hand tools
  - o Standard O&M methods
  - o Standard setting of electrical panel methods
  - Standard pump installation methods
  - o Installation of Valves, flowmeter, pressure gauge in pumping stations
  - Appropriate chlorine dosing methodology

# Re: PCM WITH KAMAL ADHIKARI

Date: 2016/8/26 Time: 10:00 – 12:00 Location: DWSS Office, Paani Pokhari

## Attendants:

- 1. Mr. Kamal Adhikari, Acting NWSSTC chief, Sociologist, DWSS
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Kazuhiko Nakamura, Vice Team Leader, WASMIP Team
- 4. Mr. Kozo Hyashisita, member, WASMIP Team
- 5. Mr. Deepak Subedi, Engineer, WASMIP Team
- 6. Mr. Vivek shrestha, Civil Engineer, WASMIP Team
- 7. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

- Mr. Kamal suggests to develop a thin and compact WASMIP model with illustrations and diagrams so that the reader will find the content easier to understand.
- Mr. Kamal also points out lack of short and specific SOP in NWSSTC.
- Mr. Kamal verifies that NWSSTC can conduct 2-3 days training regarding WASMIP under DWSS budget.
- Mr. Kamal further suggests to specify a day for WASMIP introduction and remaining days for other issues.

# Re: Discussion on NWSSTC duties and rehabilitation projects of DWSS

Date: 2016/8/26 Time: 11:00 – 12:30 Location: DWSS Office, Paani Pokhari

## Attendants:

- 1. Mr. Arun Simkhada, Planning Division, DWSS
- 2. Ms. Jyoti Tamang, Engineer, DWSS
- 3. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 4. Mr. Kazuhiko Nakamura, Vice Team Leader, WASMIP Team
- 5. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 6. Mr. Takashi Kondo, JICA representative
- 7. Mr. Deepak Subedi, Engineer, WASMIP Team
- 8. Mr. Vivek shrestha, Civil Engineer, WASMIP Team
- 9. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

- Director General (D.G) and Deputy Director General (D.D.G) are involved in selecting the type of training for future.
- > The DWSS actively collaborates with NWSSTC to revise the training manuals.
- The Ministry of Finance allocates the budget for the NWSSTC based on the ministries research and request from DWSS.
- > This year budget for implementation of WASMIP-II is also allocated.
- Based on the available budget, request from District office and DG & DDG's recommendation training programs are decided.
- > This year most of the budget is allocated for rehabilitation works.
- More than 1000 WUSCs are to be selected for rehabilitation works.
- To select the WUSCs for rehabilitation, DWSS representative visits WSSDOs and confirms the situation of WUSCs.
- The small rehabilitation works like repairing and replacing service pipes, meter replacing, cleaning and painting facilities are conducted by the WUSCs themselves.
- The larger rehabilitation works like re-construction of facilities are done by the WSSDO and DWSS.
- The small and large rehabilitation works are carried out according to the available budget and manpower required to complete the work.
- The DWSS selects WUSCs for co-financing projects. The WUSCs are interested in the co-financing projects send the request to their respective WSSDO. The WSSDO then conducts the survey on the financial and technical situation of WUSCs and identify the feasibility of the co-financing project. After the survey, the WSSDO makes short lists of WUSCs and send the names to DWSS. The DWSS then selects WUSCs on the basis of the survey reports and their own investigation.

# Re: 1<sup>st</sup> Joint Project Coordination Meeting (JPCM) for WASMIP-2

Date: 2016/09/18 Time: 11:00 – 12:30 Location: DWSS Office, Paani Pokhari

# Attendants:

# Counterpart side:

- 1. Mr. Manoj Ghimire, DDG, DWSS
- 2. Mr. Sunil K. Das, DDG, DWSS
- 3. Mr. Arun Kumar Simkhada, Senior Divisional Engineer, DWSS
- 4. Mr. Kedar Prajapati, Project Manager WSSP, DWSS
- 5. Mr. Kiran Baranl, Senior Divisional Engineer, DWSS
- 6. Mr. Bipin Kumar Thakur, Senior Divisional Engineer (Mechanical), DWSS
- 7. Mr. Kamal Adhikari, Sociologist, NWSSTC/DWSS
- 8. Mr. Prem nidhi K.C, Sr. Sociologist, DWSS
- 9. Mr. Janak Bhusan Dhaaubadel, Senior Divisional Engineer, DWSS
- 10. Mr. Narayan Prasad khanal, DWSS, Senior Divisional Engineer, DWSS
- 11. Ms. Arati Shrestha, Engineer, DWSS
- 12. Ms. Jyoti Tamang, Engineer, DWSS
- 13. Mr. Deepak Puri, Advisor, NJS
- 14. Mr. Ryuj Ogata, Water Policy Advisor, JICA
- 15. Mr. Yukio Tanaka, Staff, JICA
- 16. Mr. Sudarsan Bhandari, RMSO Kathmandu, Chief

# WASMIP side:

- 1. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 2. Mr. Kazuhiko Nakamura, Vice Team Leader, WASMIP Team
- 3. Mr. Deepak Subedi, Engineer, WASMIP Team
- 4. Mr. Vivek shrestha, Engineer, WASMIP Team
- 5. Mr. Swiss Gauchan, Engineer, WASMIP Team
- 6. Ms. Trishna Khadki, Project Secretary, WASMIP Team

- Is the Support Model developed in the WASMIP-1 implemented in eastern region?
  - WASMIP Team Leader answered that due to transfer of the WSSDO chiefs and engineers, the support from WSSDO to WUSC has been less effective.
- > Condition of Implementation of WSP (Water Safety Plan) in 13 pilot projects?
  - WASMIP Team Leader answered that due to lack of incentive for WUSCs, there is less effective in implementation of WSP.
- Mr. Narayan Khanal of Quality section has informed to plan an effective and sustainable methodology to implement WSP in this fiscal year.
- > Approval of guidelines of DWSS by Ministry?
  - DWSS answered that the guideline is approved by ministry but not implemented in district level.
- Methodology of workshop for remaining 54 WUSCs?
  - WASMIP Team Leader answered that the Workshop shall be conducted by visiting each WSSDO along with RMSO, and WSSDO representatives may explain the project purpose and procedure to fill up check list, PI and awareness survey.
- The DDG has found the presentation very helpful in finding out problems in WUSC unknown to the department. He suggests the WASMIP team to capacitate and utilize the NWSSTC in this project. He also suggests the chiefs from different sub-departments of DWSS to give their own

input to solve the problems pointed out on the presentation (i.e. revising the DWSS standard drawings).

## Re: PCM with DWSS.

Date: 2016 October 20<sup>th</sup>

Time: 13:30-14:30 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Arun Simkhada
- 2. Jyoti Tamang

WASMIP-II Side:

- 1. Satoru Oniki- Team Leader, WASMIP-II
- 2. Deepak Subedi- National Staff, WASMIP-II

- 1. DWSS has prepared the letter for WSSDOs to provide daily allowances for attending the workshop.
- 2. DWSS will decide the date for the regional conferences. DWSS will inform the schedule to WASMIP-II after the date is fixed.
- 3. DWSS will allocate a time for WASMIP-II to make a presentation in the conference.
- 4. DWSS will confirm the approval of the 'operational guidelines' and share the information with WASMIP-II.
- 5. Mr. Kabindra Karki who is the successor of Mr. Rajeev Ghimire, NWSSTC Chief has been appointed and he will join DWSS after he comes back from Maldives (oversea training).
- 6. Next PCM will be on  $2^{nd}$  November at 14:00.

# Re: Discussion on the revision of the SOPs, workshop plans and comments from DWSS.

Date: 2016/11/07 Time: 11:00 – 12:00 Location: DWSS, Kathmandu

## Attendants:

- 1. Mr. Arun Simkhada, Planning Division, DWSS
- 2. Satoru Oniki, Chief Advisor, WASMIP Team
- 3. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team
- 4. Mr. Roshan Suwal, Civil Engineer, WASMIP Team
- 5. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 6. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- Murtiya WUSC does not have any water supply system even a construction plan. Therefore, instead of Murtiya WUSC, DWSS agrees to add Netragunj WUSC as target WUSC in Sarlahi district.
- The DWSS shall also support the WASMIP team finding the contractors and suppliers which DWSS has worked.
- > Mr. Kabindra Karki (new NWSSTC chief) is joining the DWSS from the mid of November.
- > The actual reason for Garamani WUSC not attending the workshop must be find out.
- > WUSC like Urlabari can be used as a resource trainer for other WUSCs.
- > ISSAU has not hired the consultant, yet it is not functioning fully.
- DWSS can use the WASMIP Budget (150 lakh = 15 million NRS) to procure small equipment such as water flow meters, valves, valves with chambers, chlorination equipment etc.

# Re: PCM with DWSS on November 25<sup>th</sup>, 2016

Date: 2016 November 25<sup>th</sup>

Time: 11:00-12:00 Venue: DWSS Building, Conference Room

Attendants:

Counterpart Side:

- 1. Arun Simkhada
- 2. Jyoti Tamang

#### WASMIP-II Side:

- 1. Satoru Oniki- Chief Advisor
- 2. Yusaku Numajiri- Expert
- 3. Yoshio Chikamatsu-Expert
- 4. Deepak Subedi- National Staff
- 5. Vivek Shrestha- National Staff
- 6. Swiss Gauchan- National Staff
- 7. Roshan Suwal- National Staff

- 1. DWSS will invite the responsible person for procurement in the next PCM to discuss the procedure in DWSS.
- 2. Ms. Jyoti Tamang will coordinate and provide feedbacks and inputs on PDCA model as she involved in preparing Business Plan in the WASMIP-I.
- 3. Mr. Kabindra Karki will join DWSS after his successor joins his position at MWSS.

Date: 2016 November 27<sup>th</sup>

Time: 11:00-12:00 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Arun Simkhada
- 2. Janak Adhikari
- 3. Jyoti Tamang

## WASMIP-II Side:

- 1. Satoru Oniki- Chief Advisor
- 2. Yusaku Numajiri- JICA Expert
- 3. Deepak Subedi- National Staff

- DWSS has to follow the public procurement act 2063 (a tender process) for the procurement of equipment worth more than NRS 1 million (10 lakhs). Equipment worth between 0.3 to 1 million should follow the quotation process (without a tender process). The worth below 0.3 million can be directly purchase form a market.
- 2. Unofficially, DWSS requests suppliers to submit price quotations.
- 3. The DWSS tender procedure takes minimum two months.
- 4. The Rehabilitation section in the DWSS has a budget of WASMIP-II. However, the Planning section is assigned to coordinate with WASMIP-II. DWSS needs to confirm a section for implementing the tender and procurement processes.
- The WASMIP-II (DWSS) budget program has been sent to the Ministry of Water Supply and Sanitation (MoWSS) and the National Planning Commission for approval on November 27<sup>th</sup> 2016.
- 6. One week of time is expected for the WASMIP-II (DWSS) budget program to be approved by the Ministry.
- 7. After the approval of the WASMIP-II (DWSS) budget, the procurement will be discussed among the rehabilitation section, the planning section and the WASMIP-II Team.

Date: 2016 December 1<sup>st</sup>

Time: 10:30-11:00 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Arun Simkhada
- 2. Jyoti Tamang

WASMIP-II Side:

- 1. Satoru Oniki- Chief Advisor
- 2. Deepak Subedi- National Staff

- 1. The schedule of Mr.Kabindra Karki joining to DWSS has not been confirmed yet.
- 2. The Regional Conferences will be held in January 2017.
- 3. The WASMIP-II program (DWSS budget allocation) will be approved within few days by MoWSS.
- 4. DWSS will confirm the request letter (replacement of the target WUSC) from Sarlahi WSSDO.
- 5. The schedule of Mr. Arun Simkhada visit the elevated tank in Dhulabari WUSC has not been decided yet.
- 6. As unofficial News, DG (Director General) in DWSS will be transferred. The successor of him, new DG, Mr. Tej Prakash Bhatta, the joint secretary will be assigned from MoWSS.

## Re: Meeting with DWSS (PCM).

Date: 2016 December2<sup>nd</sup>

Time: 11:30-12:30 Venue: DWSS Building (Conference Room)

# Attendants:

Counterpart Side:

- 1. Jyoti Tamang Planning Section.
- 2. Narayan Khanal- Section Chief, Water Quality Section.
- 3. Prem Shrestha- Environmental and Sanitation Section.
- 4. Janak Dhaubhadel-Rehabilitation Section.
- 5. Ekraj Shakya- National Management Information Project Section

## WASMIP-II Side:

- 1. Satoru Oniki- Chief Advisor
- 2. Yusaku Numajiri- Expert
- 3. Yoshio Chikamatsu- Expert
- 4. Deepak Subedi-National Staff
- 5. Vivek Shrestha- National Staff
- 6. Swiss Gauchan- National Staff
- 7. Roshan Suwal- National Staff
- 8. Trishna Khadgi- National Staff

- 1. WASMIP-II Team explained the outline of the training scheme for water quality and the workshop results in Rupandehi and Nawalparasi WSSDOs.
- 2. DWSS has a human resource problem (especially chemists) in all the laboratories.
- 3. Regional laboratories are not functioning well in the absence of chemists.
- 4. Prem Shrestha- Environmental and Sanitation Section mentioned It is a good idea to strengthen private laboratories (companies), as they help in the water quality testing.
- 5. The Water Quality Section has conducted the survey on water quality on all 75 districts last year.
- 6. Although there is high demand of water quality test kit from WUSCs, DWSS has no enough the kit number to provide WUSCs.
- 7. DWSS provided the water quality test kit to all the 75 WSSDOs.
- 8. Awareness on water quality is necessary for WUSCs.
- 9. A mechanism or system has to be formed and carried out strictly to obligate WUSC to carry out water quality test.
- 10. For example, the Water Supply System in Dhulikhel WUSC is asked to carry out a water quality test (at least once a month) and display the result to the consumers. The WUSC conducted quality test once but has not continued further.
- 11. There should be a mechanism that imposes WUSCs to check their water quality regularly and report to WSSDO or DWSS.
- 12. DWSS is installing AS (Atomic spectrophotometer) in Nepalgunj and Dhangadhi regional laboratories in this fiscal year.
- 13. As-built drawings of the project is mandatory only since 2 years ago.
- 14. DWSS is planning to provide water quality test kit to Rajahar WUSC of Nawalparasi district.

15. Many WUSCs are facing problems like in operation and maintenance due to absence of maintenance valves on water distribution pipelines. This problem is due to long construction period of projects (10 years), due to lack of budgets, transfers etc.

# Re: Information on portable test kits

Date: 2016/12/4 Location: DWSS Informant: Mr. Narayan Khanal, Chief of the Water Quality Section Information:

- DWSS has conducted a survey 1 year ago, in all 75 WSSDOs regarding availability of test kits in 75 WSSDOs.
- The survey showed all the WSSDOs have the test kit but some of the kits needs to be repaired.
- The DWSS is now planning to repair the kits if possible. If they are to be replaced, they are going to use the test kits provided by WHO.
- The WHO provides DWSS with 10-15 test kits each year free of charge. Sometimes the DWSS also gets test kits from UNICEF if the kits umber is insufficient.
- The donated test kits from WHO and UNICEF are sent to WSSDOs by DWSS. The WSSDOs are selected by DWSS.
- > The DWSS has not bought test kits on their own and supplied to WSSDOs so far.

# Re: Internal Meeting with DWSS on December 4<sup>th</sup>.

Date: 2016 December 4<sup>th</sup>

Time: 11:30-12:30 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Mr. Kamal Adhikari NWSSTC
- 2. Mr. Bhojendra Aryal Environmental Sanitation Section
- 3. Ms. Jyoti Tamang Planning Section.

WASMIP-II Side:

- 1. Satoru Oniki- Chief Advisor
- 2. Deepak Subedi-National Staff

- 1. WaterAid has not worked directly in coordination with NWSSTC.
- 2. WaterAid has provided financial support for WASH Expo organized by NWSSTC.
- 3. WaterAid has no regular program with other section of DWSS as well.
- 4. WaterAid has meetings frequently with Environmental Sanitation Section (ESS). ESS is a secretariat of National level WASH CC.
- 5. Jyoti ji will find the necessary information for WASMIP-II such as DWSS standard drawings, design criteria, procurement processes and schedule, 15 years development book and WASMIP-II Budget approval status, and inform the team.

# Re: Information on SOP under preparation by WHO

Date: 2016/12/5 Location: DWSS Attendant:

- 1. Ms. Manila baidya, Civil Engineer, Water Quality Section
- 2. Mr. Yasuka Numajiri, Water quality expert, WASMIP
- 3. Mr. Satoru Oniki, Chief Advisor, WASMIP
- 4. Mr. Vivek Shrestha, National staff, WASMIP

## Information:

- > WHO is preparing a preliminary/General SOP for all the water supply project in Nepal.
- The quality section of DWSS has checked a draft and sent it to the WHO to prepare the contents.
- The SOP does not contain mechanical and electrical parts. There is also no SOP for aeration tank and pre-sedimentation. It also has very small information on rapid sand filter.
- > The SOP may be prepared within 1 month.
- The WASMIP Team suggested DWSS to avoid the discrepancy between the WASMIP model and WHO's SOP. Otherwise the double standards would make DWSS confused. Therefore, the Team needs to discuss the SOP with WHO.
- Mr. Narayan Prasad Khanal, chief of quality section is the responsible personal for the preparation of SOP.
- Ms. Manila also suggests the WASMIP team to prepare separate SOPs for each pilot WUSC if possible to make the SOP effective.

# Re: Information on test kits and SOP under preparation by WHO

Date: 2016/12/5 Location: DWSS Attendant:

- 1. Ms. Narayan Prasad Khanal, Chief, Water Quality Section
- 2. Mr. Satoru Oniki, Chief Advisor, WASMIP-II
- 3. Mr. Yasuka Numajiri, Water quality expert, WASMIP-II
- 4. Mr. Vivek Shrestha, National staff, WASMIP-II

## Information:

- The WASMIP Team reported Mr. Narayan, Chief of Water Quality Section the status of the test kit (POTATEST) usage in the target WSSDOs and the pilot WUSCs.
- In survey conducted on all the WSSDOs 1 year ago by DWSS, following information were gathered:
  - 24 WSSDOs are using test kits regularly
  - 22 WSSDOS are using test kits irregularly
  - 26 WSSDOS are not using kits at all
- The WSSDOs with damaged kits (destroyed, battery down, etc.) were asked to repair by DWSS in the survey one year ago. If the kits cannot be repaired by the WSSDOs, the damaged kits are to be brought to DWSS and DWSS replace it.
- The kit is provided to WSSDOs as major priority. If some kits are remaining, then they are given to WUSCs with good operation.
- As per the new rule by DWSS, the test kit price is to be included in a cost estimation of new projects.
- To change the mindset of WSSDO regarding water quality check since some WSSDOs are unwilling to conduct the test, DWSS is going to conduct trainings in coming the regional conferences to educate WSSDOs on the importance of the test.
- Mr. Narayan will confirm whether WHO agrees to provide the WASMIP Team with the draft SOP on WTP O&M.
- Water quality related documents like Water Safety Plan shall also be included in the draft SOP by WHO.
- Mr. Narayan also suggests the WASMIP Team to prepare separate SOPs for each pilot WUSCs if possible to make the SOP effective. The Chief Advisor answered that the revised SOP on WTP will consist of 5 pattern treatment processes based on the survey results to the pilot WUSCs.

# Re: Meeting with DWSS on December 14<sup>th</sup> 2016.

Date: 2016 December 14<sup>th</sup>

Time: 14:30-15:00 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Mr. Arun Simkhada (Project Coordinator C/P side, DWSS)
- 2. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Deepak Subedi- National Staff, WASMIP-II

- Mr. Arum Simkhada proposed the date (December 19<sup>th</sup>) for the 2<sup>nd</sup> Joint Project Coordination Meeting (JPCM). He will confirm DG and DDG's schedule and he will inform the WASMIP Team of the date and venue.
- 2. Mr. Arun Simkhada agreed on the 2<sup>nd</sup> JPCM agenda proposed by the WASMIP-II Chief Advisor. He will make a presentation on DWSS's issues and challenges.
- 3. Mr. Arun Simkhada agreed to procure the proposed equipment for the 13 pilot WUSCs such as flow meters and chlorination units etc. by DWSS side. He will consult the procurement matter with DG. When DG agrees it, DWSS and the WASMIP Team will sign the Memorandum of Understanding (MoU) on the equipment procurement.
- 4. Mr. Arun Simkhada informed that WASMIP-II budget (DWSS) will be approve in few days.

# Re: Meeting with DWSS on December 15<sup>th</sup>, 2016

Date: 2016 December15<sup>th</sup>

Time: 10:00-11:00 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Mr. Arun Simkhada (Project Coordinator, Planning Section, DWSS)
- 2. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Arun Simkhada will provide a revised list of target WUSCs to the WASMIP Team. The planning section will decide either to include new WUSCs at Bardiya and Sarlahi WSSDO or erase.
- 2. Mr. Arun Simkhada will make a presentation in the 2<sup>nd</sup> JPCM. If possible either Mr. Kabindra Karki or Ms. Jyoti Tamang will also make a presentation in the JPCM.
- 3. Mr. Arun Simkhada will inform DG about the procurement matter and he will inform the decision to the WASMIP Team.

# Re: Meeting with DWSS on December 16<sup>th,</sup> 2016.

Date: 2016 December15<sup>th</sup>

Time: 10:00-11:00 Venue: DWSS Building

Attendants:

Counterpart Side:

- 1. Mr. Arun Simkhada (Project Coordinator, Planning Section, DWSS)
- 2. Ms. Jyoti Tamang- Engineer, DWSS.
- 3. Deepak Subedi-National Staff, WASMIP-II

- 1. Ms. Jyoti Tamang informed about the revised schedule of regional conference. Ms. Jyoti Tamang provided the copy of revised schedule to WASMIP team.
- 2. The date for regional conference is as follows;
  - a) Western Region: 1<sup>st</sup> 3<sup>rd</sup> of January, 2017.
  - b) Central Region: 11<sup>th</sup>, 13<sup>th</sup> of January, 2017.
  - c) Far Western Region: 18<sup>th</sup>- 20<sup>th</sup> of January, 2017.
  - d) Mid-Western Region: 22<sup>nd</sup>- 24<sup>th</sup> of January, 2017.
  - e) Eastern Region: 8<sup>th</sup> 10<sup>th</sup> of February, 2017.
- 3. The agenda of the regional conference meeting will be prepared in the last week of December.
- 4. The Account section of DWSS will provide the agenda of the regional conference to the WASMIP team.
- 5. The 2<sup>nd</sup> JPCM is fixed on 19<sup>th</sup> December, 2016 at 11:00 AM in DWSS Conference Hall.

## Re: Meeting with DWSS on December 18th, 2016

Date: 2016 December18<sup>th</sup>

Time: 10:30-11:00 Venue: DWSS Building

## Attendants:

- 1. Mr. Tejraj Bhatta (Director General, DWSS)
- 2. Mr. Kabindra Karki( Project Manager, DWSS)
- 3. Mr. Arun Simkhada (Project Coordinator, DWSS)
- 4. Mr. Kamal Adhikari (Sociologist, NWSSTC, DWSS)
- 5. Satoru Oniki- Chief Advisor, WASMIP-II
- 6. Deepak Subedi-National Staff, WASMIP-II
- 7. Vivek Shrestha- National Staff, WASMIP-II

- 1. The chief Advisor of WASMIP explained the WASMIP-II, the survey of pilot projects and the workshops organized for target WUSCs to the newly joined NWSSTC Chief (Counterpart side Project Manager).
- Mr. Kabindra Karki explained that it would be effective if DWSS and WASMIP jointly make a presentation in the regional conference to explain the outline, purpose and progress of the WASMIP.
- 3. Mr. Tejraj Bhatta (Director General: DG) agreed that the WASMIP Team joins the regional conferences and makes the presentation.
- 4. The DG is available at 15:00 for the 2<sup>nd</sup> JPCM on Monday so the schedule of JPCM is revised and the time schedule is informed to all the counterparts.
- 5. The Chief Advisor put forward the subject of procurement with the DG. Mr. Arun Simkhada will explain in details about the procurement of equipment to the DG later.
- 6. Mr. Arun Simkhada agreed on the revised presentation material for the 2nd JPCM which includes the general outline of the WASMIP.

# Re: 2<sup>nd</sup> Joint Project Coordination Meeting (JPCM)

**Date:** 2016/12/19 **Time:** 15:30 – 17:00 **Location:** DWSS Conference Room

# Attendants:

# Counterpart side:

- 1. Mr.Tejraj Bhatt- Director General, DWSS
- 2. Mr. Binod Kumar Agrawal- Deputy Director General, DWSS
- 3. Mr. Shankar Prasad Jaiswal- Chief ERMSO, DWSS
- 4. Mr. Yukio Tanaka- JICA
- 5. Ms. Meena Shrestha- Project Director, CFWSSP DWSS
- 6. Mr. Arun Kumar Simkhada- Chief Planning Section, DWSS.
- 7. Mr. Prem Krishna Shrestha- Chief Sanitation Section, DWSS.
- 8. Mr. Bipin Kumar Thakur- Chief Electro Mechanical section-DWSS
- 9. Mr. Kabindra B. Karki- Chief NWSSTC, DWSS
- 10. Mr. Narayan P. Khanal- Chief WQC, DWSS
- 11. Mr. Deepak Puri- Advisor, WASMIP
- 12. Ms. Jyoti Tamang- DWSS

# WASMIP side:

- 1. Mr. Satoru Oniki- Chief Advisor
- 2. Mr. Deepak Subedi- National Staff
- 3. Mr. Vivek shrestha-National Staff
- 4. Mr. Swiss Gauchan-National Staff
- 5. Mr. Roshan Suwal
- 6. Ms. Trishna Khadgi, Project Secretary

- 1. The Chief Advisor of the WASMIP-II and the Project Coordinator Mr. Arun Simkhada made the presentations individually in the 2nd Joint Project Coordination Meeting.
- **2.** The Director General (DG) of the DWSS mentioned that the WASMIP will help to enhance DWSS capacity and contribute to increase the capacity of the WSSDOs and WUSCs.
- 3. The DG mentioned that WUSCs are expecting for the hardware support by the WASMIP.
- 4. The DG suggested to include the Water Safety Plan in the WASMIP model.
- 5. The DG said that out of the 45,000 completed projects, 12,000 schemes (water supply systems) should get rehabilitated and which is a major problem for the DWSS to solve.
- 6. The DDG (Deputy Director General) mentioned that WASMIP will be allocated 2 hours in the regional conferences to make a presentation and explain the WASMIP activities and the WASMIP Model.
- 7. The DDG mentioned that, it is a good progress that WASMIP has been initiated in 11 districts although it has been only 6 months from commencement.
- 8. The Section Chief mentioned that the initiative in Lamjung district of conducting yearly training will be replicated by the Dolakha WSSDO.
- 9. The Section chief of DWSS mentioned that the budget for training is insufficient for conducting trainings in WSSDOs.
- 10. The Section Chief mentioned that, since WSSTs are also assigned for store keeping and other administration works at WSSDO Office, WASMIP need to consider number of WSSTs.

- 11. The Section chief mentioned that the complaint of taste and odor from the consumers is another challenge in using the disinfection equipment at rural water supply systems.
- 12. The Section Chief mentioned that the maintaining proper chlorine dosing at long distribution pipe networks is also a challenge. Usually chlorine concentration is higher in nearer tap and almost nil in the farthest tap.
- 13. JICA asked DWSS about mobilizing the WSST for WASMIP implementation. If DWSS has any other idea, the WASMIP team will reconsider about mobilizing the WSSTs.
- 14. Mr. Arun Simkhada will explain about the need and procurement of equipment from the site survey to the DG.
- 15. The 2<sup>nd</sup> JPCM was successfully adjourned by the DDG 's closing remarks.

# Re: Meeting with DWSS on December 20th, 2016

Date: 2016 December20<sup>th</sup>

Time: 11:00-11:40 Venue: DWSS Building

Attendants:

- 1. Mr. Arun Simkhada (Project Coordinator, DWSS)
- 2. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Ms. Jyoti Tamang- Engineer, DWSS.
- 4. Deepak Subedi-National Staff, WASMIP-II

- 1. The WASMIP Budget (DWSS) will be approved by the last week of December.
- 2. DWSS will decide the responsible section (the Planning section or NWSSTC or Rehabilitation section) for the authority to use the WASMIP budget.
- 3. The MoU will be signed after the section is designated for the use for the WASMIP budget.
- 4. DWSS will discuss internally to confirm the dispatch of DWSS's staff in the regional conferences to make presentations on the WASMIP-II respond to the Chief Advisor requested.
- 5. The WASMIP Team, National staffs will attend the conferences to support DWSS in the presentations.
- 6. Ms. Jyoti Tamang will inform about the DWSS standard drawing status such as chlorination unit, flow meter and valves to the WASMIP team after she collects the information on standard drawing.

Date: 2017 January 25<sup>th</sup>

Time: 14:00-14:30

Venue: DWSS Building

## Attendants:

- 1. Mr. Arun Simkhada- DWSS
- 2. Mr. Kazuhiko Nakamura Deputy Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Arun Simkhada mentioned that the Director General has agreed to provide authority to the planning section for using WASMIP-II budget (DWSS).
- 2. Mr. Arun Simkhada mentioned that he will get the letter of authority with in the last week of January.
- 3. Mr. Arun Simkhada mentioned that it is better if MoU is prepared by WASMIP side.
- 4. DWSS will procure the equipment for the WASMIP-II project as per the Government's procurement act and regulations.
- 5. WASMIP-II side will provide the list, location of installation and quantity of the equipment for procurement.
- 6. DWSS will divide the equipment as a package if necessary. For example: Flow meters and valves as one package and disinfection unit as another package.
- 7. WASMIP-II Deputy Chief Advisor suggested that it's better to divide the package according to area since it has a merit of reducing the cost.

# Re: Discussion on the procurement, training plans and comments from DWSS.

Date: 2017/01/30 Time: 02:00 – 03:00 Location: DWSS, Kathmandu

## Attendants:

- 1. Mr. Arun Simkhada, Planning Division, DWSS
- 2. Mr. Kazuhiko Nakamura, Deputy Chief Advisor, WASMIP Team
- 3. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team
- 4. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 5. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- > Approval letter for WASMIP budget is received from Mr. Simkhada.
- > Mr. Simkhada asked the team to submit the cost estimation of all the items for reference.
- > WASMIP-II team will provide the cost estimate and reference material as Engineer's estimate.
- > Mr. Simkhada suggested the installation of valves and meters by supplier.
- > The projects shall be divided based on area if supplier can provide all the items.
- > DWSS decides how to divide the project by item or area. Once it is decided, DWSS will notice it.
- The WUSCs may be instructed to build the small civil works like chambers. The WSSDO/DWSS will monitor the work and reimburse them after completion because it is a small size of the work.
- WASMIP-II team kindly requested DWSS to provide DWSS standard drawings. However, the DWSS has hired a local consultant to revise standard drawing but even the draft is not submitted by the consultant.
- > Mr. Simkhada shall instruct the NWSSTC to gather information on trainer's list.
- WASMIP-II asks Mr. Shimkhada to appoint three trainers from NWSSTC for water quality, mechanical/electrical and business.
- Mr. Simkhada asked that WASMIP would submit an official letter for training program in Japan including the information such as venue, duration, funding, subject matter, attendants name before two or three months in the commencement of the training session.
- WASMIP-II team confirmed the schedules for the Central region conference and the Eastern region conference.
- WASMIP-II team kindly requested Mr. Shimkhada to ask Mr. Kabindra to conduct the WASMIP project on both conferences and Mr. Shimkada agreed with it.

# Re: Discussion on the procurement, training plans and comments from DWSS.

Date: 2017/02/02 Time: 12:00 – 01:00 Location: DWSS, Kathmandu

## Attendants:

- 1. Mr. Arun Simkhada, Planning Division, DWSS
- 2. Mr. Kazuhiko Nakamura, Deputy Chief Advisor, WASMIP Team
- 3. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team
- 4. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 5. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- Mr. Simkhada reviewed the MoU and put forward few comments on some of the points in the document.
- Mr. Simkhada will review the engineer's estimate and will start the tendering procedure accordingly.
- > Ms. Jyoti is responsible for cost estimation for project cost and division of the project.
- WASMIP team reported DWSS to acquire draft version of DWSS standard drawings from the local consultant.
- NWSSTC's organogram has not been changed since the name of the organization changed from CHRDU to NWSSTC.
- Mr. Sinkhada assured that DWSS will facilitate (contact responsible WUSCs and WSSDOs through phone) in the collection of PIs and checklists from the remaining WUSCs
- The new schedule for Western and Far Western regional conference is confirmed and WASMIP has been allocated 1 hr time in 2<sup>nd</sup> day.

# Re: Project Coordination meeting

Date: 2017/2/3 Time: 11:50 – 12:30 Location: DWSS, Paanipokhari, Nepal

# Attendants:

- 1. Mr. Kamal Adhikari, Sociologist, DWSS
- 2. Mr. Kazuhiko Nakamura, Deputy Chief Advisor, WASMIP Team
- 3. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 4. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

- **1.** About the data collection from 56 wusc's, he said WASMIP II to follow them through telephone for data collection from wusc's.
- **2.** He said that the trainer's list collection work was going on and would submit it as soon as possible to WASMIP II team.
- **3.** He further asked about the comments that was arose at the Western Regional Conference about the WASMIP II project.
- **4.** He told WASMIP II team that WASMIP had played a big role in finding problems and was happy to work with them.
- **5.** He requested WASMIP team to send him the copy of presentation too so that he could add this presentation on his training session.

Date: 2017/02/08 Time: 12:30 – 01:30 Location: DWSS Building

#### Attendants:

- 1. Mr. Kabindra karki, DWSS
- 2. Mr. Kazuhiko Nakamura, Deputy Chief Advisor, WASMIP-II
- 3. Mr. Akira Hasebe, Team Member, WASMIP-II
- 4. Mr. Swiss Gauchan, National Staff, WASMIP-II
- 5. Mr. Vivek Shrestha, National Staff, WASMIP-II
- 6. Mr. Deepak Subedi, National Staff, WASMIP-II

- Mr. Kabindra mentioned that the copy of MoU should be revised once the Director General would have any comments/revisions regarding the contents of the MoU.
- > Mr. Kabindra shall provide list of trainer's after coordinating with Mr. Kamal Adhikari.
- Mr. kabindra agrees that the DWSS staffs should be used in ToT or other trainings. Resource persons are busy sometimes and are not sustainable.
- Mr. Hasene kindly requested to appoint appropriate officers for ToT sessions. He also added there would be mainly three types of training area, which are water quality/WTP, Electrical/ mechanical and business plan.
- Mr. Kabindra advised WASMIP to prepare SOP suitable for both technical and non-technical personal of WUSC.
- > Mr. Hasebe explained the contents of work/ purpose of visit in Nepal.
- Mr. Hasebe explained that WASMIP will develop an easy to understand SOPs for site operators and a comprehensive SOPs for higher technical persons such as engineer.
- > Mr. Hasebe explained that the visualization will be used in SOPs for operator's convenience.
- Mr. Kabindra mentioned WASMIP team to share success story of WASMIP-I and demonstrate some positive outcomes to motivate WUSCs to use WASMIP model.
- Mr. Kabindra explained DWSS considered to set the project supporting unit for solving the burden of the work facing on WSSDO engineers. The project supporting unit is mentioned on Sector Development Plan which is Concept plan.

Date: 2017/02/15 Time: 11:30 – 13:00 Location: DWSS Building

## Attendants:

- 1. Mr. Arun Simkhada, Planning section, DWSS
- 2. Mr. Kamal Adhikari, NWSSTC, DWSS
- 3. Mr. Kazuhiko Nakamura, Deputy Chief Advisor, WASMIP-II
- 4. Mr. Akira Hasebe, Team Member, WASMIP-II
- 5. Mr. Deepak Subedi, National Staff, WASMIP-II

- Deputy Chief Advisor of WASMIP-II handed over the copies of MoU to the Director General of DWSS through Mr. Arun Simkhada (Project Coordinator- counterpart side).
- **2.** DWSS will officially begin the tendering process of procurement of equipment for WASMIP-II after the MoU is signed by the Director General.
- **3.** WASMIP requested Mr. Arun Simkhada to prepare the tendering documents and to provide the schedule of the tender.
- **4.** Mr. Arun Simkhada mentioned that DWSS will divide the tendering process in equipment. It is difficult to find the contractor and supplier in local areas so it is better to divide the procurement in in terms of equipment.
- **5.** Mr. Arun Simkhada assured that DWSS will make a necessary follow-up from their side for the collection of questionnaire forms from various WSSDOs.
- **6.** Mr. Arun Simkhada agreed to provide the revised list of target WUSCs after discussing with the Deputy Director General of the DWSS.
- 7. Mr. Hasebe explained about his assignments during his stay in Nepal.
- **8.** Mr. Hasebe explained about the cascade model for facility O & M, water quality and Business plan and asked Mr. Simkhada to put forward his opinion.
- **9.** Mr. Hasebe explained about the idea of triggering RMSO in a cascade model and asked Mr. Simkhada to share his ideas on this model to DG or DDG.
- **10.** Mr. Kamal Adhikari provided the WASMIP-II following documents; organogram, approval document for the organogram, annual plan on NWSSTC and training schedule on 2016 and 2017.
- 11. Mr. Kamal Adhikari mentioned that the organogram of NWSSTC has not been changed and NWSSTC has an organogram for obtaining the ISO certificate only. He would confirm this issue and inform the WASMIP team later after he confirmed the details with senior officers of the DWSS.
- **12.** Mr. Kamal Adhikari agreed to Mr. Hasebe's point of including young trainers from DWSS in a ToT provided by JICA expert.

Date: 2017 February 22<sup>nd</sup>

Time: 11:00-13:00 Venue: DWSS Building

## Attendants:

- 1. Mr. Arun Simkhada, DWSS
- 2. Mr. Jyoti Tamang, DWSS
- 3. Mr. Akira Hasebe, WASMIP-II
- 4. Mr. Deepak Puri, WASMIP-II
- 5. Mr. Deepak Subedi, WASMIP-II

- 1. Mr. Arun Simkhada will hand over the copy of MoU to the Director General and get his signature in few days after the regional conference is over.
- 2. Ms. Jyoti will cooperate the WASMIP in the collection of questionnaire sheets from the target WUSCs.
- 3. Ms. Jyoti will prepare the tender package working together with the WASMIP team.
- 4. Mr. Hasebe explained about the sample SOP of electrical equipment.
- 5. Mr. Simkhada feels that the SOP with visualization will be beneficial to the WUSCs for the O & M of the electrical equipment.
- 6. Mr. Hasebe explained about the proposed support model mechanism.
- 7. Mr. Arun Simkhada informed that the DWSS is hiring 50 engineers in a contract base to address the lack of manpower in different WSSDOs. In addition, he said he would seek possibility to dispatch some of those new engineers to each RMSO.
- 8. Mr. Arun Simkhada mentioned that, it is possible to hire a manpower from NWSC, KUKL, WUSC etc. as a resource person in NWSSTC as long as asking them personally for the short term trainer's purpose.
- 9. Mr. Arun Simkhada and Mr.Puri jointly expressed that the proposed model to activate RMSO function looked effective and valuable if we can make the Regional Director obliged for the work with budget allocation.
- 10. Mr. Simkhada mentioned that the budget for service support activity would be allocated from DWSS side without obstruction. Therefore, DWSS would be even able to allocate several millions for each RMSO every year for the implementation of the support unit program once implementation and output of the activity are confirmed in the first year.
- 11. In case of adopting the proposal above, RMSOs themselves have to submit a program proposal to the DWSS for the budget approval.
- 12. DWSS has more or less achieved the basic service target, so currently DWSS has to focus on quality of the service and actually tries to gradually shift the policy to it.
- 13. Mr. Simkhada mentioned that the budget can be allocated to the RMSO in a program name like "Regional Level Capacity Development Program".
- 14. Mr. Simkhada mentioned that it would be helpful for him to decide the budget amount if WASMIP provides a tentative outline of the program with draft budget estimation for the model related activities.
- 15. Mr. Puri mentioned that there are many advantages in activating the RMSO in a cascade system. However, there are few risks to be considered such as :
  - Regional Director must take pro-active role to organize, mobilize and monitor 'support unit' team.

- DWSS must secure adequate budget to operate 'support unit' team.
- WSSDOs must willingly assist and support RMSOs to dispatch manpower in a 'support unit' team
- 16. Mr. Puri suggested that it would be necessary to give even a small try to the proposed model in an early stage of the project and see the result and output. He said it would be even beneficial to start with a small try like adopting the support unit model in only one or two regions at first in parallel with enhancing the capacity of NWSSTC which contributes on the other proposal as well.
- 17. Mr. Simkhada suggested to take an opportunity of the Mid-Western regional conference for hearing opinions about the two draft support models from DG, RD and WSSDO chiefs who would attend the conference.

Date: 2017 February 23<sup>rd</sup>

Time: 15:30-16:00

Venue: DWSS Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki- NWSSTC, DWSS
- 2. Mr. Akira Hasebe WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II
- 4. Mr. Swiss Gauchan- National Staff, WASMIP-II

- 1. Mr. Kabindra mentioned that he will provide a revised list of trainers including other possible resource such as young engineers to WASMIP team in a few days.
- 2. WASMIP team requested to share the annual training programs for the last three years.
- 3. Mr. Hasebe explained the two types of draft support models and propose role of each section of DWSS in the models.
- 4. Mr. Kabindra mentioned that the model with activation of RMSO is preferable as it maintains the hierarchy of the DWSS.
- 5. Mr. Hasebe explained about the electrical SOP for the operators.
- 6. Mr. Kabindra mentioned that the SOPs will be a guidance and hopes it will be useful for the capacity development of the WUSCs.
- 7. Mr. Kabindra informed that currently the DWSS is making a performance contract with the employees including even section chiefs and regional directors.
- 8. Mr. Hasebe shared the draft of proposed training courses which consists of water quality management, business management and facility O&M.
- 9. Mr. Kabindra mentioned that the first draft application of NWSSTC budget allocation for the next fiscal year was already submitted and it would have several times for revisions by April. He said that it would be necessary to put additional budget in the application if the proposed trainings with WASMIP model are newly implemented in the next fiscal year.
- 10. Mr. Kabindra mentioned that the DWSS engineers has less work in July, August and September so it would be easier to arrange and more effective if trainings of trainers are planned during the same period.
- 11. Mr. Kabindra mentioned that the minimum numbers of trainees for one lecture/course in NWSSTC is 16 because of some informal audit regulations.
- 12. Mr. Kabindra mentioned that it is possible to outsource trainers from other organizations such as NWSC, KUKL etc.

## **<u>Re: Meeting with DWSS.</u>**

Date: 2017 March 5th

Time: 14:00-16:30

Venue: DWSS Building

## Attendants:

- 1. Mr. Arun Simkhada- Planning Section, DWSS
- 2. Mr. Kamal Adhikari- NWSSTC, DWSS
- 3. Ms. Jyoti Tamang- Planning Section, DWSS
- 4. Mr. Akira Hasebe- Team Member, WASMIP-II
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II

## **Meeting Conclusions:**

- 1. Mr. Hasebe reminded about the MoU to Mr. Simkhada. Mr. Simkhada mentioned that he will get the documents signed by the DG in few days, when DG is available.
- 2. Mr. Kamal mentioned that the business management is a new course for NWSSTC. It is better to conduct the new training with new curriculum than enhancing the existing training at NWSSTC.
- 3. Mr. Kamal mentioned that if we select DWSS senior officers for the ToT, they may not allocate enough time for the training.
- 4. Mr. Kamal mentioned that he will discuss with Mr. Kabindra and provide the revised trainers list with some young engineers.
- 5. Mr. Kamal mentioned that it would be better to design a one day or half day orientation course for the DWSS senior officers as the first part of ToT.
- 6. Mr. Simkhada mentioned that the July 1<sup>st</sup> week is the last date of payment for all the works in this fiscal year.
- 7. Mr. Simkhada mentioned that the work has to be finished within the 1<sup>st</sup> week of July otherwise the allocated budget will be freezed and cannot be postponed to the next year.
- 8. Mr. Simkhada mentioned that it is easier to divide the procurement work as follows;
  - (i) Supply and Delivery of water flow meters and valves to the sites by the supplier and installation by the WUSCs under the supervision of WSSDOs.
  - (ii) Construction of civil works (chambers) by the WUSCs and the reimbursement of the cost by the DWSS.
  - (iii) Supply, installation and commissioning of the Chlorination equipment and related electrical works by the supplier.

As for (i), he mentioned that it would be overburdened and easily postponed if they ask WSSDOs to manage procurement and construction works by themselves in this busiest, last quarter of the fiscal year.

- 9. Ms. Jyoti will prepare the tendering documents in coordination with the WASMIP team.
- 10. Mr. Hasebe explained the timeline and the urgency of the procurement process as we have not much time remaining for this fiscal year.

- 11. Mr. Simkhada and Mr. Kamal mentioned that, as a proposal for the next fiscal year, they would apply a budget plan for WASMIP as follows;
  - (i) WASMIP ( rehabilitation works )- 60 million
  - (ii) RMSO (Regional level capacity development program) 5 million for each RMSO.
  - (iii) NWSSTC ( WASMIP trainings )- 5 million
- 12. Mr. Simkhada requested WASMIP team to technically help not only the pilot/target areas but also the far western region as well, which has no pilot WSSDOs/WUSCs. Mr. Hasebe answered that the concept of including all the 5 regions would be very necessary and rather unignorable from the model's dissemination point of view although the pilot/target WSSDOs/WUSCs should be given priority on some concrete activities for the project purpose.
- 13. Mr. Simkhada mentioned that Sep-Oct is an ideal time to conduct trainings for WSSDOs engineers and technicians due to less workload.
- 14. Mr. Simkhada mentioned that it is possible to have a meeting with a ministry officer regarding the draft structure of MoWSS for the federal system. However, he said it would be better to discuss with Mr. Sudarshan Bhandari first, the current regional director of central region, who was actively involved in the preparation of the draft structure.
- 15. Mr. Hasebe explained the tentative schedule of the experts' assignment. Mr. Hasebe explained about the financial expert's has a plan to conduct a first small workshop at NWSSTC on business management.

Date: 2017 March 20th

Time: 11:00-12:30

Venue: DWSS Building

# Attendants:

- 1. Mr. Arun Simkhada- Planning Section, DWSS
- 2. Mr. Kabindra Bikram karki- NWSSTC, DWSS
- 3. Ms. Jyoti Tamang- Planning Section, DWSS
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Kozo Hayashishita- Team Member, WASMIP-II
- 6. Mr. Deepak Subedi-National Staff, WASMIP-II

# Meeting Conclusions:

Equipment Procurement;

- 1. Mr. Kabindra mentioned that DWSS should check the procurement act if we can reduce the notice for 21 days instead of 30 days for the procurement process.
- 2. Mr. Arun Simkhada mentioned that planning section will anyhow manage the procurement of the equipment for the 13 pilot projects.
- 3. Mr. Simkhada mentioned that planning section has proposed the budgets for WASMIP-II for the next fiscal year as follows:
  - > Rehabilitation works- 50 million NPR.
  - ▶ 4 million NPR for Far Western RMSO and 5 million NPR for other RMSOs.
  - ➢ 5 million NPR for the NWSSTC.
- 4. If the WASMIP budget (1.5million) is not used within this fiscal year, the budget will be frozen and it will not be carried over to the next fiscal year. The budget needs to be spent for the procurement in this fiscal year.
- 5. If the contracted supplier cannot complete the work (supply & installation) within the fiscal year, DWSS will use the bid security amount as a penalty to the supplier. The bid security amount is generally 5% of the contract amount. DWSS expects that the supplier will finish the work by the end of the fiscal year.
- Chief Adviser of WASMIP explained the schedule of JCC. Tentatively any day between 17<sup>th</sup> to 21<sup>st</sup> April.
- 7. Mr. Kabindra will contact to secure time for the JCC with the Joint Secretary of MoWSS and the Director General of DWSS.
- 8. Mr. Kabindra and Mr. Simkhada will put forward the comments on the WASMIP-II progress report-1 by coming Thursday (on March 23) if they have any comments and feedbacks.
- The Expert explained about the training schedule in Japan on 3<sup>rd</sup> September to 9<sup>th</sup> September.
- 10. The Expert requested that DWSS makes any comments on the draft General Information on the counterpart training by coming Thursday (on March 23).

# **Re: Meeting with DWSS.**

Date: 2017/03/22 Time: 12:30 – 12:45 Location: DWSS Building

#### Attendants:

- 1. Mr. Arun Simkhada, Planning Section, DWSS
- 2. Mr. Satoru Oniki, Chief Adviser, WASMIP-II
- 3. Mr. Deepak Subedi, National Staff, WASMIP-II

#### Meeting conclusions:

#### Mr.Arun Simkhada mentioned as followings:

- 1. DWSS will publish the notice of 'supply, delivery, installation and commissioning of the chlorination equipment' till on 24<sup>th</sup> March.
- 2. Flow meters and valves will be purchased through a sealed quotation because the amount for these equipment is less than the tender amount mentioned in the DWSS procurement act.
- 3. DWSS will purchase the filter media for aeration tank directly or by sealed quotation.
- 4. DWSS will ask the WUSCs to construct a valve chamber and DWSS will pay the amount after completion of the work.
- 5. Joint Secretary (Mr. Rajan Raj Pandey) is in a long leave and he has much workload in the office so it is better to conduct JPCM instead of JCC.

Date: 2017 March 23rd.

Time: 14:30-15:00

Venue: DWSS Building

# Attendants:

- 1. Mr. Arun Simkhada- Planning Section, DWSS
- 2. Mr. Kabindra Bikram karki- NWSSTC, DWSS
- 3. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II

- Mr. Kabindra agrees that it would be better to conduct JPCM (Joint Project Coordination Meeting) than JCC (Joint Coordination Committee) meeting because the joint secretary (Mr. Rajan Pandey) will be not available until the end of March.
- 2. In the 3<sup>rd</sup> JPCM, main subjects will be the report of the WASMIP progress based on the progress report and DWSS equipment procurement.
- 3. Mr. Kabindra will confirm the schedule (17<sup>th</sup> April-21<sup>st</sup> April) of DG and DDG for the 3<sup>rd</sup> JPCM and he will inform to the WASMIP team.
- 4. Mr. Kabindra has no major comments in the progress report. However we will provide minor comments and feedbacks as early as possible.
- 5. Mr. Arun Simkhada assures that the DWSS will procure the equipment within a deadline (2nd week of July).
- 6. Mr. Arun Simkhada will read the progress report thoroughly and he will provide the feedbacks as soon as possible.
- 7. The Chief Adviser of WASMIP-II explained the next assignment of the Japanese experts to Mr. Kabindra.

# Re: Meeting with DWSS (PCM).

Date: 2017/03/26 Time: 11:00 – 12:00 Location: DWSS Building. Attendants:

#### JICA side:

- 1. Mr. Kabindra Bikram Karki Chief, NWSSTC.
- 2. Mr. Narayan Khanal Chief, Water Quality Section.
- 3. Mr. Kamal Adhikari- Sociologist, NWSSTC.
- 4. Ms. Jyoti Tamang Engineer, Planning Section.
- 5. Mr. Satoru Oniki- Chief Adviser, WASMIP-II.
- 6. Mr. Kozo Hayashishita- Team Member, WASMIP-II.
- 7. Deepak Subedi- National Staff, WASMIP-II.

- 1. Regarding the training in Japan in December 2017, Mr. Kabindra mentioned that the participants for working level training should be made clear.
- 2. Kozo San explained that the working level such as engineers, managers and other trainers will be the prospective candidates for training in Japan.
- 3. Mr. Kabindra mentioned that if possible it is better to set a criteria for the selection of candidates for the working level training in Japan.
- 4. Mr. Kabindra appreciated the training materials to be used in the first ToT training (trial and error) to be held in NWSSTC on 29<sup>th</sup> March. Mr. Narayan (Water Quality Section Chief) requested to conduct the same lecture in DWSS for other staff.
- 5. Regarding the target WUSCs, 6 out of 56 WUSCs currently have no operating water supply facilities (the under construction projects). Mr. Kabindra suggested that these WUSCs need to be replaced and /or removed from the target.
- 6. Mr. Kamal informed that NWSSTC has the proposed budget (5 million NPR) for WASMIP-II activities in the next fiscal year.
- 7. Mr. Kamal mentioned that it would be useful if NWSSTC has a training curriculum like the ESS (environmental and sanitation section) of DWSS has the Total Sanitation Guidelines (issued on November 29, 2016).

Date: 2017/3/31. Time: 11:00 – 11:40. Location: DWSS Building.

# Attendants:

- 1. Mr. Kamal Adhikari, Sociologist, NWSSTC, DWSS.
- 2. Mr. Satoru Oniki, Chief Advisor, WASMIP Team.
- 3. Mr. Kozo Hayashishita, Team Member, WASMIP Team
- 4. Mr. Yoshiro Chikamatsu, Team Member, WASMIP Team.
- 5. Mr. Deepak Subedi, National Staff, WASMIP Team.
- 6. Mr. Swiss Gauchan, National Staff, WASMIP Team.

# A. Meeting with Mr. Kamal Adhikari at his office:

- 1. Mr. Kamal Adhikari mentioned that he will arrange the presentation sharing workshop with his colleagues in DWSS.
- 2. Mr. Hayashishita asked about the plan of action in conducted training programme to Mr. Kamal. Mr. Kamal explained the methods and processes (for e.g. Open Defecation declaration (sanitation programme)) to WASMIP team.
- 3. Mr. Kamal mentioned that he will provide the plan of action prepared by the participants of the actual training to the WASMIP team.
- 4. Mr. Chikamatsu asked Mr. Kamal about the NWSSTC website and Mr. Kamal replied that the website is currently under construction.
- 5. Mr. Kamal said that the roster of NWSSTC expert has been already prepared but not approved from the Director General.
- 6. Mr. Kamal requested WASMIP team to provide photographs of the activities so that it can be attached in the yearly calendar published by DWSS.
- 7. Mr. Kamal mentioned that NWSSTC has TNA (Training Need Assessment) published in 2014.
- 8. Mr. Kamal mentioned that Mr. Kabindra has more information regarding act, regulations and guidelines.
- 9. Mr. Kamal mentioned that Mr. Narayan Khanal (Water quality section chief), Mr. Ram Chandra Devkota (Former DG) and Sudarshan Bhandari (CRMSO chief) are the focal person on preparing directives and guidelines of drinking water supply.
- 10. Mr. Kamal said that he will provide the feedback and suggestion of presentation materials.

Date: 2017/04/02

Time: 11:00-11:45 Venue: DWSS Building

# Attendants:

- 1. Mr. Arun Simkhada Chief of Planning Section, DWSS.
- 2. Mr.Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr.Kozo Hayashishita- Team Member, WASMIP-II
- 4. Mr. Yoshio Chikamatsu- Team Member, WASMIP-II
- 5. Mr. Daisuke Yashiro- Team Member, WASMIP-II
- 6. Deepak Subedi-National Staff, WASMIP-II

- Mr. Arun Simkhada mentioned that it is alright if WASMIP team submits the copies of progress report-I to Mr. Arun in the absence of Mr. Kabindra Bikram Karki (Project Manager of WASMIP-II).
- 2. Mr. Arun mentioned that he will confirm the schedule of the Director General for the 3<sup>rd</sup> JPCM (Joint Project Coordination Meeting).
- 3. Mr. Chikamatsu explained the ideas of conducting business plan training for WUSCs.
- 4. Mr. Hayashishita explained the first trial ToT (Lecture on training skill enhancement) conducted at the NWSSTC, Nagarkot.
- 5. Mr. Hayashishita explained about the working level training in Japan in December 2017.
- 6. Mr. Arun mentioned that DWSS will invite the DDG and the section chiefs for the ToT lecture on April 3<sup>rd</sup> at DWSS conference hall.
- 7. Mr. Arun mentioned that Mr. Rajan Pandey (Joint Secretary in MOWSS) has more information about the umbrella act as Mr. Pandey is the chief of draft committee for the umbrella act. Mr. Rajan is absent in MoWSS till the end of April.

# **Re: Meeting with DWSS.**

Date: 2017/04/03 Time: 15:30 – 15:45 Location: DWSS Building. Attendants:

#### JICA side:

- 1. Mr. Arun Sinkhada Chief, Planning section DWSS.
- 2. Mr. Satoru Oniki- Chief Adviser, WASMIP-II.
- 3. Deepak Subedi- National Staff, WASMIP-II.

- 1. Mr. Arun Simkhada mentioned the following things :
  - Mr. Simkhada agreed to remove 'scheme II WUSC' of Ramechhap district and 'Rajapur WUSC' of Bardiya district from the list of target WUSCs.
  - Mr. Simkhada will contact the Chief of Morang WSSDO and ask him the construction status of Keraun and Rajghat WUSC which are included in a target list but these WUSCs are still in construction and are not in operation.
  - Mr. Simkhada suggested to replace or remove the under construction WUSCs that are included in the target WUSCs list.
  - Mr. Oniki suggested that DWSS does not need to keep 56 number as target WUSCs. Improper WUSCs (under construction) will be removed from the target WUSC list. Before judging to remove the improper WUSCs, DWSS needs to confirm the status of constructions such as completion year.
  - Mr. Simkhada mentioned that he will try to allocate enough budget for the under construction projects so that construction will be finished soon.

## Re: Meeting with DWSS (PCM).

Date: 2017/04/9

Time: 11:00-11:45 Venue: DWSS Building

# Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC, DWSS.
- 2. Mr. Arun Simkhada Chief of Planning Section, DWSS.
- 3. Ms. Jyoti Tamang- Engineer, DWSS.
- 4. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 5. Mr. Kozo Hayashishita- Team Member, WASMIP-II
- 6. Mr. Yoshio Chikamatsu- Team Member, WASMIP-II
- 7. Mr. Daisuke Yashiro- Team Member, WASMIP-II
- 8. Deepak Subedi-National Staff, WASMIP-II

- Mr. Arun Simkhada mentioned that he will try to arrange the 3rd Joint Project Coordination Meeting on 21<sup>st</sup> April.
- 2. Mr. Kozo Hayashishita mentioned that it would be nice if he receives the honest comments on trial presentation from the DWSS participants.
- 3. Mr. Hayashishita explained the schedule and training contents of the working-class training in December 2017 in Japan.
- 4. Mr. Hayashishita mentioned that it would be nice if the DWSS gives opinion on working class training course by the end of May.
- 5. Mr. Simkhada mentioned that the DWSS will verify the status of operation of under construction projects and inform the WASMIP team.
- 6. DWSS will coordinate with the WASMIP team regarding the specifications to procure the mechanical equipment and the media for an aeration tank.
- 7. Mr. Kabindra mentioned that the DWSS and WASMIP team discuss the support model to implement the Model, and recognize difficulties in implementation and revised points.

Date: 2017 April 11<sup>th</sup>.

Time: 14:00-15:00

Venue: DWSS Building

## Attendants:

- 1. Mr. Arun Simkhada- Chief of Planning Section, DWSS
- 2. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Arun Simkhada mentioned that the Director General has allocated his time for the 3<sup>rd</sup> Joint Project Coordination Meeting on 22<sup>nd</sup> April (Saturday) at 8:00 AM.
- 2. Mr. Kozo Hayashishita mentioned that he will reflect the output of trial presentation till his next assignment.
- 3. Mr. Simkhada mentioned that he will announce the allocation of WASMIP budget from the DWSS in the JPCM.
- 4. DWSS will send an official invitation letter to attend the JPCM.
- 5. Mr. Simkhada mentioned that the DWSS structure for the provincial system has not been clearly fixed yet.
- 6. Mr. Simkhada mentioned that the human resource is the main problem for the dissemination/implementation of the Support Model after the WASMIP phase I.
- 7. Mr. Simkhada will provide comments and feedbacks on the Support Model.

# Re: Meeting with DWSS (Kabindra san).

**Date:** 2017/4/12 **Time:** 15:30 – 16:20 **Location:** DWSS Building, Nepal

# Attendants:

- 1. Mr. Kabindra Bikram Karki- Chief of NWSSTC, DWSS.
- 2. Mr. Satoru Oniki- Chief Adviser, WASMIP-II
- 3. Mr. Deepak Subedi- National Staff, WASMIP-II

# Meeting conclusions:

Mr. Kabindra mentioned the followings;

- 1. Mr. Kabindra will discuss with Mr. Arun Simkhada and prepare a presentation for the third Joint Project Coordination Meeting.
- 2. DWSS is hiring 50 engineers which is still under process.
- 3. The new engineers will be assigned mostly for the construction projects.
- 4. It is better to provide ToT to the permanent staffs of DWSS. New engineers are temporary position and may quit the job anytime.
- 5. The lack of manpower is the main issue for the dissemination/ implementation of the support model of WASMIP phase I.
- 6. WSSDOs give high priority to the construction project than the management of existing WUSCs which is also one of the problems for the dissemination of the support model.
- 7. The budget allocation is always more on the construction projects. Less budget on management of existing WUSCs is also a problem.
- 8. If possible it will be good if the functions of MIT and MAT are merged so that work is reduced.
- 9. It would be easier if a report template is developed for each support team.
- 10. SDP (Sector Development Plan) has accommodated support unit in each WSSDO with adequate manpower and budget. Mr. Kabindra proposed that WASMIP team may refer to this document for revising the current support model.
- 11. MoWSS has a RWSSIP (Rural Water Supply and Sanitation Improvement Project) funded by the WHO (World Health Organization). Mr. Kabindra proposed that WASMIP team may refer to the documents for reflecting in the support model.

# Re: Meeting with DWSS on April 16<sup>th</sup>.

Date: 2016 April 16th

Time: 10:30-11:30 Venue: DWSS Building

## Attendants:

- 1. Mr. kabindra Karki( Chief of NWSSTC, DWSS)
- 2. Mr. Arun Simkhada (Chief of Planning Section, DWSS)
- 3. Mr. Kamal Adhikari (Sociologist, DWSS)
- 4. Ms. Jyoti Tamang (Planning Section, DWSS)
- 5. Satoru Oniki- Chief Advisor, WASMIP-II
- 6. Deepak Subedi-National Staff, WASMIP-II

# **Meeting Conclusions:**

# Agenda 1: Target WUSCs list

- Mr. Arun Simkhada mentioned that DWSS will replace the target WUSCs (under construction and unknown status of construction completion). DWSS can replace the target WUSCs other than that from the small town fifteen years plan document published in February, 2015.
- Mr. Kabindra Karki agreed to replace the two target WUSCs in Morang district with the new WUSCs and remove one WUSC from the list. The total target WUSCs are now 55 from 56 WUSCs.
- Ms. Jyoti will inform the Morang WSSDO about the replacement of new target WUSCs and the baseline survey for new WUSCs by the WASMIP-II.
- Mr. Kabindra suggested that the WASMIP team should avoid the election period to conduct the survey in new target WUSCs.

# Agenda 2: Comments on WASMIP-I Support Model

- Mr. Simkhada mentioned that the MIT MET and MAT are conducted unofficially by WSSDOs, but WSSDOs do not keep the record of such activities. WSSDOs provide advisory, inspection and evaluation support to WUSCs on the request basis, but not according to the WASMIP Support Model.
- Mr. Simkhada mentioned that WSSDOs focus to achieve construction projects set by the DWSS in a yearly programme. Therefore, support model has the less priority.
- Mr.Simkhada mentioned that if Support Model is included in an annual programme of WSSDO, then WSSDO gives priority and it would be more effective.
- Mr. Kabindra mentioned that the lack of human resource is the main issue to implement the WASMIP-I support model.
- Mr. Kabindra mentioned that the frequency of monitoring should be 3 times each year which match the DWSS trimester system. In a trimester system, each WSSDO has to submit a construction progress report to RMSO once in four month. Mr. Kabindra proposed the monitoring sheet and the progress report can be submitted the same time.
- Ms. Jyoti mentioned that it is better if we make one team merging MIT and MAT since both the teams has more or less same function.
- Ms. Jyoti mentioned that it would be easier if the monitoring indicators described in the support model are made simple.
- Ms. Jyoti suggested to make a reporting template simple.
- Ms. Jyoti mentioned that the formation of team has to be revised for the effective teamwork. It means that DWSS and/or WSSDOs may invite WUSC members if necessary. (Sometimes WUSC members may be difficult to manage the time)

# Agenda 3: 3<sup>rd</sup> JPCM and Others

- Mr. Kabindra will make a presentation on achievements and activities of the DWSS on the JPCM.
- DWSS agreed upon the agenda set for the third JPCM.
- Mr. Kamal mentioned that the operation guideline would be effective if it has a provision of reward.

# Re: Meeting with CRMSO on April 19<sup>th</sup>.

Date: 2016 April 19th

Time: 11:30-12:30 Venue: CRMSO Building

#### Attendants:

- 1. Mr. Sudarshan Bhandari( Chief of CRMSO, DWSS)
- 2. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Sudarshan Bhandari has to attend a workshop outside the Kathmandu so he will try his best to attend the third JPCM when the chief advisor request to attend the JPCM.
- 2. Mr. Bhandari mentioned the following comments on the Support Model :
  - > There is no specific program for supporting the WUSCs.
  - > The Support Model activities should be included in the DWSS annual program.
  - There is no allocated budget in CRMSO/WSSDOs for implementing the WASMIP support model.
  - > The following up and monitoring to WUSCs by DWSS is not satisfactory.
  - Lack of manpower may be the problem for new proposed support model (Proposed-2) in the WASMIP-II Progress Report-1.WSSDO Chief should be provided training and orientation for the successful implementation of the proposed support model.
  - Permanent staffs of DWSS should be trained so that training knowledge does not disappear.
  - There is a lack of awareness of Operation Guidelines to WSSDOs/WUSCs regarding operation and maintenance of the water supply facilities.

Date: 2017/04/22 Time: 08:00 – 11:00 Location: Ambassy hotel, Paani Pokhari

# Attendants:

# **Counterpart side:**

- 1. Mr. Tej Raj Bhatt, DG, DWSS
- 2. Mr. Sunil K. Das, DDG, DWSS
- 3. Mr. Arun Kumar Simkhada, Senior Divisional Engineer, DWSS
- 4. Mr. Kabindra Bikram Karki, Chief, NWSSTC
- 5. Mr. Kiran Daranl, Senior Divisional Engineer, DWSS
- 6. Mr. Bipin Kumar Thakur, Senior Divisional Engineer (Mechanical), DWSS
- 7. Mr. Shekhar Chandra K.C. Senior Divisional Engineer, DWSS
- 8. Ms. Meena Shrestha, Project Director, CFWSSP
- 9. Ms. Jyoti Tamang, Engineer, DWSS
- 10. Mr. Sanjaya Adhikari, Wash Government specialist, Small Town DWSS
- 11. Mr. Deepak Puri, Advisor, NJS
- 12. Mr. Divakar Prasad Dhakal. DPD, Small Town DWSS
- 13. Mr. Yoji Toriumi, Representative, JICA
- 14. Mr. Roshan Suwal, Engineer Water policy, JICA

# WASMIP side:

- 1. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 2. Mr. Yoshio Chikamatsu, Business Management Expert, WASMIP Team
- 3. Mr. Deepak Subedi, Engineer, WASMIP Team
- 4. Mr. Vivek shrestha, Engineer, WASMIP Team
- 5. Mr. Swiss Gauchan, Engineer, WASMIP Team
- 6. Ms. Trishna Khadgi, Project Secretary, WASMIP Team
- 7. Ms. Shajina Subedi, Financial Management, WASMIP

# Mr. Sunil Kumar Das's (DDG) opening remarks:

- WASMIP project has been helping in institutional strengthening of DWSS/ RMSO/ WSSDO/ WUSCs.
- DG has recently visited to one of the project in India where the smart water management was introduced.
- The smart water management model (using high technology such as smart phone, PC) along with WASMIP's support and management model may be introduced to support Sustainable Development Goals (SDG).
- New designs to be introduced for effective water supply in all the topographic levels (mountain, hilly and Terai plain) in Nepal are required.
- DWSS should introduce software components like business plan, SOPs etc. to projects out of the scope of WASMIP-II.

# Presentation: Progress Highlights of WASMIP-II (Mr. Satoru Oniki)

- > WASMIP-II progress, goals and achievements were explained to attendants.
- > WASMIP model's undergoing revision status of SOPs was explained.
- > Workshops were organized in regional level and district level for introduction of WASMIP.
- Collection/analysis of PIs and Checklists from the target projects is undergoing. Remaining WUSCs which have not submitted are 6.
- > The WASMIP budget in DWSS is going to be utilized in rehabilitation of the 13 pilot WUSCs.
- > Training modules, materials and conditions of laboratories of NWSSTC were analyzed.
- Counterpart's training in Japan has been organized in September and December 2017.

# Presentation highlights: WASMIP-II DWSS Activities/Achievements (Mr. Kabindra Bikram Karki)

- DWSS's support to WASMIP project's various endeavor and future plans to support WASMIP was revealed.
- DWSS has facilitated WASMIP in conducting base line surveys and workshops in pilot and target WUSCs.
- > DWSS also supported WASMIP during ToT training in NWSSTC and DWSS.
- > WASMIP team was allocated time to conduct workshop in regional conferences.
- DWSS has decided to rehabilitate the pilot WUSCs by procurement of equipment (chlorination unit, flow meter, valves and filter media) as per WASMIP team's suggestion and using WASMIP budget (DWSS).
- DWSS has also decided to procure water quality test kits for necessary pilot and target WUSCs and target WSSDOs.
- A new budget is proposed (FY 2074/75) to rehabilitate target WUSCs, WASMIP model implementation in RMSOs and facilitating training at NWSSTC.
- > DWSS shall revise the guidelines to support WUSCs functionally.
- > DWSS recommends merge of MET and MIT team due to lack of technical personal in WSSDO.
- > DWSS shall allocate regular budgets for WASMIP-II implementation every year.
- NWSSTC shall include training on management model of WASMIP like business plan training and SOPs.
- > DWSS needs to overcome challenges like:
  - o Insufficient trainers, monitors
  - o Incentive mechanism
  - Implementation of revised WASMIP model
  - Introduction of water supply facility design with bulk meter, valves and disinfection units.
  - o Continuity of support model
  - Surveying and rehabilitation of target WUSCs
  - $\circ$   $\;$  Implementation of WASMIP activities in DWSS annual program

# Presentation highlights: Key Issues of Support Mechanism (Mr. Yoshio Chikamatsu)

- > The support mechanism introduced in DWSS guideline 2014 is not accurately followed.
- There is no establishment of unit, no action plan, no budget etc. for implementation of support model.
- > The support from DWSS/RMSO/WSSDO to WUSC is not regular but on request.
- > WSSDO's communication with WUSC is very limited (general assembly and by telephones).
- The 2014 guideline should be revised incorporating management model, training, support model of WASMIP model and other models from various related projects.
- Different information acquired from pilot and target WUSCs to revise management model. Coordination with small town project should also be done to get necessary suggestions and information to revise management model.
- As formation of MET, MAT, MIT team may be difficult due to lack of human resources, new permanent positions may be formed at RMSO to dedicate support work within region.
- Mobilization of external resources other than RMSO staff (eg. DWSS/WSSSDO, WUSC, NGO, private) may be done to support WUSCs if the human resource is limited.
- Training programs to be organized for support staff; workshops can also be conducted at a regional level to facilitate knowledge sharing and support skills among support staff.
- A guideline should be formed consolidating ideas, lessons learned from various projects (WASMIP, STWSSP, etc.)

# **Open Discussion:**

Mr. Deepak Puri (Former DWSS Planning section chief) asked, "why DWSS is trying to combine MIT and MET into one as both MET and MIT have different functions and how will it work." Mr. Kabindra (PM of WASMIP-II, NWSSTC Chief,) explained, "due to limited human resource in WSSDOs, a single unit for the support can be formed which can function all the responsibility of MET and MIT".

Mr. Yoshio Chikamatsu (JICA Expert, WASMIP-II) suggested DWSS to form permanent positions in RMSO to dedicate support work within region and also to develop an elaborated job description for such positions.

Mr. Sanjaya Adhikari (Wash Government specialist, Small Town DWSS) from small town asked if WASMIP has categorized the target WUSCs in any manner (size, service area etc.) Mr. Kabindra suggested WASMIP team to categorize the pilot and target WUSCs into 5 catagories (point, small, medium, large, mega) as mentioned in sector development plan (SDP) to develop SOPs according to the categories.

Mr. Yoshio Chikamatsu explained that due to diversity of WUSCs (population, service area, water treatment facilities) it would be better to develop a single guideline using different models.

- Mr. Sunil Kumar Das (DDG, DWSS) asked working station (RMSO/WSSDO) of MET, MIT and MAT. Mr. Satoru Oniki (Chief Advisor, WASMIP-II) explained that the support unit to be formed in Regional level which shall look after all the monitoring and support activities within the region.
- Mr. Sunil Kumar Das also asked if the WSSDO staff were involved in base line survey of target WUSCs

Mr. Satoru Oniki explained that WSSDO chief and engineers were invited in the workshops organized for target WUSCs. So, after participations of other such workshops in future the WSSDO staffs shall surely be capacitated in carrying out base line survey by themselves.

- Mr. Arun Simkhada (DWSS Planning section chief) suggested that incentives to be provided to lower level WSSDO staff to implement WASMIP. WASMIP should also be included in annual program within WSSDO to make it more effective.
- Mr. Sunil Kumar Das further explained that the guideline shall be revised after finalization of structure in district/regional/central level (before july).
- Mr. Arun Simkhada suggested if some target projects are needed to be replaced, then some WUSCs from Far-Western region can be chosen in target project.
- Mr. Yoji Toriyumi (JICA Nepal Office, Representative) put forward his view that the preparation of a clear guideline in early stage of the project is important to accomplish the goal of the project.
- Mr. Satoru Oniki explained the project schedule to the attendants.
- > Mr. Tej Raj Bhatt (DG, DWSS) gave following suggestions to the WASMIP team:
  - Master schedule for 5 years and milestones to be achieved each year should be prepared and shared.
  - $\circ$   $\;$  The topics discussed in last JPCM should be reviewed in next JPCM.
  - In next JPCM, the comments and feedbacks in the 2<sup>nd</sup> JPCM should be followed-up, the WASMIP-II progress will be reported and get suggestions for WASMIP progress from DWSS.
  - The support and management models should be revised and implementation methodology should be realized also to support sustainable development goal (SDG).
  - $\circ$   $\;$  Good points of WASMIP-I should be followed and included in WASMIP-II.
  - Launch annual schedule of programme and activities to WUSCs for district office which includes: i.e. fixed date for collecting the documents from WUSCs, date for district level meeting for the WUSCs and national level meeting (liaison conference) of WUSCs etc. There should be database of WUSC prepared by WSSDO.
  - Water Safety Plan should be included in WASMIP model.
  - A comprehensive guideline which can be relevant to all kinds of project (WASMIP, ISSAU, RWSSIP-2 etc.) should be prepared and easily understandable and implemented.
  - A master plan for 744 Local level government about awareness on water reach, quality of water, functionality of the WUSC at service level is going to conducted by DWSS in next year.

- If applicable JICA provide hardware support to the WUSCs and development of automation part for smart water management model in the future too.
- DWSS is always ready to implement and use this WASMIP models as soon as possible in all the WUSCs including the WUSCs supported by the ADB and World Bank too for proper functionality.

# Minutes of 3<sup>rd</sup> Joint Project Coordination Meeting (JPCM)

for

# The Capacity Development Project for Improvement of Water Supply

# Management in Semi-Urban Areas in Nepal (WASMIP-II)

Date:	22 April, 2017
Time:	From 08:00am to 11:00am
Venue:	Embassy Hotel, Paani Pokhari

#### Attendants:

- 1. Mr. Tej Raj Bhatt, DG, DWSS
- 2. Mr. Sunil Kumar Das, DDG, DWSS
- 3. Mr. Kabindra Bikram Karki, Chief, NWSSTC/WASMIP-II Project Manager
- 4. Mr. Arun Kumar Simkhada, Senior Divisional Engineer, DWSS/WASMIP-II Project Coordinator
- 5. Mr. Kiran Darnal, Senior Divisional Engineer, DWSS
- 6. Mr. Bipin Kumar Thakur, Senior Divisional Engineer (Mechanical), DWSS
- 7. Mr. Shekhar Chandra K.C. Senior Divisional Engineer, DWSS
- 8. Ms. Meena Shrestha, Project Director, CFWSSP
- 9. Ms. Jyoti Tamang, Engineer, DWSS
- 10. Mr. Sanjaya Adhikari, Wash Government Specialist, Small Town DWSS
- 11. Mr. Deepak Puri, Former Planning Section Chief, Advisor for WASMIP-II
- 12. Mr. Divakar Prasad Dhakal, Deputy Project Director, Small Town DWSS
- 13. Mr. Yoji Toriumi, Representative, JICA
- 14. Mr. Roshan Suwal, Engineer Water policy, JICA Nepal Office
- 15. Mr. Satoru Oniki, Chief Advisor, WASMIP-II
- 16. Mr. Yoshio Chikamatsu, Business & Financial Management Expert, WASMIP-II
- 17. Mr. Deepak Subedi, Engineer, WASMIP-II
- 18. Mr. Vivek Shrestha, Engineer, WASMIP-II
- 19. Mr. Swiss Gauchan, Engineer, WASMIP-II
- 20. Ms. Trishna Khadgi, Project Secretary, WASMIP-II
- 21. Ms. Shajina Subedi, Financial Management, WASMIP-II

#### **Proceedings:**

#### 1. Opening Remarks

The meeting was opened by the remarks of Mr. Tel Raj Bhatt, Director General of DWSS, who pointed out that WASMIP-II has helped institutional strengthening of DWSS and its subordinate offices as well as WUSC through development of support and management models. He shared his experience on recent visit to India where he witnessed the introduction of "Smart Water Management" leveraged by high technology such as smartphones/PCs, and he suggested that the Department should help and support for better water management and Sustainable Development Goals (SDG) by introducing Smart Water Management in Nepal, where most of over 40,000 water management schemes at all topographic level may adopt this concept for effective water supply.

## 2. Progress Highlights of WASMIP-II

Mr. Satoru Oniki, Chief Advisor of WASMIP-II, highlighted the key progress of WASMIP-II to date. He explained the progress of WASMIP model, which was introduced at the regional workshops and is currently under revision according to the result of baseline survey. Baseline survey was extended to target 55 WUSCs for situation analysis and collect performance indicators and checklist. The other points he mentioned included: DWSS's budget allocation for rehabilitation work at 13 pilot WUSCs, situation analysis of NWSSTC, and Counterpart training which has been scheduled in September and December 2017 in Japan.

# 3. WASMIP-II DWSS Activities and Achievements

Mr. Kabindra Bikram Karki, the WASMIP-II Project Manager, shared the participants with the key activities and achievements of DWSS side including: support to WASMIP-II in the course of baseline survey, regional conferences and trial session of Training of Trainers. He also pointed out some feedback from DWSS to WASMIP-II to update the WASMIP model, including development of more efficient support teams, regular budget meeting, implementation of training activities, and embedding incentive mechanism. He explained that DWSS counterpart budget would be primarily used for rehabilitation work at pilot WUSCs such as chlorination unit, flow meter, valves and filter media, and procurement of water quality test for pilot and target WUSCs. The budget in next fiscal year (BS2074/75) has been proposed to rehabilitate target WUSCs, implement WASMIP at RMSOs, and facilitate training at NWSSTC. He concluded his presentation by addressing key challenges to overcome including: increasing human resources for training and support activities, embedding incentive mechanism, ensuring implementation and continuity of support model, introduction of water supply facilities with bulk meter, and implementation of WASMIP activities in DWSS annual program.

# 4. Key Issues of Support Mechanism

Mr. Yoshio Chikamatsu, Business and Financial Management Expert of WASMIP-II, highlighted the key issues of support mechanism. He said that the support provided to WUSC is still limited on request basis, while the guideline published in 2014 stipulates the regular-based support from central, regional and district level. He pointed out some countermeasures to implement sustainable support mechanism including: update of management model by incorporating diverse cases from increased number of pilot and target WUSCs, strengthening the support capacity at RMSO by establishing permanent position dedicated for support activities and mobilizing external resources other than RMSO, support skill development, guideline update to consolidate or harmonize diverse models and practices in a proposed platform consisting of stakeholders.

# 5. Open Discussions and Q&A

With regard to support model, Ms. Jyoti Tamang responded to the question asked by Mr. Satoru Oniki that the main barrier to implement support model developed in the precedent phase was the extra requirement of manpower in comparison with available resources, and suggested to review the composition of support unit and frequency of support activities. In response to Mr. Deepak Puri, who asked how the teams proposed in WASMIP model may be combined, Mr. Kabindra Bikram Karki proposed a single support system which can perform all functions and Mr. Yoshio Chikamatsu suggested to elaborate job description of the permanent positions dedicated for support activities to attain the idea of a single support system.

Mr. Sanjaya Adhikari asked about categorization of target WUSC. Mr. Kabindra Bikram Karki suggested to categorize the service providers in terms of population as mentioned in Sector Development Plan (SDP) to develop SOPs. Mr. Yoshio Chikamatsu added that the proposed guideline should accommodate not a single but various models according to the categorization.

With regard to support establishment at regional/district level, Mr. Satoru Oniki responded to the question from Mr. Sunil Kumar Das that the regional support unit would be formed to look after all the monitoring and support activities within the region. Mr. Sunil Kumar Das also asked if WSSDO staff were involved in baseline survey, and Mr. Satoru Oniki responded that WSSDO chief and engineers were invited to workshops organized for target WUSCs.

With regard to the update of guideline, Mr. Arun Simkhada suggested that incentives be provided to lower level WSSDO staff to implement the guideline. Mr. Sunil Kumar Das also said that the guideline should be revised after finalization of restructuring at central, regional and district level, which may be clarified by July. Mr. Yoji Toriyumi said that the preparation of a clear guideline at an early stage of the project is important to accomplish the goal of the project.

#### 6. Plan of WASMIP-II

Mr. Satoru Oniki shared the project schedule until December, including rehabilitation work, update of WASMIP model, and training in Japan.

#### 7. Closing Remarks

Mr. Tej Raj Bhatt concluded the meeting with the following suggestions to WASMIP-II and other participants:

With regard to project management, Mr. Tej Raj Bhatt requested a "Master Schedule" to detail the activities and milestones in five year. He added that JPCM should be organized in a way to respond to the key issues identified in the precedent meetings with the action taken and achievement. In next JPCM, the comments and feedbacks in this JPCM should be followed-up, the WASMIP-II progress should be reported and get suggestions for WASMIP progress from DWSS.

Mr. Tej Raj Bhatt commented on support and management models that they should be revised in line with Sustainable Development Goals (SDG). He also suggested to incorporate Water Safety Plan (WSP) and the guideline should be comprehensive to cover the support functions for all kinds of projects and sophisticated in terms of structure and presentation consisting of diagrams and flowchart for better understanding.

Mr. Tej Raj Bhatt suggested to prepare calendar that has all the important schemes and dated for data collection time for district level meeting for the WUSC and national level meeting of WUSC. There should be database of WUSC by WSSDO in which there should be list of getting the management model, support model and smart water management.

Mr. Tej Raj Bhatt explained that a master plan for 744 local government unit about awareness on water reach, quality of water, functionality of the WUSC at service level is going to conducted by DWSS in next year.

Mr. Tej Raj Bhatt suggested that JICA consider to provide hardware support and automation part for Smart Management Model to WUSCs.

Mr. Tej Raj Bhatt concluded that DWSS is always ready to implement and use this WASMIP models as soon as possible in all the WUSCs including the WUSCs supported by the ADB and World Bank too for proper functionality.

# MINUTES OF MEETINGS FOR THE JOINT PROJECT COORDINATON MEETING ON THE CAPACITY DEVELOPMENT PROJECT FOR THE IMPROVEMENT OF WATER SUPPLY MANAGEMENT IN SEMI-URBAN AREAS IN NEPAL

The Third Joint Project Coordination Meeting (hereinafter referred to as "JPCM") on "The Capacity Development Project for the Improvement of Water Supply Management in Semi-Urban Areas in Nepal" (hereinafter referred to as "the Project") was held on the 22<sup>nd</sup> April, 2017 with both the DWSS and WASMIP Team sides

As a result of the discussion in the JPCM, both the DWSS and WASMIP Team sides agreed the actions to be taken by the both sides and related stakeholders .

Kathmandu 28th April, 2017

Satoru Oniki JICA Expert, Chief Advisor The Capacity Development Project for the Improvement of Water Supply Management in Semi-Urban Area in Nepal Mr. Kabindra Bikram Karki Project Manager of WASMIP-II Department of Water Supply and Sewerage

# **Re: Meeting with DWSS.**

Date: 2017/04/25

Time: 11:00-12:00 Venue: CRMSO Building

# Attendants:

- 1. Mr. Sudarshan Bhandari- Regional Chief CRMSO, DWSS.
- 2. Mr.Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Deepak Subedi-National Staff, WASMIP-II

- 1. Chief Advisor explained the 3<sup>rd</sup> JPCM discussion with the draft memorandum to Mr. Bhandari.
- 2. He understood the discussion points and suggested that action plan should be prepared for the effective implementation of the Operational Guideline.
- 3. Mr. Sudarshan Bhandari mentioned that the DWSS has proposed 25 WSSDOs in a new federal system but it is not sure if it will be approved.
- 4. Mr. Bhandari mentioned that there is likely to be one central DWSS and 7 federal DWSS. WSSDOs will be converted into a section of local bodies in a federal system.
- 5. Mr. Bhandari mentioned that there should be a specific program to monitor WUSCs. Although, the Operational Guideline has a provision but DWSS has no such program in an annual program. Currently, RMSOs don't have specific budget and program to monitor WUSCs based on the Operational Guideline.
- 6. RMSO has to submit a budget program and activities within 15 days from the end of fiscal year.
- 7. Mr. Bhandari mentioned that it would be easy to assign 1 person for 3 duties (Water Treatment Plant, water quality and business planning) in a proposed-2 support model described in the WASMIP Progress Report-1.
- 8. Jyoti ji explained that budget discussion/allocation procedures.
  - 1) In April/May, DWSS has a budget discussion with MoWSS.
  - 2) In May, MoWSS submits the proposed budget to NPC (National Planning Commission).
  - 3) NPC may approve the budget. NPC sometimes holds the approval of budgets.
  - 4) In case of NPR 150 lakhs (DWSS budget), it had not approved yet till January 2017. Therefore, DWSS went through the procedure to NPC to use the budget for equipment procurement.

Date: 2017 May 24<sup>th</sup>

Time: 11:00-11:30 Venue: DWSS Building

# Attendants:

- 1. Mr. kabindra Bikram Karki- Chief of NWSSTC, DWSS
- 2. Ms. Jyoti Tamang Engineer, DWSS
- 3. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Kabindra has not reviewed the draft SOPs (summery version: WTP, Distribution Facility, Water Meter) yet. He will review and provide some comments and feedbacks by next week.
- Water Quality Section is also reviewing the SOP on Water Treatment Plant which will be published in Nepali version very soon. WASMIP Team got the draft SOP from the Water Quality Section.
- 3. WASMIP-II may consider the Water Quality Section SOP to avoid duplication.
- 4. Mr. Kabindra will discuss with other section chiefs of DWSS and inform WASMIP about the performance award mentioned in a guideline.
- 5. Mr. Kabindra has asked NWSC and KUKL to provide the list of candidate trainers. He will provide the candidate trainers list after he get information from NWSC and KUKL.
- 6. Ms. Jyoti will submit the BOQ of flow meters and water quality test kits and discuss with Arun san Simkhada for the procurement process.

## Re: Meeting with DWSS.

Date: 2017 August 17<sup>th</sup>.

Time: 16:00-17:00

Venue: DWSS Building

## Attendants:

- 1. Mr. Arun Simkhada Project Coordinator of WASMIP-II, Chief of Planning Section, DWSS
- 2. Mrs. Jyoti Tamang Engineer, DWSS
- 3. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 4. Mr. Yusaku Numajiri Team Member, WASMIP-II
- 5. Mr. Deepak Subedi National Staff, WASMIP-II

- The Chief Advisor of WASMIP explained the importance of meeting with the trainees in Japan. WASMIP will provide a brief introduction about the project and the training outline to the officers of MoWSS and DWSS.
- 2. Mr. Arun Simkhada mentioned that he will try to arrange the meeting in next week with Joint Secretaries and Director General.
- 3. The Chief Advisor mentioned that WASMIP office has no electricity power for five days because the contractor damage the power line inside the DWSS premise. WASMIP office works is very much affected due to power failure. The Chief Advisor requested DWSS to solve the issue as soon as possible.
- 4. Ms. Jyoti Tamang mentioned that she will try to solve the power failure problem in WASMIP office in Water Quality Section building.
- Mr. Arun Simkkhada mentioned that DWSS has procured all the equipment (water meter, valves, water quality test kit, chlorination unit and electrical devices) and supplied to the 13 WUSCs. DWSS has spent the allocated budget (14.9 million) for WASMIP in the last fiscal year.
- Mr. Simkhada mentioned that DWSS has allocated budget for WASMIP for this fiscal year, 55 million for rehabilitation works to the target WUSCs, 3.5 million for four RMSOs, 2.8 million for Far Western RMSO and 2.5 million for NWSSTC.
- 7. The Chief Advisor confirmed that if CRMSO has submitted the program (activities) of WASMIP budget to DWSS. Mr.Simkhada mentioned that Central RMSO will submit the program of budget in the August, 2017.
- 8. Mr. Numajiri explained the cost estimation for the procurement of the filter media for Gauradaha and Mangadh WUSC. Gauradaha and Mangadh WUSCs were handed over by the Japanese Grant Aid project. The manufacturer (Hitachi) doesn't guarantee the performance of the iron removal if the filter media is used any other (Indian, Chinese or local products) than the original media.
- 9. Mr. Simkhada agrees that DWSS can use the WASMIP budget of DWSS to procure the original filter media (Japanese Product).

10. The Chief Advisor mentioned that it is high priority to explain the revised PDM (draft) to the counterparts during his stay in Nepal. The Chief Advisor requested the counterparts (Project Manager, Project Coordinator and related engineers) to participate in the meeting to get a consensus on a revised PDM (Draft).

## **Re: Meeting with DWSS.**

Date: 2017 August 18<sup>th</sup>.

Time: 11:00-12:30

Venue: DWSS Building

## Attendants:

- 1. Mr. Kabindra Bikram Karki- Project Manager of WASMIP-II, Chief of NWSSTC, DWSS
- 2. Mr. Arun Simkhada- Project Coordinator of WASMIP-II, Chief of Planning Section, DWSS
- 3. Mrs. Jyoti Tamang- Engineer, DWSS
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Yusaku Numajiri- Team Member, WASMIP-II
- 6. Mr. Deepak Subedi-National Staff, WASMIP-II

# Meeting Conclusions:

# 1. Revised WASMIP-II scope and activities

- 1. The Chief Advisor of WASMIP-II explained the revised purpose and scope of the project to the counterparts (Project manager and project Coordinator).
- The Chief Advisor explained about two main points in WASMIP-II. One is the enhancement of NWSSTC (capacity development) and the other is an establishment of support mechanism to WUSCs. The establishment of support mechanism is not appropriate time because of the restructuring of the local bodies and provincial reformations.
- 3. The chief Advisor explained that the project will focus mainly on the enhancement of NWSSTC and at the same time collects information about the status of provincial and local bodies.
- 4. Mr. Kabindra and Arun Simkhada mentioned that NWSSTC is the only one training center in Nepal so it is a very good idea to enhance the NWSSTC.
- 5. Mr. Kabindra mentioned that within six months the structure of DWSS (Central and Provincial DWSS) and roles / functions of local bodies may be clear. DWSS and WASMIP can consider to work on the establishment of the support mechanism after six months.
- 6. Mr. Kabindra mentioned that WSSDO should be included in capacity development. After the restructuring, WSSDOs staff will be the key person working for water supply systems.
- The Chief Advisor explained that approximately 50% of candidates for the ToT (Training of Trainers) list provided by DWSS are from WSSDOs. These WSSDOs staff will participate in training for the ToT in NWSSTC so the staffs are included in a capacity development training program.
- 8. The Chief Advisor mentioned that the scope of works (activities) in WASMIP-II is reduced so the duration of project is also reduced.
- 9. Mr. Kabindra mentioned that it is too early to decide to reduce the project duration.
- 10. The Chief Advisor mentioned that DWSS and WASMIP continuously discuss the revised PDM to get consensus and work together with harmony.

#### Expert's purpose and activities and others

- 11. Mr. Numajiri explained the tasks and purpose of his visit (updating SOPs such as WTP, WQ, WDF, WM).
- 12. Mr. Numajiri explained the differences between WHO's SOP and WASMIP SOP.
- 13. WHO's SOP allows 50 NTC turbidity in an inlet of the slow sand filter whereas WASMIP's SOP allows maximum 30 NTU.
- 14. Mr. Kabindra advised that WASMIP and Water Quality Section of DWSS need to discuss the difference and decide on the turbidity parameter.
- 15. The Chief Advisor explained the idea of dispatching the mobile test kits and electrical devices which DWSS purchased last fiscal year to the target WUSCs with holding the lectures at NWSSTC. Target WUSCs are 55 and participants (water quality and operator) may be about 100 people.
- 16. Mr. Kabindra mentioned that the training will be effective to 25-30 participants at a time. Training for large number of participants may be ineffective.
- 17. Mr. Arun Simkhada mentioned that budget and programs (e.g.; WSP, small rehabilitation etc.) has dispatched to local bodies by the DWSS.

Date: 2017 August 20<sup>th</sup>.

Time: 11:00-12:00

Venue: DWSS Building

## Attendants:

- 1. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC, DWSS
- 2. Mr. Arun Simkhada- Project Coordinator, Chief of Planning Section, DWSS
- 3. Ms. Jyoti Tamang- Engineer, DWSS
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Yusaku Numajiri- Team Member, WASMIP-II
- 6. Mr. Deepak Subedi-National Staff, WASMIP-II

# Meeting Conclusions:

# 1. Activities on Revised PDM (draft)

- 1. The Chief Advisor of WASMIP-II explained the revised activities of the project to the counterparts (Project Manager and Project Coordinator).
- 2. The Chief Advisor explained the responsible institution to carry out the activities mentioned in the revised PDM (draft).
- 3. The Chief Advisor mentioned that WASMIP will prepare the master schedule of the activities according to the revised PDM (draft). NWSTC can prepare the training schedule based on that master schedule.
- 4. Mr. Kabindra and Mr. Simkhada has no objection in the activities mentioned in the revised PDM (Draft). The counterparts basically agreed to implement the activities of the revised PDM (Draft).
- 5. The Chief Advisor mentioned that DWSS needs to appoint responsible staffs for determining the scope of works and preparing the guideline of training of NWSSTC.
- 6. Mr. Kabindra Karki and Mr. Arun Simkhada mentioned that DWSS will appoint staffs for procurement survey, rehabilitation works and training guideline preparation.
- 7. The Chief Advisor explained the status of candidates from WSSDOs in the ToT (Training of Trainers) list provided by the DWSS.
- 8. Mr. Kabindra mentioned that the number of candidates may increase in the list. DWSS will provide the revised ToT list to WASMIP.
- 9. The Chief Advisor mentioned that WASMIP will prepare the questionnaire sheet for the capacity assessment of candidate trainers. DWSS will coordinate in filling up the questionnaire sheet.
- 10. Mr. kabindra requested to change the expression as "NWSSTC conducts ToT of management model for internal officials (DWSS) and external sources" in activities 3.4.The current expression is "NWSSTC conducts ToT of management model for training institution officials and other teaching resources".

# 2. Others

- 11. Mr. Numajiri explained the purpose and need of safety devices to the chlorination equipment operator. Mr. Numajiri mentioned that safety wears such as safety goggles, mask, gloves etc. should be procured and provided to the WUSCs.
- 12. Mr. Numajiri mentioned that insulation gloves and hand tools should be procured and provided to the electrical operators of WUSCs.
- 13. Mr. Kabindra mentioned that NWSSTC has a high priority on safety. NWSSTC provides safety wears to the trainees during field works.
- 14. Mr. Kabindra mentioned that it is a good idea to provide safety wears to the target WUSCs so that other WUSCs can learn and follow the practice in their respective WUSCs.
- 15. Mr. Arun Simkhada mentioned that he will try to arrange a briefing meeting about training in Japan with the Joint Secretaries and Director General within this week. The meeting may be held on August 25<sup>th</sup>, Friday.
- 16. WASMIP team contacted CRMSO chief to discuss about the allocated budget for the WASMIP in the CRMSO. At the moment, the Regional Chief is out of Kathmandu valley for a flood relief program. WASMIP expects to visit him during the Japanese experts stay in Nepal.

Date: 2017 August 20<sup>th</sup>.

Time: 11:00-12:00

Venue: DWSS Building

## Attendants:

- 1. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC, DWSS
- 2. Mr. Arun Simkhada- Project Coordinator, Chief of Planning Section, DWSS
- 3. Ms. Jyoti Tamang- Engineer, DWSS
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Yusaku Numajiri- Team Member, WASMIP-II
- 6. Mr. Deepak Subedi-National Staff, WASMIP-II

# Meeting Conclusions:

# 1. Activities on Revised PDM (draft)

- 1. The Chief Advisor of WASMIP-II explained the revised activities of the project to the counterparts (Project Manager and Project Coordinator).
- 2. The Chief Advisor explained the responsible institution to carry out the activities mentioned in the revised PDM (draft).
- 3. The Chief Advisor mentioned that WASMIP will prepare the master schedule of the activities according to the revised PDM (draft). NWSTC can prepare the training schedule based on that master schedule.
- 4. Mr. Kabindra and Mr. Simkhada has no objection in the activities mentioned in the revised PDM (Draft). The counterparts basically agreed to implement the activities of the revised PDM (Draft).
- 5. The Chief Advisor mentioned that DWSS needs to appoint responsible staffs for determining the scope of works and preparing the guideline of training of NWSSTC.
- 6. Mr. Kabindra Karki and Mr. Arun Simkhada mentioned that DWSS will appoint staffs for procurement survey, rehabilitation works and training guideline preparation.
- 7. The Chief Advisor explained the status of candidates from WSSDOs in the ToT (Training of Trainers) list provided by the DWSS.
- 8. Mr. Kabindra mentioned that the number of candidates may increase in the list. DWSS will provide the revised ToT list to WASMIP.
- 9. The Chief Advisor mentioned that WASMIP will prepare the questionnaire sheet for the capacity assessment of candidate trainers. DWSS will coordinate in filling up the questionnaire sheet.
- 10. Mr. kabindra requested to change the expression as "NWSSTC conducts ToT of management model for internal officials (DWSS) and external sources" in activities 3.4.The current expression is "NWSSTC conducts ToT of management model for training institution officials and other teaching resources".

# 2. Others

- 11. Mr. Numajiri explained the purpose and need of safety devices to the chlorination equipment operator. Mr. Numajiri mentioned that safety wears such as safety goggles, mask, gloves etc. should be procured and provided to the WUSCs.
- 12. Mr. Numajiri mentioned that insulation gloves and hand tools should be procured and provided to the electrical operators of WUSCs.
- 13. Mr. Kabindra mentioned that NWSSTC has a high priority on safety. NWSSTC provides safety wears to the trainees during field works.
- 14. Mr. Kabindra mentioned that it is a good idea to provide safety wears to the target WUSCs so that other WUSCs can learn and follow the practice in their respective WUSCs.
- 15. Mr. Arun Simkhada mentioned that he will try to arrange a briefing meeting about training in Japan with the Joint Secretaries and Director General within this week. The meeting may be held on August 25<sup>th</sup>, Friday.
- 16. WASMIP team contacted CRMSO chief to discuss about the allocated budget for the WASMIP in the CRMSO. At the moment, the Regional Chief is out of Kathmandu valley for a flood relief program. WASMIP expects to visit him during the Japanese experts stay in Nepal.

Date: 2017 August 21<sup>st</sup>.

Time: 15:30-16:30

Venue: DWSS Building

## Attendants:

- 1. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 2. Mr. Arun Simkhada- Project Coordinator, Chief of Planning Section.
- 3. Mr. Kamal Adhikari- Sociologist, DWSS
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Yusaku Numajiri- Team Member, WASMIP-II
- 6. Mr. Deepak Subedi-National Staff, WASMIP-II

# Meeting Conclusions:

# I. Revised PDM (Draft)

- The Chief Advisor mentioned that in a briefing meeting with the Joint Secretaries (Trainees for training in Japan) it is better that Project Manager and Project Coordinator explain about WASMIP-II and the Chief Advisor will explain about training in Japan.
- 2. Mr. Kabindra and Mr. Arun agreed to explain the outline and progress of WASMIP-II to the Joint Secretaries.
- 3. Mr. Arun Simkhada mentioned that he will provide the official documents of WASMIP-II to the Joint Secretaries for their better understanding of the project.
- 4. The Chief Advisor explained that, this time project purpose and activities are revised because of ongoing state restructuring process in Nepal. Project Manager and Chief Advisor consider how to explain the revised project in the meeting.

# **II. KUKL Collaboration**

- 5. The Chief Advisor informed DWSS of the meeting of with the Japanese Consultants for KUKL technical cooperation project.
- 6. The Chief Advisor confirmed DWSS if KUKL staffs can participate in the NWSSTC trainings conducted by DWSS.
- 7. Mr. Kabindra mentioned that KUKL staffs can participate in the NWSSTC training facilities.
- 8. Mr. Kabindra mentioned that KUKL and NWSSTC can collaborate for the training and both organizations (NWSSTC and KUKL) can have a MoU and work together.
- 9. Mr. Kamal Adhikari mentioned that it is better to have a meeting and discuss the need assessment of both organizations (NWSSTC and KUKL) and collaborate for the better outcome.
- 10. Mr. Kamal mentioned that KUKL has its own well equipped water quality test laboratory. NWSSTC can invite KUKL staffs as a resource person (Trainer).

## III. Others

- 11. Mr. Numajiri suggested about the procurement of filter media and necessary safety equipment for the WUSCs.
- 12. Mr. Arun mentioned that the cost of filter media is higher than expected. DWSS has to spend budget for the rehabilitation of 55 WUSCs. Mr. Arun agrees to procure 1set of filter media each for Gauradaha and Mangadh WUSC.
- 13. The Chief Advisor of WASMIP-II explained about the power recovery in the WASMIP office. The Chief Advisor explained about the malfunction of copier machine and water dispenser due to high voltage supply in WASMIP office included in the water quality section building.

Date: 2017 August 22<sup>nd</sup>.

Time: 10:15-10:45

Venue: DWSS Building

## Attendants:

- 1. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 2. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II explained the situation of the activities of the revised PDM (Draft) again to Mr. Kabindra (Project Manager).
- The Chief Advisor mentioned that while the revised project will be conducted, simultaneously, WASMIP will continue to collect information and to monitor the ongoing states restructuring process of Nepal.
- 3. Mr. Kabindra mentioned that he has understood the situation and the activities of the revised PDM (Draft).
- 4. Mr. Kabindra suggested to discuss with Deputy Director General for the final consensus between DWSS and WASMIP-II. Mr. Kabindra and Mr. Arun will arrange and attend the meeting.

## **Re: Meeting with DWSS.**

Date: 2017 August 23<sup>rd</sup>.

Time: 15:30-17:00

Venue: DWSS Building

## Attendants:

- 1. Mr. Tej Raj Bhatta- Director General, DWSS.
- 2. Mr. Sunil Kumar Das- Deputy Director General, DWSS.
- 3. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II

- The Chief Advisor of WASMIP-II explained the revised PDM (Draft) to Deputy Director General (DDG). The Chief Advisor explained that WASMIP will focus on enhancement of DWSS/NWSSTC for WUSCs support and simultaneously collects information and monitor status to state restructuring process in Nepal.
- DDG mentioned that discussion on restructuring of RMSOs, WSSDOs, and local bodies is going on. DDG mentioned that the role of local bodies will be prime in water supply sector in coming future. So, the local bodies need to be strengthen and enhanced through capacity building program.
- 3. The Chief Advisor mentioned that some WSSDO staffs as a trainer candidate are accommodated in a Tot in NWSSTC.
- 4. The Chief Advisor explained that according to the revised PDM (Draft) the scope of works is reduced so the duration of project is also reduced.
- DDG mentioned that water supply sector policy and sector regulations are under preparation in a rapid speed. DDG mentioned that by next April scenario of structure will be clear. So, it is early to revise the PDM and scope of works. WASMIP-II can start setting up the support mechanism by April 2018.
- 6. DDG mentioned that, he principally agrees on focusing DWSS/NWSSTC enhancement now and to collect information about the state restructuring process.DWSS has to follow the government procedures and has to justify the change of scope of works and project duration of the project.
- 7. Mr. Kabindra explained the revised PDM (Draft) to the Director General (DG) in Nepali.
- DG mentioned that regarding the restructure of the organization there will be no major changes. Restructuring will be completed by April 2018, so it is better to follow the previous scope of works.
- 9. DG mentioned that WASMIP-II and ISSAU should work in harmony. ISSAU implements the WASMIP works all over Nepal.
- 10. DWSS (DDG, Project Manager, and Project Coordinator) and WASMIP continue to discuss on project scope and duration on 24<sup>th</sup> August.

#### **Re: Meeting with DWSS.**

Date: 2017 August 24<sup>th</sup>.

Time: 11:30-12:30

Venue: DWSS Building

#### Attendants:

- 1. Mr. Sunil Kumar Das- Deputy Director General, DWSS.
- 2. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 3. Mr. Kamal Adhikari- Sociologist, DWSS.
- 4. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II

- The Chief Advisor of WASMIP-II explained about the change of project scope of works and duration to the Deputy Director General (DDG). The Chief Advisor mentioned that although it is expected by DWSS that the state restructuring process and formulation of acts will be finished by April 2018, it is still uncertain because of the unknown factors. That is why this time the organizations (DWSS, NWSSTC) that are under the less influence of restructuring processes is selected as a target group in the scope of the work. WSSDO staffs are also accommodated in a ToT (Training of Trainers) in NWSSTC.
- The Chief Advisor mentioned that WASMIP-II will continuously collect information about the restructuring process. The rules, regulations, acts and human resources are very essential factors to set up the support mechanism, WASMIP-II will collect information of progress of this factors. Meanwhile, WASMIP-II will focus on enhancement of the target groups (DWSS, NWSSTC).
- DDG mentioned that the revised PDM (draft) seems to be practical and appreciable but DWSS needs to discuss it internally and make a decision on the revision of project scope of works and project duration.
- DDG mentioned that DWSS has to justify reasons to the revised project scope of works and duration to get consensus and approval on revised PDM (Draft) from MoWSS (Ministry of Water Supply and Sanitation).
- 5. <u>DDG mentioned that some documents has to be prepared to justify the need of new project</u> <u>purpose and its outputs. DDG mentioned that documents has to be prepared to justify the</u> <u>difficulties on implementing the current project purpose and activities.</u>
- 6. DDG mentioned that in a project purpose of the revised PDM (draft) RMSOs and WSSDOs are not mentioned. RMSOs and WSSDOs are key organizations of DWSS for project implementation, monitoring and supervision. These organizations cannot be ignored.
- 7. The Chief Advisor mentioned that due to the lack of acts and regulations, these organizations are unclear now. WASMIP-II will consider RMSOs (Provincial DWSS) and WSSDOs as next target groups.

- 8. Mr. Kamal Adhikari mentioned that DWSS has already prepared and submitted a draft of organizational structure (DWSS/RMSO/WSSDO) to the Prime Minister's office. WASMIP-II can follow the draft to establish a support mechanism in a transitional phase in Nepal.
- DDG mentioned that DWSS has proposed 75 WSSDOs/Sub-WSSDOs to the Ministry. WSSDOs will be accountable to the central government as well as provincial government. 75 WSSDOs will remain until this fiscal year (July 2018).
- 10. Mr. Kamal mentioned that although the local bodies will take care of the small WUSCs. Being a sectoral lead DWSS will have obligations to support the WUSCs.
- 11. DDG mentioned that WSSDOs will remain and WSSDOs will work in two sections, obliged to central government and obliged to provincial government.
- 12. DDG mentioned that DWSS is highly optimistic that the proposed structure will be approved by the Prime Minister's office.
- 13. DDG mentioned that DWSS has decided to depute 39 engineers and 40 sub-engineers of DWSS/ WSSDO to the local bodies for a time being.
- 14. DDG mentioned that DWSS was very much encouraged that the management model and support model will function in parallel. DWSS has expected that implementation of both management and support model will bring out technical and managerial improvement of WUSCs.
- 15. DDG mentioned that implementation of support model is important for DWSS. DWSS has to implement the support mechanism by DWSS own resources anyway.
- 16. The Chief Advisor mentioned that Operational directives and Operational Guidelines need to be revised according to the restructuring situation. DDG agreed that these documents has to be revised. The Chief Advisor mentioned that based on the revised Directives and Guidelines, DWSS and WASMIP-II can discuss and reconsider about setting up the support mechanism.
- 17. DDG mentioned that DWSS needs to discuss more on this matter and DWSS, JICA, and WASMIP will have a meeting again at a favorable time for all parties.

#### **<u>Re: Meeting with Joint Secretaries and DWSS.</u>**

Date: 2017 August 25<sup>th</sup>.

Time: 13:20-13:50

Venue: DWSS conference hall.

#### Attendants:

- 1. Mr. Ashish Ghimire- Joint Secretary, MoWSS.
- 2. Mr. Shankar Subedi- Joint Secretary, MoWSS.
- 3. Mr. Tej Raj Bhatt- Director General, DWSS.
- 4. Mr. Sunil Kumar Das- Deputy Director General, DWSS.
- 5. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 6. Mr. Arun Simkhada- Project Coordinator, Chief of Planning Section.
- 7. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 8. Mr. Deepak Subedi-National Staff, WASMIP-II

- **1.** The Chief Advisor of WASMIP-II explained the training objectives and training schedule to the trainees (6 persons) from MoWSS and DWSS.
- **2.** The Chief Advisor explained the social life of Japan briefly to the trainees.
- **3.** The Director General confirmed if the training schedule has a visit to any rural water supply system of Japan. The chief Advisor explained that training schedule has a one day site visit to the water supply system of Japan.
- **4.** Mr. Kabindra Bikram Karki explained the outline and activities of WASMIP-I. Mr. Kabindra explained the progress of WASMIP-II till date to the trainees.
- **5.** Mr. Kabindra explained the revised PDM (Draft) with ongoing state restructuring process as a main reason for revision.
- **6.** Mr. Ashish Ghimire mentioned that within 6 months everything will be clear. GoN has to decide everything within this fiscal year.

Date: 2017 August 74<sup>th</sup>.

Time: 11:-11:30

Venue: DWSS Building

#### Attendants:

- 1. Mr. Sunil Kumar Das- Deputy Director General, DWSS.
- 2. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 3. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II

### **Meeting Conclusions:**

### I. Site Survey Report:

- 1. The Chief Advisor of WASMIP-II reported the site visit of Pragatinagar WUSC (Nawalparasi district) to DWSS.
- **2.** The Chief Advisor explained that the chlorination equipment and flow meter which has been procured by DWSS has already been installed at Pragatinagar WTP.
- **3.** The Chief Advisor mentioned that WASMIP-II will update the WTP SOP based on the site survey results.

# II. Training in Japan:

4. The Chief Advisor explained that it would be better if a trainee make a presentation on behalf of all the trainees to MoWSS/DWSS to share knowledge and experience gained in a training in Japan. Mr. Kabindra agreed to make a presentation after the training in Japan.

#### III. Revised PDM (Draft):

5. Mr. Sunil kumar Das is available at 2:00 on August 28<sup>th</sup>. DWSS, JICA and WASMIP will have a meeting on that day.

Date: 2017 August 28<sup>th</sup>.

Time: 11:00-11:30

Venue: DWSS Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 2. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 3. Mr. Yusaku Numajiri- Team Member, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II explained about the explanation letter for revised PDM (Draft) prepared by WASMIP-II for DWSS.
- 2. Mr. Numajiri explained the site visit of Pragatinagar WUSC (Nawalparasi district).
- 3. Mr. Numajiri explained about the installation and operation status of newly installed chlorination equipment that is procured by DWSS.
- 4. Mr. Numajiri suggested to supervise the installation by the supplier. Some items are meaningless to install such as back pressure valve in a suction line.
- 5. Mr. Numajiri mentioned that he will revise the drawing and share it with DWSS.
- 6. Mr. Kabindra mentioned that DWSS will share the revised installation process with other WUSCs to avoid the installation fault.
- 7. Mr. Numajiri explained about the dosing rate and flow determination and trouble shooting at the Pragatinagar site.
- 8. Mr. Numajiri mentioned that the quality of bleaching powder that is used at the site is very poor. WUSC has been advised to use the better quality bleaching powder to ensure the proper mixing of a chemical.
- 9. The Chief Advisor explained the status of the deep well no: 2 and the status of new deep well pump which is under construction.

Date: 2017 August 28<sup>th</sup>.

Time: 14:00:-14:45

Venue: DWSS Building

### Attendants:

### I.JICA side:

- 1. Mr. Shigeyuki Matsumoto
- 2. Mr. Yoji Toriumi
- 3. Mr. Takashi Kondo
- 4. Ms. Bidhya Pokhrel

# II.DWSS side:

- 5. Mr. Sunil Kumar Das- Deputy Director General, DWSS.
- 6. Mr. Kabindra Bikram Karki- Project Manager, Chief of NWSSTC.
- 7. Mr. Arun Simkhada- Project Coordinator, Chief of Planning Section.

# III.WASMIP side:

- 8. Mr. Satoru Oniki- Chief Advisor.
- 9. Mr. Yoshio Chikamatsu- Team Member.
- 10. Mr. Deepak Subedi-National Staff.

- 1. The Chief Advisor explained about the previous discussion with DWSS on revised PDM (Draft).
- 2. The Deputy Director General (DDG) mentioned that WASMIP-I has a positive impact on the O &M of water supply systems. DWSS was highly enthusiastic on a launch of WASMIP-II and DWSS is hopeful that WASMIP-II will bring more positive outcome.
- 3. DDG mentioned that setting up of 744 local bodies will be finished by the middle of September, 2017.
- 4. DDG mentioned that Prime Minister's office has approved and published an 'unbundling report' to clarify the role of government entities in a transitional phase. The roles of 3 layers (Central, Provincial and Local bodies) has been defined in this document. These document can be used to set up a support mechanism during an institutional reform process.
- 5. DDG mentioned that DWSS has more than 5000 ongoing projects all over Nepal. Therefore, DWSS has proposed to the Government of Nepal that WSSDOs will remain at all districts to complete these projects.
- 6. DDG mentioned that the Government is working within few months' roles and functions of local bodies will be clear.
- 7. DDG mentioned that DWSS perspective is to work in the current (WASMIP-II) project scope and project duration. But there can be flexibility so that WASMIP-II can adjust and comply the support model according to the situation.
- 8. JICA HQ Representative mentioned that as a development partner JICA has to align with the legislation and policy of Nepal. After the roles of each entities and demarcation are clear and human resources are set at a local level, JICA will consider an elaborate support mechanism and

discuss on an effective approach to address all the layers (Central, provincial, Local, WUSCs) and implement the approach in WASMIP-III.

- 9. JICA HQ Representative mentioned that the support model has to incorporate the provincial and local bodies, so WASMIP-II will closely observe the transition process and collects information and consider a favorable approach to set up a support model.
- 10. JICA HQ Representative mentioned that Local Municipalities have secured insufficient Manpower which hinders the effective implementation of support model. DDG mentioned that DWSS has deputed 39 engineers and 40 sub-engineers to the local bodies to support them.
- 11. JICA HQ Representative mentioned that local bodies should be included in a WASMIP-III from the beginning so that they have better understanding of the project purpose. DWSS and WASMIP team are working together form the beginning, that is why both parties understand each other activities and working together for better output.
- 12. DDG mentioned that WASMIP-II need to include a support model in a squeezed timeframe.
- 13. DDG mentioned that learning from the WASMIP activities and output DWSS has initiated ISSAU (Institutional Support Strengthening and Advisory Unit) in ADB projects.

## Re: Discussion with DG, JICA and WASMIP team

Date: 2017/08/31 Time: 12:30 – 13:00 Venue: DWSS, Kathmandu

#### Attendants:

#### I.JICA side:

- 1. Mr. Shigeyuki Matsumoto
- 2. Mr. Yoji Toriumi
- 3. Mr. Takashi Kondo
- 4. Ms. Bidhya Pokhrel

#### II.DWSS side:

5. Mr. Tejraj Bhatt- Director General, DWSS.

#### III.WASMIP side:

- 6. Mr. Satoru Oniki- Chief Advisor.
- 7. Mr. Yoshio Chikamatsu- Team Member.
- 8. Mr. Deepak Subedi-National Staff.
- 9. Mr. Vivek Shrestha National Staff

- 1. The JICA team explained about the revised PDM (Draft) to the Director General. JICA Team proposed to revise the project scope by revising the support model and project duration due to following reasons:
  - a. Although it is anticipated that the ongoing implementation of local restructuring will largely affect the support model which is supposed to be developed by WASMIP-II, there are still much uncertainty on detailed structure and transitional process of local restructuring.
  - b. As counterparts play important role in sustainability of the project, if in future the WASH projects are handed over to the local bodies (municipalities, VDCs), the present cascade model may fail. Local bodies are independent to DWSS.
- 2. Director General mentioned that the issue of state restructuring shall not affect the scope of the project due to following reasons, and suggested to continue WASMIP-II as the current scope and duration remain unchanged:
  - **a.** As many development partners such as ADB, UNICEF, WHO working on ISSAU are not affected by the state restructuring process, DWSS hopes that WASMIP project will not be affected.
  - **b.** Finalization of State reconstructing process is going to take some time, and he anticipated that the changes are not going to be huge. Minor changes will be made which can be adjusted in a support model. DG mentioned that DWSS is planning to hire 7 consultants to gather information on all the WASH projects in 7 states of Nepal within next year.
  - **c.** The local bodies are inexperienced and they don't have capacity to provide efficient support to WUSCs. Hence, meantime DWSS and WSSDO will support WUSCs through local bodies.

**3.** The meeting was adjourned, and the parties agreed to continue to discuss on the implementation of WASMIP-II in due course.

#### Re: Meeting with DWSS.

Date: 2017 November 9<sup>th</sup>.

Time: 14:00-14:30

Venue: DWSS Building

#### Attendants:

- 1. Mr. Arun Simkhada- Project Manager, Chief of NWSSTC.
- 2. Mr. Kazuhiko Nakamura- Deputy Chief Advisor, WASMIP-II.
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II.

- 1. The Deputy Chief Advisor of WASMIP-II explained the schedule of SOP training to Mr. Arun Simkhada.
- 2. The Deputy Chief Advisor mentioned that WASMIP-II team will try to wrap up the session by 16:00 pm.
- 3. The Deputy Chief Advisor informed the status of capacity assessment questionnaire submitted by the ToT candidates. The Deputy Chief Advisor requested DWSS to make an arrangement of dispersing and collection of CAQ to new candidates.
- 4. The Deputy Chief Advisor requested DWSS to share the information on progress of the organizational reform in Nepal. Mr. Arun Simkhada mentioned that he will provide the draft version of the progress of the organizational reform to WASMIP-II.
- 5. Mr. Arun Simkhada mentioned that DWSS has allocated budget for WASMIP-II in all 5 RMSOs.Mr. Simkhada suggested WASMIP-II to have a meeting with Regional Directors and arrange SOP and other trainings in a regional level as well.
- 6. The Deputy Chief advisor informed the schedule of Japanese expert during November and December.

### Re: Meeting with Director General (DWSS).

Date: 2017 December 11<sup>th</sup>.

Time: 14:45-15:45

Venue: JICA Building

#### Attendants:

- 1. Mr. Tej Raj Bhatta Director General (DWSS)
- 2. Mr. Arun Kumar Simkhada Project Coordinator, Chief of Planning Section (DWSS)
- 3. Mr. Yoji Toriumi- JICA Nepal
- 4. Ms. Bidhya Pokharel- JICA Nepal
- 5. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 6. Mr. Kazuhiko Nakamura– Deputy Chief Advisor, WASMIP-II
- 7. Mr. Deepak Subedi-National Staff, WASMIP-II

- Ms. Bidhya Pokharel explained about the request letter from JICA headquarter. The letter mentioned about the preparation and schedule of JCC meeting as a part of project activities. Ms. Bidhya mentioned that the tentative schedule is on the last week of February, 2018.
- 2. Ms. Bidhya mentioned that considering the DG requests in a previous meeting, JICA has not changed the project duration and JICA agreed to include RMSOs and WSSDOs staffs in a new proposed support mechanism.
- 3. Mr. Tej Raj Bhatta (Director General) mentioned that February will be a good time for JCC as most of the issues regarding the reformation of the organization may be clear by that time but he suggested to avoid SACOSAN (South Asian Conference on Sanitation) which is going to be held in February in Pakistan for 5 days.
- 4. Ms. Bidhya mentioned that the JICA Nepal and WASMIP-II team would like to know if there is any updates on the reformation of DWSS.
- 5. Mr. Tej Raj Bhatta (DG) mentioned that the government has decided to keep the DWSS intact. DWSS will remain as a central department and there will be 7 Central Project Implementation Directorates (CPIDs) under the DWSS. However, the name of central department will be changed into 'Department of Water Supply and Wastewater Management' from 'Department of Water Supply and Sewerage. The schedule for the official approval of restructuring of DWSS has not been fixed.
- 6. Mr. Tej Raj Bhatta (DG) mentioned that there will be 7 parallel Provincial Directorate. DWSS is now working on demarcation on what type of projects Central, Provincial and Local level will do.
- 7. Mr. Tej Raj Bhatta (DG) mentioned that large urban project, wastewater project, and foreign assistance projects will be under the central department.
- 8. Mr. Tej Raj Bhatta (DG) mentioned that this structure of DWSS is almost final and DG has already signed with a local restructuring committee.

- 9. Mr. Tej Raj Bhatta (DG) mentioned that strengthening and capacity development of provincial and local levels will be provided by the Central Department. The Guidelines is under preparation to provide Capacity development to provincial as well as local levels.
- 10. Mr. Tej Raj Bhatta (DG) mentioned that within a month the guideline for the capacity development program will be finalized by DWSS.
- 11. Mr. Tej Raj Bhatta (DG) emphasizes that new changes in a structure of DWSS and reformation will not affect the capacity development projects (WASMIP-II).
- 12. Ms. Bidhya mentioned that NWSSTC will be a core organization in a new proposed support system. WASMIP-II will focus more on strengthening the target groups through NWSSTC.
- 13. Ms. Bidhya mentioned that WASMIP has adopted slightly different approach than the cascade system. The support to the target group will be provided directly through NWSSTC.
- 14. DG mentioned that he would like to tie up ISSAU (ADB's project) and WASMIP-II together. Two components of ISSAU and WASMIP-II will strengthen the organization.
- 15. The chief advisor of WASMIP-II mentioned about the meeting with the Project Director of 3<sup>rd</sup> small town water supply and sanitation project.
- 16. The Chief Advisor mentioned that it was a first meeting with the ADB's project and WASMIP-II.
- 17. The Chief Advisor mentioned that WASMIP-II and ISSAU has to be harmonized and jointly work to achieve the project purpose and outputs of both parties.
- 18. The Chief Advisor mentioned that WASMIP-II would like to continuously discuss with ISSAU to harmonize the project.
- 19. The Chief Advisor mentioned that WASMIP-II can invite ISSAU to attend WASMIP trainings and workshops. The Project Director of 3<sup>rd</sup> Small Town Water Supply and Sanitation Project agreed to dispatch observers in WASMIP-II trainings and workshops.
- 20. Mr. DG mentioned that ministries will be merged (road and water supply). There will be one division in a ministry under which department of water and waste water management will function (current DWSS).
- 21. Mr. DG mentioned that in a Department of Water Supply and Wastewater Management, the formation of 7 Central Project Implementation Directorate (CPID) and NWSSTC has been clearly spelled out in a document prepared by the Local Restructuring Committee.
- 22. Ms. Bidhya mentioned that WASMIP-II team will work together with DWSS's counterparts in detail to achieve the project purpose.
- 23. Mr. Toriumi asked about the functions of RMSOs and WSSDOs in a restructured system.
- 24. Mr. DG answered that there will be no RMSOs. The RMSOs will become Provincial Directorate and WSSDOs will be under the Provincial Directorate. The staffs will be deployed to the Provincial Directorate and WSSDOs by the DWSS.
- 25. Mr. DG mentioned that the main role of central department is to monitor the SDG (Sustainable Development Goals) and implement along with the SDG.
- 26. Mr. DG mentioned that foreign assistance project (i.e. WASMIP-II) will be under central department which can work directly to the local levels with or without the provincial level. There will be a Project Management Unit (PMU) in a central department to assist the foreign grant projects.
- 27. The meeting participants agreed to explain to DG that WAMSIP-II would remain unchanged in terms of duration but the approach will be slightly changed and that support mechanism would be continuously elaborated in consultation with DWSS.

#### Re: Meeting with DWSS.

Date: 2017 December 13<sup>th</sup>.

Time: 14:45-15:30

Venue: DWSS Building

#### Attendants:

- 1. Mr. Shekhar Chandra KC- Section Chief, Rehabilitation Section- DWSS.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II.
- 3. Mr. Kazuhiko Nakamura Deputy Chief Advisor, WASMIP-II.
- 4. Mr. Yusaku Numajiri Team Member, WASMIP-II.
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II.

- 1. The Chief Advisor of WASMIP-II explained the outline and project purpose of WASMIP-II.
- 2. The Chief Advisor asked about the activities of rehabilitation section to the section chief.
- 3. Mr. Shekhar Chandra KC (Section Chief) answered that the major role of rehabilitation section is to prepare a WASH plan of 753 local bodies all over Nepal.
- 4. The Section Chief mentioned that Rehabilitation Section is also installing solar power and solar power operated pumps in 14 WUSCs.
- 5. The Section Chief mentioned that he is also a chief of ISSAU and Monitoring and Evaluation Section of DWSS. Mr. Shekhar Chandra is chief of two sections and ISSAU in DWSS.
- 6. The Section Chief mentioned that Rehabilitation Section has no budget for rehabilitation works to WUSC. The budget for rehabilitation works has been transferred to the local bodies from this fiscal year.
- 7. The Section Chief mentioned that in a last fiscal year Rehabilitation Section had rehabilitated more than 4000 WUSCs all over Nepal.
- 8. The Section Chief mentioned that ISSAU is publishing a notice in a next week to hire a consultant team (Nepali consultant).
- 9. The Deputy Chief Advisor of WASMIP-II asked if there are any reasons to transfer a budget of rehabilitation works to the local bodies.
- 10. The Section Chief answered that the budget has been allocated to the local bodies due to the new constitution of Nepal.

#### **Re: Meeting with Water Quality Section.**

Date: 2017 December 13<sup>th</sup>.

Time: 11:45-12:15

Venue: DWSS Building

### Attendants:

- 1. Mr. Narayan Khanal- Chief of Water Quality Section, DWSS.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II.
- 3. Mr. Kazuhiko Nakamura Deputy Chief Advisor, WASMIP-II.
- 4. Mr. Yusaku Numajiri Team Member, WASMIP-II.
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II.

- 1. The Chief Advisor of WASMIP-II explained about contents and schedule of the WASMIP-II training at NWSSTC, Nagarkot.
- 2.Mr. Narayan Khanal mentioned that he is interested in participating the WASMIP-II SOP and ToT training.
- 3.Mr. Narayank Khanal mentioned that he will be outside of the Kathmandu valley during the WASMIP-II training at Nagarkot. Mr. Narayan requested WASMIP-II to provide a brief training on water quality management to the Water Quality Section's engineers (approximately three persons) at Water Quality Section's conference hall in DWSS.
- 4.Mr. Narayan Khanal mentioned that Water Quality Section is organizing a training on SOP on 26<sup>th</sup> 28<sup>th</sup> December at Gaidakot, Nawalparasi district. WASMIP-II members can join the training as an observer.
- 5. The Chief Advisor agreed to allocate time for brief training to Water Quality Section's engineers.
- 6.Mr. Narayan Khanal mentioned about the abovementioned SOP prepared by the Water Quality Section in a financial assistance of WHO. The Chief Advisor mentioned that there is a dissimilarity regarding the value of turbidity between WASMIP-II SOP and Water Quality Section (WHO) SOP.
- 7. The Chief Advisor mentioned that the dissimilarity may cause confusion to the target groups to follow the SOP.
- 8.Mr. Narayan mentioned that Water Quality Section (WHO) SOP is focused on conventional water supply system. The SOP of Water Quality Section is <u>kind of a guideline</u> to prepare a SOP for each facility (i.e. sedimentation tank, roughing filter, slow sand filter etc.)
- 9. The Chief Advisor mentioned that the WASMIP-II activities are expanding so DWSS's Water Quality Section and WASMIP-II has to continuously discuss/work together to achieve the project purpose.

### **Re: Meeting with ERMSO Chief.**

Date: 2017 December 14<sup>th</sup>.

Time: 12:15-13:00

Venue: DWSS Building

#### Attendants:

- 1. Mr. Shankar Prasad Jaiswal Regional Director, ERMSO DWSS.
- 2. Mr. Arun Simkhada- Project Coordinator, Chief of Planning Section.
- 3. Mr. Satoru Oniki- Chief Advisor, WASMIP-II.
- 4. Mr. Kazuhiko Nakamura Deputy Chief Advisor, WASMIP-II.
- 5. Mr. Yusaku Numajiri Team Member, WASMIP-II.
- 6. Mr. Deepak Subedi-National Staff, WASMIP-II.

- i. General issues
- The Chief Advisor of WASMIP-II explained the situation of Garamani WUSC (Target WUSC) in Jhapa district in eastern region to the Regional Director. Garamani WUSC has a new water supply system with Iron Removal Water Treatment Plant and Chlorination constructed by DWSS, but the Garamani WUSC has not operated and provided water yet.
- 2. The Chief Advisor explained that the Garamani WUSC's power supply has been shut down because the WUSC has not paid the electricity bills.
- 3. Mr. Shankar Prasad Jaiswal (Regional Director) mentioned that he will confirm the situation of Garamani WUSC with Chief of Jhapa WSSDO.
- 4. The Regional Director will instruct the Jhapa WSSDO for the intervention of Garamani WUSC.
- 5. The Chief Advisor of WASMIP-II mentioned about the damage of WTP of Shivasatakchi WUSC (Target WUSC) in Jhapa district in eastern region.
- 6. The Regional Director mentioned that estimated cost for the rehabilitation of the WTP of Shivasatakchi WUSC has been submitted to the concerned ministries.
- ii. WASMIP ToT
- 1. The Chief Advisor explained about the WASMIP-II trainings to the Regional Director.
- 2. The Regional Director requested to conduct WASMIP-II trainings in Eastern Region by using the DWSS budget (3.5 million NPR) for WASMIP-II.
- The Chief Advisor asked if ERMSO has any plans and program to utilize the DWSS budget for WASMIP-II allocated by DWSS in an Eastern Region. The Regional Director answered that ERMSO has no such plans and program yet. ERMSO can use the budget for WASMIP-II trainings.
- 4. The Regional Director mentioned that it would be better if WASMIP-II provides ToT to engineers, not divisional chiefs. WSSDO Chiefs are very busy and it will be difficult for them to work as a trainer because some training candidates are divisional chiefs in the list provided by DWSS.
- 5. The Regional Director requested that the WASMIP-II trainings at regional level can be effective if Japanese expert attends and support the training.

6. The Chief Advisor mentioned that Japanese experts have been developing human resources as a trainer in DWSS/NWSSTC/RMSO/WSSDO/WUSC. WASMIP-II can dispatch national staffs to support the trainings at regional level.

# Trail TOT on Water Quality Management

Date: 2017/12/17 Time: 2:00 – 3:45 Location: Water Quality Section, DWSS, Kathmandu

#### Attendants:

- 1. Mr. Narayan Prasad Khanal, Section Chief, Water Quality Section, DWSS
- 2. Mr. Dibakar Ghimire, Engineer, Water Quality section, DWSS
- 3. Mrs. Sujata Joshi, Engineer, Water Quality section, DWSS
- 4. Mr. Rabi Kishan Acharya, Chemist, Water Quality section, DWSS
- 5. Mr. Ramesh Subedi, Engineer, Water Quality section, DWSS
- 6. Mr. Kishor Pandey, Chemist, Water Quality section, DWSS
- 7. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 8. Mr. Kazuhiko Nakamura, Deputy Chief Adviser, WASMIP Team
- 9. Mr. Yusaku Numajiri, Water Quality Control and Monitoring, WASMIP Team
- 10. Mr. Roshan Suwal, Deputy chief Project Engineer, WASMIP Team

#### Suggestions from Narayan Ji

- The contents of presentation are theoretical based and are very necessary and useful. Beside this, WASMIP team should focus on problem identification and problem solving for water treatment plants.
- > WASMIP Team should focus on operational procedure and usual problems.
- Some of the problems mentioned in the contents are not common in Nepal, such as split of chemical, oil etc. More common problems can be extracted from SOP prepared by DWSS.
- DWSS Water Quality Section plan to conduct training on water quality and water treatment plants in some WUSCs and later expand them to regional basis. WASMIP Team can join these trainings, and Narayan Ji will join the training by NWSSTC/WASMIP.

# Re: 2<sup>nd</sup> SOP Training at NWSSTC, Nagarkot.

Date: 2017/12/19

**Time:** 10:00 – 17:00

#### Location: NWSSTC, Nagarkot.

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC (Project Manager)
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Kazuko Nakamura- Deputy Chief Advisor, WASMIP-II
- 4. Mr. Yusaki Numajiri- Team Member, WASMIP-II
- 5. Mr. Deepak Subedi, National Staff, WASMIP-II
- 6. Mr. Roshan Suwal, National Staff, WASMIP-II
- 7. Mr. Swiss Gauchan, National Staff, WASMIP-II
- 8. Mr. Vivek Shrestha, National Staff, WASMIP-II

# Opening Remarks: Kabindra Bikram Karki.

- Mr. Kabindra mentioned that WASMIP SOPs will help to solve the many problems in operation and maintenance of water supply system in semi urban areas.
- Mr. Kabindra mentioned that DWSS is spending large budget in the construction of water supply system but it is unfortunate that small things like chlorination equipment and flow meters are neglected while constructing a water supply system.
- Mr. Kabindra mentioned that SOP training and Training of Trainers (ToT) will focus on developing human resources as a trainer.
- Mr. Kabindra mentioned that Trainees in ToT (Trainers) will have to teach the operation and maintenance of water supply system based on the WASMIP SOPs to WUSCs.
- Mr. Kabindra mentioned that Trainers should teach WUSCs to keep record of O&M so that it will be useful for future reference to calculate the Non-Revenue Water and to prepare a WUSC's business plan.
- Mr. Kabindra mentioned that 2<sup>nd</sup> SOP training has a session on Electro-Mechanical aspect.

#### **Discussions:**

- Mr. Mohan Kunwar (WSSDO Kailali) mentioned that worker in Nepal don't have a habit of wearing safety accessories like gloves, helmets, boots. So it is important to provide a safety lectures to the workers.
- Mr. Ram Kumar Shrestha (WSSDO Udayapur) mentioned about a problem of high turbidity from the deep tube well. He wants to know if WASMIP-II found such problems in the target WUSCs.
- Mr. Diwakar Ghimire (Water Quality Section) also mentioned that the problem of high turbidity from the deep tube well which were giving clear water before is the major problem in Terai Region.
- Mr. Rameshwor Parajuli (Manager, Dhulikhel WUSC) requested DWSS to establish a forum for discussion. Many problems can be solved by sharing the ideas and countermeasures in such forum.

#### Day 1: Closing Remarks: Mr. Kabindra Bikram Karki.

- Mr. Kabindra mentioned that participants of ToT are supposed to become a trainer. The trainers are responsible to provide trainings to WUSCs, so it is important that trainers should have knowledge on mitigation of issues and problems on the operation and maintenance of water supply system.
- Mr. Kabindra asked participants to prepare a presentation material during the training. The Presentation can be used for training in WUSCs, so it is better to prepare a presentation on a local context based on their experiences.
- Mr. Kabindra mentioned that SOP training is also a platform for sharing knowledge and experiences. He requested participants to share the experiences to other colleagues.

#### Re: Meeting with DWSS.

Date: 2018 February 12<sup>th</sup>.

Time: 15:30-16:00

Venue: DWSS Building

#### Attendants:

- 1. Mr. Arun Kumar Simkhada- Project Coordinator, Chief of Planning Section.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II.
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II.

- 1. The Chief Advisor of WASMIP-II explained the schedule and purpose of his visit to Mr. Arun Simkhada. The main purpose is to hold the first Joint Coordinating Committee to approve the PDM and PO.
- 2. Mr. Arun Simkhada mentioned that February 23<sup>rd</sup> is an appropriate date for the Joint Coordinating Committee.
- 3. Mr. Arun Simkhada mentioned that Joint Secretary, Director General and Deputy Director General agreed on an above mentioned date.
- 4. Mr. Simkhada mentioned that Joint Secretary (JCC Chairperson) has been changed last week. The new Chairperson is Mr. Anil Bhadra Khanal.
- 5. The Chief Advisor requested to DWSS to arrange a courtesy meeting with a new Joint Secretary.
- Mr. Simkhada mentioned that he will arrange a meeting with a new JCC Chairperson on 18<sup>th</sup> of February.
- 7. The Chief Advisor explained about the orientation training in five RMSOs. The chief advisor mentioned that as per the request of Eastern RMSO and Mid-Western RMSO, he can attend the orientation training if he is available in Nepal.
- 8. Mr. Simkhada mentioned that it is better if WASMIP-II prepares a training menu for RMSOs.

Date: 2018 June 3.

Time: 15:00-16:00

Venue: DWSS Building

#### Attendants:

- 1. Mr. Arun Kumar Simkhada- Project Coordinator, Chief of Planning Section.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Toshiaki Ooka- Deputy Chief Advisor, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II introduced the new Deputy Chief Advisor to DWSS, and explained about the schedule of his stay in Nepal.
- 2. The Chief Advisor mentioned that securing budget for rehabilitation works is important for DWSS to implement WASMIP effectively.
- 3. Mr. Arun Simkhada mentioned that DWSS has spent all the budget for rehabilitation works for target WUSCs. He mentioned that because of deficit, surplus NPR 5million from the rehabilitation section is also used in the rehabilitation works.
- 4. Mr. Arun Simkhada mentioned that the budget for rehabilitation works for target WUSCs for next fiscal year will be around 15 million rupees.
- 5. The Chief Advisor mentioned that WASMIP has developed the design manual of specifications on rehabilitation works for target WUSCs. The manual is helpful to identify the essential equipment with specifications for the operation and maintenance of facilities. Mr. Arun will confirm the design manual and he will provide feedback and comments to WASMIP-II.
- 6. The Chief Advisor explained that WASMIP has been preparing the work plan-2 of WASMIP-II based on the JCC policy.
- 7. The Chief Advisor mentioned that the work plan-2 will be discussed together with JICA and DWSS get a consensus and finalize it.
- 8. The Chief Advisor requested DWSS to resume weekly PCM (Project Coordination Meeting).
- 9. Mr. Arun mentioned that DWSS's section will be merged and DWSS will have fewer sections and WSSDOs will be under the provincial government. However, he doesn't know the exact schedule of reconstruction. He mentioned that reconstruction may be finished by coming autumn.

Date: 2018 June 4<sup>th</sup>.

Time: 15:30-16:00

Venue: DWSS Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki- Chief of NWSSTC.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II requested DWSS to replace the candidate trainer who is no longer available to provide Basic Training for WUSCs.
- 2. Mr. Kabindra mentioned that he will select the new candidate using the Capacity Assessment Questionnaire sheet and attendance list of TOT.
- 3. The Chief Advisor explained that WASMIP-II had a meeting with the Acting Chief of Central RMSO. Central RMSO Acting Chief will ask one of the engineer to coordinate with WASMIP-II team to conduct an orientation training.
- 4. The Chief Advisor explained about the importance of orientation training in each RMSOs.
- 5. The Chief Advisor mentioned about WASMIP-II team members visit to NWSSTC on 7<sup>th</sup> June. Mr. Kabindra will be available at NWSSTC on 7<sup>th</sup> June at NWSSTC.

Date: 2018 June 5<sup>th</sup>.

Time: 15:45-16:15

Venue: DWSS Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Toshiaki Ooka- Deputy Chief Advisor, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II introduced the new Deputy Chief advisor (Mr. Toshiaki Ooka) to the Chief of NWSSTC.
- 2. The Chief Advisor explained about the visit to NWSSTC by the new Deputy Chief Advisor of WASMIP-II.
- 3. Mr. Kabindra mentioned that DWSS has allocated NPR 2.5 million for NWSSTC for next fiscal year.
- 4. Mr. Kabindra mentioned that only NPR 1 million (40% of total budget) has spent from the budget (NPR 2.5 million) of this fiscal year.
- Mr. Kabindra mentioned that NWSSTC would like to conduct trainings for pilot and target WUSCs to strengthen their capacity in plumbing, pump operations and Operation and Maintenance of Water Treatment Plant. The trainees will be plumber, technicians and operators of WUSCs.
- 6. The Chief Advisor suggested that it would be fruitful if NWSSTC use parts of WASMIP-II SOPs content in a training curriculum for WUSCs.
- 7. Mr. Kabindra mentioned that NWSSTC will prepare the training curriculum.

# Re: Weekly Project Coordination Meeting.

Date: 2018/06/18 Time: 03:00 – 04:30 Location: DWSS, Kathmandu

# Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC, DWSS
- 2. Mr. Narayan Khanal- Chief of Water Quality Section, DWSS
- 3. Mr. Purna Upadhyaya Chief of Monitoring and Evaluation Section, DWSS
- 4. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 5. Mr. Toshiaki Ooka Deputy Chief Advisor, WASMIP-II
- 6. Mr. Yusaku Numajiri Team Member , WASMIP Team
- 7. Mr. Deepak Subedi National Staff, WASMIP Team
- 8. Mr. Roshan Suwal National Staff, WASMIP Team
- 9. Mr. Vivek Shrestha -National Staff, WASMIP Team

- 1. Mr. Kabindra welcomed the participants of the Project Coordination Meeting (PCM).
- 2. The Chief Advisor requested DWSS about the replacement of a candidate trainer. Mr. Kabindra mentioned that Mr. Purna Upadhyay (Chief of Monitoring and Evaluation Section) will be a new candidate trainer because he has attended the ToT for Basic Training.
- 3. The Chief Advisor mentioned that the local structure of Nepal is in reforming process. Nobody knows whether candidate trainers are transferred to other places. Is it possible for NWSSTC to invite/gather candidate trainers even if they are not associated with DWSS?
- 4. Mr. Kabindra mentioned that NWSSTC can invite the candidate trainers for training program at Nagarkot. NWSSTC will provide the remuneration (trainer fee, allowance, and transportation fee) to a trainer according to the rule of Nepal government. However, respect for trainers is a key for motivation for becoming a trainer. Trainers and teachers are highly respected in a Nepali society.
- 5. The Chief Advisor explained about the orientation training at RMSOs. He mentioned that 4 RMSOs have already conducted the orientation training and Central RMSO is planning to conduct the orientation training by the end of June (this month).
- 6. The WASMIP national staffs have supported the orientation training. The subjects of training are to teach and instruct the use of water quality test kits and electrical measuring devices.
- Mr. Kabindra mentioned that NWSSTC is going to start an intensive technical training for technical staffs of 13 target WUSCs (out of total 68 target WUSCs) from June 19 2018 to July 05 2018. Mr. Kabindra requested WASMIP to select 2 or 3 more target WUSCs to participate in a training. The trainings will be provided to the technical staffs of the target WUSCs on pump operatorion, water quality and plumbing.
- 8. The Chief Advisor confirmed Mr. Kabindra if the budget for next fiscal year for NWSSTC (NPR 2.5 million) is enough to conduct trainings related to WASMIP.
- 9. Mr. Kabindra mentioned that the budget is enough for conducting for training programs. However, if the budget for WASMIP training is deficit, NWSSTC can use the main budget (approximately 10 million rupees) to supplement the deficit budget.
- 10. The Chief Advisor explained about the rehabilitation works have conducted in a target WUSCs by DWSS.

- 11. Mr. Narayan Khanal mentioned that the water quality section in DWSS is going to distribute 35 Wagtech kits (water quality test kit) and 55 dosing pumps for chlorination units to WUSCs. He requested WASMIP team to provide the list of rehabilitation works to avoid duplication.
- 12. The Chief Advisor requested DWSS to update the website and add WASMIP activities and achievements for the public information purpose.
- 13. Mr. Purna is recently transferred to DWSS from WSSDO. He attended the PCM for the first time. Mr. Purna (Chief of M&E Section and Focal Information Officer of DWSS) mentioned that he will make necessary arrangements to include WASMIP-II in DWSS's homepage.
- 14. The Chief Advisor mentioned that WASMIP-II is now preparing the draft Work Plan-2 based on the PDM. WASMIP-II and DWSS needs to discuss on it and get a consensus.
- 15. The chief Advisor requested DWSS to host the 4<sup>th</sup> JPCM in July. DWSS agreed on it.
- 16. The Deputy Chief Advisor explained the outline of observations of his site visit to Jhapa and Morang from 10<sup>th</sup> June to 12<sup>th</sup> June.
- 17. The Deputy Chief Advisor mentioned that the purpose of his visit was to confirm the current facilities status, need of trainings, progress of rehabilitation works and the managerial capacity.
- 18. Mr. Narayan Khanal asked about the site condition in Shivasatakchi WUSC in Jhapa distrct. He asked if there is any solution to replace or repair the Water Treatment Plant (WTP) destroyed by the landslide in Shivasatakchi WUSC. Water Quality Section of DWSS designs and constructs Water Treatment Plant.
- 19. The Deputy Chief Advisor mentioned that the WTP cannot be repair. Either WUSC has to find a new water source or new Water Treatment Plant has to be built.
- 20. The Deputy Chief Advisor mentioned that he was informed by the WUSC member that WUSC has already requested Jhapa WSSDO to construct a new water treatment plant.
- 21. Mr. Narayan mentioned that Water Quality section has not received any formal request from WSSDO regarding destruction of WTP in Shivasatakchi WUSC. He would like to visit Shivasatakchi WUSC in a convenient time to understand the situation and to find the countermeasures to mitigate it.

# **Re: Meeting with DWSS.**

Date: 2018/7/3 Time: 16:00 – 16:30 Location: DWSS Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC.
- 2. Mr. Satoru Oniki Chief Advisor, WASMIP II.
- 3. Mr. Deepak Subedi National Staff, WASMIP II

- 1. The Chief Advisor mentioned that expert team has developed the draft Training Implementation Guideline for NWSSTC. He requested Mr. Kabindra to confirm its contents and make a personal comments on it.
- **2.** Mr. Kabindra mentioned that he would like to discuss on some points of the draft 'Training Implementation Guideline' prepared by WASMIP team.
- 3. The Chief Advisor confirmed about the information on organizational structure of ISSAU.
- **4.** Mr. Kabindra mentioned that ISSAU is established in DWSS. ISSAU is managed by DWSS and ISSAU is financially supported currently by the Third Small Town and Sanitation Project in DWSS funded by ADB.

# **Re: Meeting with DWSS.**

Date: 2018/7/4 Time: 11:00 – 11:30 Location: DWSS Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC.
- 2. Mr. Satoru Oniki Chief Advisor, WASMIP II.
- 3. Mr. Yoshio Chikamatsu Team Member, WASMIP-II.
- 4. Mr. Deepak Subedi National Staff, WASMIP II

- 1. The Chief Advisor mentioned that the first Basic Training for 13 target WUSCs will be held in the last week of August or in the early September.
- The Chief Advisor mentioned that the understanding of Board Members of WUScs is necessary for the effective output of training. The participants of the first Basic Training will be one from the Executive Committee of WUSC (Chairman/Vice Chairman/Secretary/Members), one Manager/Engineer of WUSC, and one form the technicians (key-technician is preferred.). Mr. Kabindra agreed on it.
- 3. Mr. Chikamatsu explained about the draft 'Training Implementation Guidelines', which is prepared by the expert team for NWSSTC.
- 4. Mr. Chikamatsu mentioned that the draft is an idea and he needs feedbacks and comments from DWSS. Mr. Chikamatsu mentioned that demarcation of work may be different in a coming future but temporarily we can envision the "Training Implementation Guideline" like this and later expert team and DWSS can improvise it.
- 5. Mr. Chikamatsu mentioned that NWSSTC is responsible for providing trainings to all the WUSCs across Nepal. This draft is prepared especially for the trainings to small town WUSCs.
- 6. Mr. Chikamatsu confirmed if NWSSTC has any prevailing rules and regulations for providing training to WUSCs
- 7. Mr. Kabindra mentioned that there are no documented rules and regulations. However, NWSSTC follows the past practices and traditions for providing training to WUSCs.
- 8. Mr. Kabindra mentioned that NWWSTC has a plan to develop a Capacity Development Master Training Plan which will be applicable to entire WASH sector. Master training Plan will include many components in detail, such as: target groups, training curriculum, expected output etc.
- 9. Mr. Chikamatsu mentioned that the "Training Implementation Guideline" can be a part of such Master Training Plan.
- 10. Mr. Kabindra mentioned that it is difficult for NWSSTC to impose trainer to make a report after each training. He would like to consider on this clause in the Draft training implementation guideline.
- 11. Mr. Kabindra mentioned that the documentation of observation tour of WUSC will yield positive output in the training program.
- 12. Mr. Kabindra reconfirmed that the existing training norms of NWSSTC stipulates standard session time of 90 minutes and mobilization of only one trainer in each session. Mr. Chikamatsu responded that he will reflect this standard norms in the training syllabus.

## Re: Meeting with Deputy Director General (DWSS).

Date: 2018 August 29<sup>th</sup>.

Time: 15:30-16:00

Venue: DWSS Building

#### Attendants:

- 1. Mr. Sunil Kumar Das Project Director, Deputy Director General (DWSS).
- 2. Mr. Kabindra Bikram karki- Project Manager , Chief of NWSSTC (DWSS)
- 3. Mr. Arun Kumar Simkhada Project Coordinator, Chief of Planning Section (DWSS)
- 4. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Kabindra mentioned about the budget release situation of DWSS. The allocated Budget for DWSS has not been released yet.
- 2. The chief Advisor explained about the current schedule of trainings. There are two trainings in September .Supplemental ToT for trainers and Basic training for WUSCs.
- 3. The Chief Advisor explained about the reschedule of trainings if the budget is not released soon.
- 4. DWSS mentioned that it is not a proper time to conduct trainings in between Dashain and Tihar.
- The DDG mentioned that if budget issue is solved by September 7<sup>th</sup>, it is better to conduct trainings according to the current schedule. Otherwise, it is better to reschedule the trainings in November 2018.
- 6. The DDG also mentioned about the monitoring of activities of WUSCs.
- 7. The Chief Advisor explained that the WUSCs will be monitored during the on-site trainings.
- 8. The Chief Advisor mentioned that WASMIP has developed a Work Plan -2. He requested DWSS for conducting 4<sup>th</sup> JPCM to explain Work Plan 2.
- 9. The Work Plan -2 was prepared based on the PDM (Project Design Matrix).
- 10. The DDG mentioned that the tentative schedule of 4<sup>th</sup> JPCM will be on 10<sup>th</sup> September.

# Meeting with Chief of Water Quality Improvement and Service Regulation Section, DWSSM.

Date: 2019/06/12

Time: 10:15 – 10:30

Location: Water Quality Section, DWSSM

#### Attendants:

- 1. Mr.Narayan Prasad Khanal Chief of Water Quality Improvement and Service Regulation Section, DWSSM.
- 2. Mr. Satoru Oniki Chief Advisor, WASMIP-II.
- 3. Mr. Yusaku Numajiri Expert, WASMIP-II
- 4. Mr. Deepak Subedi National Staff, WASMIP-II

#### Memorandum:

- 1. Mr. Narayan mentioned that;
  - NWSSTC, Water Quality Improvement and Service Regulation Section (WQISRS), and WASMIP-II have been working in close coordination to avoid duplication of works.
  - WQISRS has some activities (i.e. training for WUSCs) remaining for this fiscal year. Demonstration on using Enpho test kit can be incorporated in a training.
  - Chemist or Assistant chemist will assist in preparing the training material (video) of using Enpho test kit.
  - WQISRS is responsible for water quality and also responsible for service regulation. WQS is working to redefine service level. According to National Water Plan 2005, Current service level is defined as Basic, Medium, and High.
  - ISSAU had a plan to distribute water quality test kits to 52 WUSCs. Due to budget disbursement issues, it is not possible to procure water quality test kits within this fiscal year. These test kits may be provided to 52 WUSCs in next fiscal year.

# Meeting Memo with DWSSM

**Date:** 2019/08/07 **Time:** 16:00 – 17:00 **Location:** DWSSM Building

### Attendants:

- 1. Mr. Ratna Prasad Lamichhane– Chief of Planning Monitoring and Evaluation Section, DWSSM.
- 2. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi National Staff, WASMIP-II

- The Chief Advisor informed about 2<sup>nd</sup> JCC Meeting which is agreed to conducted on August 26<sup>th</sup>, 2019.
- 2. The Chief Advisor confirmed Mr. Ratna that the budget for WASMIP Trainings in NWSSTC for new fiscal year (Nepali Fiscal Year 2076/77) is 4 million NPR.
- 3. Mr. Ratna mentioned that it is very important to persuade officers of Ministry of Finance (MoF) to secure training budget. MoF deducted NWSSTC budget (proposed 4 million from DWSSM but allocated 1 million) as MoF focuses more on capital investment such as construction works.
- 4. Mr. Ratna explained the importance of training to MoF officers to secure budget. Hardware components are not sustainable if proper O&M is not conducted. Software components can provide O&M training which will make the long life of hardware components.
- 5. Mr. Ratna explained that it is important to make a strategy to convince MoF officers before submitting a budget proposal.

# Re: Meeting with Mr. Kabindra Bikram Karki (Chief of NWSSTC) on PDM

**Date:** 2021/04/27 **Time:** 10:30 – 11:10 **Location:** DWSSM, Panipokhari

#### Attendants:

- 1. Mr. Kabindra Bikram Karki, Project Manager, Chief of NWSSTC
- 2. Mr. Satoru Oniki, Chief Advisor, WASMIP
- 3. Mr. Yusaku Numajiri, Water Quality Expert, WASMIP
- 4. Mr. Vivek Shrestha, Engineer, WASMIP

#### Memo:

 The current status of achievement for the objectively verifiable indicators and the remaining tasks were confirmed according to the latest PDM. Outline and remarks are shown as below.

#### <Overall Goal>

- Necessary data as the NWSSTC annual report is shown in a trimester report and/or a summarized annual information report prepared by NWSSTC.
- There is the annual budget plan including trainings and rehabilitation works as DWSSM annual report.

#### < Project Purpose >

#### Indicator No.1 and No.2

- The job description of DWSSM needs to be confirmed, but it is still a draft, and it has not approved yet.
- Regarding revision process and responsible section for Management model and Technical support mechanism, Kabindra PM mentioned that responsible section shall be NWSSTC.
- The responsible section for trainings is NWSSTC.

#### **Indicator No.3**

The current status is as follows;

- Total number of trainers : 69
- From FWSSMP: 18
- From MOWS/DWSSM/NWSSTC: 21
- From other offices: 30

#### **Indicator No.4**

The current status is as follows;

- Total number of the participants who submitted Capacity Assessment Questionnaire: 12
- From FWSSMP: 4
- From MOWS/DWSSM/NWSSTC: 5
- From other offices: 3
- WASMIP team continuously conducts capacity assessment to the trainers.

#### **Indicator No.5**

The documents such as Management model, training implementation guideline, training plan and training curriculums shall be submitted to DG. After reviewing the documents and arranging a meeting within DWSSM if necessary, DG can approve the documents because the documents belong to DWSSM. DG shall also make a decision whether the documents shall be submitted to MoWS or not.

# <Outputs>

### Indicator No.2.2

- Main targets of "Design manual of specifications on rehabilitation works for target WUSCs in semi-urban towns" are engineers of FWSSMP and WUSCs. And the main purpose of the manual is not only to plan/design the necessary rehabilitation works based on the survey results through On-site training by an engineer of FWSSMP, but also to recognize the necessary equipment/material/instrument by WUSC. Moreover, WUSC should understand the process including procurement and request to FWSSMP for rehabilitation works by the manual. The manual focuses on designing/procuring chlorination unit, water meter, valve and instruments as minimum requirement.
- Since an annual review meeting in DWSSM will be conducted between August and September, the manual can be shared in the meeting.
- Draft final version of the manual will be submitted to Kabindra PM by the end of May.

### Indicator No.2.3

The number of WUSCs which are not in operation: 5 WUSCs

### Indicator No.3.1

Draft final version of training implementation guideline, training plan, training curriculums and training materials for WUSCs in semi-urban towns will be submitted to Kabindra PM by the end of May.

#### Indicator No.3.3

The number of WUSCs who attended Basic training: 63 out of 68 WUSCs

#### Indicator No.3.4

The current status is as follows;

- Evaluation of KPI have completed: 53 WUSCs
- Evaluation of KPI have completed partially: 8 WUSCs
- No reply: 2 WUSCs

**Date:** 2021/04/28 **Time:** 01:00 – 02:00 **Location:** DWSSM, Panipokhari

## Attendants:

- 1. Mr. Kabindra Bikram Karki, Chief, NWSSTC
- 2. Mr. Satoru Oniki, Chief Advisor, WASMIP-II
- 3. Mr. Yusaku Numajiri, Member, WASMIP-II
- 4. Mr. Deepak Subedi, National Staff, WASMIP-II
- 5. Mr. Vivek Shrestha, National Staff, WASMIP-II

### Memo:

Each evidence/support document for the objectively verifiable indicators listed on the latest PDM were confirmed. WASMIP team and Kabindra PM discussed evidences/documents to the indicators. Outline and remarks are shown as below.

# [Overall Goal]

#### Continuous support to WUSCs in semi-urban towns is provided by DWSSM and NWSSTC.

1. In means of verification in Overall Goal, there is the budget progress report in DWSSM which describes the budget heads (items) instead of DWSSM annual report. WASMIP team has a part of the budget progress report. The team needs related parts of the report.

### [Project Purpose]

# Support to the WUSCs in semi-urban towns is provided and strengthened by DWSSM and NWSSTC using government and non-government organizations' personnel.

- 2. In indicators No.1 &2, the draft job descriptions in DWSSM shall be attached.
  - The revision process and sections of DWSSM responsible for the Management Model and Technical Support Mechanism for WUSCs in semi-urban towns are identified. <u>→NWSSTC</u>
  - 2. The sections of DWSSM responsible for the training on the Management Model for WUSCs in semiurban towns and revision process of training implementation guideline are identified. → NWSSTC
- **3.** Regarding Indicator No.3 &4 , trainer's names are listed with updated organizations and capacity assessments (CA). The WASMIP team focus on trainers who belong DWSSM/NWSSTC/FWSSMP. CA survey of both before and after ToT have not completed for the trainers. The team continuously conduct follow up the CA survey.
  - 3. More than 15 trainers, who are able to carry out the training on the Management Model for WUSCs in semi-urban towns, are developed. From this trainer batch, at least six must be employees of FWSSMP.<u>→Total 40 trainers (FWSMP: 18)</u>
  - 4. Capacity assessment results of trainers on the Management Model for target WUSCs in semi-urban towns are improved compared to the baseline.
- **4.** In output 2, regarding Indicator No.2.3, the team summarized the installation status list for the target WUSCs. In case that some WUSCs have NOT installed procured equipment such as flow meter and chlorination unit, Kabindra PM suggested that the reason for NOT installing shall be mentioned in the list.
  - 2. Design manual of specifications on rehabilitation works for target WUSCs in semi-urban towns are shared in <u>annual progress review meeting of FWSSMP</u>.
  - 3. Rehabilitation works are carried out in more than 50 target WUSCs in semi-urban towns.  $\rightarrow$ 65WUSCs(95.6%)
- 5. In output 3, regarding Indicator No.3.3, as of the end of April 2021, the Basic trainings have been conducted 5 times. The 6<sup>th</sup> Basic training can be conducted for semi-urban WUSCs, including 5 remaining target WUSCs of WASMIP. There are reasons that training materials have been updated and the opportunity to attend the Basic training needs to be given for nonparticipating WUSCs which are NOT in operation yet.
  - 3. More than 80% of target WUSCs attend the Basic Training on the Management Model.

#### <u>→63WUSC(92.6%)</u>

Kabindra PM mentioned that approximately 1-2% of WUSCs in semi urban towns are not in operation. The team shall conduct case study of non-operating WUSCs to grasp the fact and determine the further strategy to support such WUSCs.

If necessary, DWSSM can issue a letter to the related stakeholders (WSSDO, Local Governments) for the joint site visit and meetings with non-operating WUSCs.

- **6.** In output 3, regarding Indicator No.3.4, the team summarized KPIs for 68 WUSCs and will compare KPIs with the baseline data.
  - 4. Monitoring and Evaluation of more than 80% of target WUSCs are carried out.

### →Completed 53WUSCs(77.9%), Partially collected 10WUSCs(14.7%), Total 63WUSCs(92.6%)

7. The remainder period in WASMIP-II is approximately 9 months (WASMIP-II terminates at the end of February, 2022). The team and the C/P need to share the main activities and recognize above mentioned issues, therefore, we may have Joint Project Coordination Meeting (JPCM, internal meeting in DWSSM). The meeting can be arranged and held after the lockdown (13th May as tentative schedule).

**Date:** 2021/05/28 **Time:** 11:00 – 12:00 **Location:** Virtual Meeting

## Attendants:

- 1. Mr. Kabindra Bikram Karki, Chief, NWSSTC/DWSSM
- 2. Mr. Satoru Oniki, Chief Advisor, WASMIP-II
- 3. Mr. Yusaku Numajiri, Member, WASMIP-II
- 4. Mr. Deepak Subedi, National Staff, WASMIP-II
- 5. Mr. Vivek Shrestha, National Staff, WASMIP-II

### Memo:

Each evidence/support document for the objectively verifiable indicators listed on the latest PDM were confirmed. WASMIP team and Kabindra PM discussed evidences/documents to the indicators. Outline and remarks are shown as below.

# [Overall Goal]

### Continuous support to WUSCs in semi-urban towns is provided by DWSSM and NWSSTC.

1. In means of verification in Overall Goal, there is the budget progress report in DWSSM which describes the budget heads (items) instead of DWSSM annual report. WASMIP team has a part of the budget progress report. The team needs related parts of the report.

Kabindra PM suggested to contact the planning section to get the DWSSM budget progress report such as NWSSTC training budget, repair/ rehabilitation works and water supply facility construction for WUSC. WASMIP-II team will coordinate with the chief of planning section to get the report.

# [Project Purpose]

# Support to the WUSCs in semi-urban towns is provided and strengthened by DWSSM and NWSSTC using government and non-government organizations' personnel.

- 2. In indicators No.1 &2, the draft job descriptions in DWSSM shall be attached.
  - 1. The revision process and sections of DWSSM responsible for the Management Model and Technical Support Mechanism for WUSCs in semi-urban towns are identified.
  - 2. The sections of DWSSM responsible for the training on the Management Model for WUSCs in semiurban towns and revision process of training implementation guideline are identified.
    - A) Kabindra PM mentioned that the revision process and sections of DWSSM responsible for the Management Model and Technical Support Mechanism is NWSSTC.
    - B) Kabindra PM mentioned that the sections of DWSSM responsible for the training on the Management Model is also NWSSTC.
    - C) Kabindra PM mentioned that the information on status of the latest draft job description in DWSSM can be gotten from the administration section in DWSSM. WASMIP-II team will contact the administration section to get the draft job description. The team will confirm the draft and approvement progress to the administration section.
- **3.** Regarding Indicator No.3 &4, trainer's names are listed with updated organizations and capacity assessments (CA). The WASMIP team focus on trainers who belong DWSSM/NWSSTC/FWSSMP. CA survey of both before and after ToT have not completed for the trainers. The team continuously conduct follow up the CA survey.
  - 3. More than 15 trainers, who are able to carry out the training on the Management Model for WUSCs in semi-urban towns, are developed. From this trainer batch, at least six must be employees of FWSSMP.
    - D) Current trainers are total 40 (FWSSMP: 18) as of the end of April.

- **4.** Capacity assessment results of trainers on the Management Model for target WUSCs in semi-urban towns are improved compared to the baseline.
  - E) However, WASMIP team will continuously follow-up to collect the capacity assessment (after ToT) of the trainers of 40 trainers. WASMIP team will make an appointment with the trainers and visit them to conduct capacity assessment.
- 5. In output 2, regarding Indicator No.2.3, the team summarized the installation status list for the target WUSCs. In case that some WUSCs have NOT installed procured equipment such as flow meter and chlorination unit, Kabindra PM suggested that the reason for NOT installing shall be mentioned in the list.
  - 2. Design manual of specifications on rehabilitation works for target WUSCs in semi-urban towns are shared in <u>annual progress review meeting of FWSSMP</u>.
  - 3. Rehabilitation works are carried out in more than 50 target WUSCs in semi-urban towns.
  - F) DWSSM will allocate time for WASMIP-II to share Design manual of specifications on rehabilitation works, during annual progress review meeting with FWSSMP. The meeting may be held the end of July of August 2021.
  - G) 65 (95.6%) out of the target 68 WUSCs have been carried out rehabilitation works.
- 6. In output 3, regarding Indicator No.3.3, as of the end of April 2021, the Basic trainings have been conducted 5 times. The 6<sup>th</sup> Basic training can be conducted for semi-urban WUSCs, including 5 remaining target WUSCs of WASMIP. There are reasons that training materials have been updated and the opportunity to attend the Basic training needs to be given for nonparticipating WUSCs which are NOT in operation yet.
  - 3. More than 80% of target WUSCs attend the Basic Training on the Management Model.
    - H) 63 (92.6%) out of the target 68 WUSCs have attended the Basic training.
    - I) WASMIP-II team will conduct case study of 5 not in operation WUSCs and prepare a report to determine strategy for their capacity development.

Kabindra PM mentioned that approximately 1-2% of WUSCs in semi urban towns are not in operation. The team shall conduct case study of non-operating WUSCs to grasp the fact and determine the further strategy to support such WUSCs.

If necessary, DWSSM can issue a letter to the related stakeholders (WSSDO, Local Governments) for the joint site visit and meetings with non-operating WUSCs.

- **7.** In output 3, regarding Indicator No.3.4, the team summarized KPIs for 68 WUSCs and will compare KPIs with the baseline data.
  - 4. Monitoring and Evaluation of more than 80% of target WUSCs are carried out.
    - J) Monitoring and Evaluation of Total 63WUSCs(92.6%) have been carried out. (Completed 53WUSCs(77.9%), Partially collected 10WUSCs(14.7%))
    - K) WASMIP team will follow up to collect remaining KPIs from 10 WUSCs except non-operation 5WUSCs and request the WUSCs to calculate KPIs continuously.
- 8. The remainder period in WASMIP-II is approximately 9 months (WASMIP-II terminates at the end of February, 2022). The team and the C/P need to share the main activities and recognize above mentioned issues, therefore, we may have Joint Project Coordination Meeting (JPCM, internal meeting in DWSSM). The meeting can be arranged and held after the lockdown (13th May as tentative schedule).
- 9. Nepali version of SOP, PowerPoint, and Design manual will be prepared by WASMIP team.
- **10.** Kabindra PM explained Management model shall be internally approved by DWSSM first, then the Management model shall be submitted MoWS and approved by MoWS later. However, it is better to be approved by MoWS so that all the stakeholders (provincial, local government) can use WASMIP modules for the capacity development of water utilities.
- **11.** Kabindra PM explained departments in DWSSM responsible for support (Helpline) to WUSCs are:

- a. For construction: Planning section
- b. For training: NWSSTC
- c. For O&M and rehabilitation: Water Quality section, NWSSTC

DWSSM has a dedicated information officer. WUSCs can contact information officer to get the necessary information. However, this system is insufficiently utilized by WUSCs because of lack of knowledge. DWSSM can announce the responsible section to WUSCs through homepage and lectures of NWSSTC.

- **12.** Regarding distribution pipelines damaged by road constructions have happened across Nepal, Kabindra PM explained that NWSSTC is planning to add an information section in NWSSTC's homepage and share this information in lectures to mitigate conflicts with local government or road department. The steps are explained as:
  - a. During preliminary survey, public hearing is conducted by concerned authority (Road department or Local government). WUSCs can use this as an opportunity to grab the attention of the authority on existing water supply infrastructures (pipelines).
  - b. WUSCs should prepare updated distribution map every year and submit to concerned authorities (Local Government, Road department)
  - c. In worst case scenario, WUSC may also file a legal case against authorities.

**Date:** 2021/06/04 **Time:** 11:00 – 12:30 **Location:** Zoom meeting

# Attendants:

- 1. Mr. Surya Kadel DDG, DWSSM
- 2. Mr. Kabindra Bikram Karki Chief, NWSSTC/DWSSM
- 3. Mr. Binod Gajurel Engineer NWSSTC/DWSSM
- 4. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 5. Mr. Yusaku Numajiri Team Member, WASMIP-II
- 6. Mr. Deepak Subedi National Staff, WASMIP-II
- 7. Mr. Vivek Shrestha National Staff, WASMIP-II

Chief Advisor explained activities and achievements based on the Project Design Matrix(PDM), and confirmed the remaining activities/works with DWSSM using PowerPoint Slides.

# Mr. Kabindra Bikram Karki's Remarks:

- 1. It is fine to send questionnaire to past participants of training in Japan to receive feedback on contents of the training.
- 2. NWSSTC may conduct online Basic Training for the remaining 5 WUSCs and 10 WUSCs of Basic Training-I.
- 3. NWSSTC requests to prepare the list of trainers to upload the data in a homepage.
- 4. After WASMIP-II, DWSSM will continuously conduct Basic Training to other semi-urban WUSCs.
- 5. NWSSTC will upload the KPIs data in its homepage.
- 6. In future, KPIs of WUSCs will be collected through the NWaSH application.

# Mr. Surya Kadel Remarks

- 1. Approval process will be carried out when the final deliverables are ready.
- 2. Achievements of WASMIP-II are remarkable and appreciable.
- 3. DWSSM has started dedicated budget for O&M of completed projects from next fiscal year.
- 4. DWSSM has started NWaSH platform to collect KPIs of WUSCs.

# One Day Seminar on WASMIP II-achievements and Way forward

Date: 24<sup>th</sup> August 2021 Time: 10:30 – 4:30 Venue: DWSSM Building / Zoom

# Schedule:

Day	10:30 - 12:00	12:00 - 13:30	13:30 - 15:00	15:00 - 16:30
2078 Bhadra	Introduction:	Support programs	Capacity	Synchronization
8 (August	Overview of	provided by the	Development and	of approaches
(2021, 24 <sup>th</sup>	WASMIP II Project	department to	Operational	under ISSAU and
	(Oniki San)	improve the	management of	WASMIP
		operational	WUSCs under	Rajit Ojha
		management of	WASMIP project	
		WUSCs under	Kabinda Bikram	
		WASMIP II project	karki	
		Laxmi Upadhaya		

# Participants:

- 1. Mr. Tiresh Khatri Director General, DWSSM
- 2. Mr. Kabindra Bikram Karki- Chief of NWSSTC, DWSSM
- 3. Mr. Laxmi Prasad Upadhaya Chief of Planning Section, DWSSM
- 4. Mr. Narayan Prasad Acharya Chief of Water Quality Section, DWSSM
- 5. Mr. Binod Gajurel NWSSTC /DWSSM
- 6. Mr. Chandra Shekhar Acharya DWSSM
- 7. FWSSMP Bhaktapur
- 8. Mr.Maheshi Mahato FWSSMP Birgunj
- 9. FWSSMP Butwal
- 10. FWSSMP Bhaktapur
- 11. FWSSMP Nepalgunj
- 12. Mr.Sujit Mahato FWSSMP Biratnagar
- 13. Mr.Rajeeb Ghimire ISSAC
- 14. Mr. Deepak Puri ISSAC
- 15. Mr.Harka Chhetri ISSAC
- 16. Ms. Miha Matsubayashi JICA HQ
- 17. Ms.Bidhya Pokharel JICA Nepal
- 18. Mr.Satoru Oniki WASMIP II
- 19. Mr.Toshiaki Ooka WASMIP II
- 20. Mr. Kenji Otsuka WASMIP II
- 21. Mr. Deepak Subedi WASMIP II
- 22. Mr. Vivek Shrestha WASMIP II
- 23. Ms.Shajina Subedi WASMIP II

# Sessions:

- Presentation handouts, Design Manual of specifications on rehabilitation works for target WUSCs in semi-urban towns and its handout for explanation were distributed among C/P participants.
- 2. Introduction: Overview of WASMIP II Project Satoru Oniki Chief Advisor, WASMIP II In this session, the contents of the design manual were briefly explained and shared.
- Support programs provided by the department to improve the operational management of WUSCs under WASMIP II project – Laxmi Prasad Upadhaya – Project Coordinator/ Chief of Planning Section, DWSSM
- 4. Capacity Development and Operational management of WUSCs under WASMIP project Kabindra Bikram Karki Project Manager/ Chief of NWSSTC, DWSSM.
- 5. The fourth session was not conducted. Mr. Rajit Ojha (Chief of ISSAU) was unavailable during the seminar.

# **Discussion and key points**

- 1. Mr. Kabindra mentioned that
  - The role of FWSSMPs needs to be clearly defined for the sustainability of support model to WUSCs.
  - DWSSM relies on FWSSMPs as they have more information of the WUSCs.
  - FWSSMPs must cooperate and dispatch trainers/engineers to the sites for the capacity development of WUSCs.
  - DWSSM is responsible for continuing the trainings for the WUSCs after WASMIP II.
  - Inviting the engineers from local governments is possible but the procedure is lengthy.
  - NWSSTC is planning to conduct trainings for engineers of local government (water supply and wastewater management training.)
  - NWSSTC will conduct the basic training to other semi urban WUSCs of Nepal. General information such as location, contact details, functionality etc. needs to be determined to shortlist the candidate WUSCs for the training.
  - The Management Model as outputs of WASMIP-II will be approved and institutionalize by DWSSM.
- 2. Ms. Bidhya mentioned that;
  - WASMIP II has been the project that has efforts in endorsing preventive measures for WUSCs.
  - Sustaining the project activities for preventive measures in WUSCs is important and DWSSM should actively engage for accomplishing it.
  - The main challenges after WASMIP II are institutionalization and utilization of the resources made during the Project.
- 3. Mr. Otsuka mentioned that;
  - In the last month of the project, the output needs to be rechecked and there are many challenges due to the pandemic.
  - Be requested DWSSM for cooperation during the final evaluation and questionnaires that will be conducted in September.
  - It will be a good opportunity to share the programs and projects with everyone.

# THE DISSEMINATION WORKSHOP OF WASMIP-II FOR THE CAPACITY DEVELOPMENT PROJECT FOR THE IMPROVEMENT OF WATER SUPPLY MANAGEMENT IN SEMI-URBAN AREAS IN NEPAL (WASMIP-II)

# Agenda :

AGENDA FOR THE DISSEMINATION WORKSHOP OF WASMIP-II FOR THE CAPACITY DEVELOPMENT PROJECT FOR THE IMPROVEMENT OF WATER SUPPLY MANAGEMENT IN SEMI-URBAN AREAS IN NEPAL (WASMIP-II)

Date Venue	February 15 (Tuesday), 2022, 12:15PM - 13:45 PM Online Meeting
	Topics and Timetable Meeting Moderator: Mr. Kabindra Bikram Karki
12:15-12:20	Opening Remarks Mr. Madhay Prasad Adhikari, Project Director, Deputy Director General of DWSSM Mr. Xoshiki Ehara, Senior Representative, JICA Nepal Office
12:20-12:50	Activities, Achievements of the WASMIP-II     WASMIP-II Deliverables Mr. Satoru Oniki, Chief Advisor WASMIP-II
12:50-13:00	Utilization Plan / Way Forward Mr. Kabindra Bikram Karki
13:00-13:15	Remarks Chief of ISSAU NWSC Water Supply Management Boards
13:15-13:30	Discussion
13:30-13:45	Remarks Mr. <u>Xoshiki Ebara</u> , Senior Representative, JICA Nepal Office Mr. <u>Madhav</u> Prasad <u>Adhikari</u> , Deputy Director General of DWSSM Ms. <u>Neena</u> Shrestha, Joint Secretary of <u>MoWS</u> .

# **Participants:**

- 1. Ms. Meena Shrestha Joint Secretary, MoWS
- 2. Mr. Madhav Prasad Adhikari Deputy Director General, DWSSM
- 3. Mr. Kabindra Bikram Karki Ministry of Water Supply
- 4. Mr. Rajit Ojha Chief of ISSAU, DWSSM
- 5. Mr. Birendra Kadel Chief of Planning Section, DWSSM
- 6. Mr. Binod Gajurel NWSSTC / DWSSM
- 7. Ms. Miha Matsubayashi JICA Headquarter
- 8. Mr. Yoshiki Ehara- JICA Nepal
- 9. Mr. Kato Kumiko -JICA Nepal
- 10. Mr. Noboru Ozaki \_ JICA Nepal
- 11. Ms. Bidhya Pokharel JICA Nepal
- 12. Mr. Deepak Puri -Institutional Support and Service Advisory Consultant / DWSSM
- 13. Ms. Tripti Rai Water Aid
- 14. Mr. Sarbagya Shrestha Water Aid
- 15. Mr. Sanjeev Rana Kathmandu Valley Water Supply Management Board
- 16. Mr. Shiva Paudel -Asian Development Bank
- 17. Mr. Sudan Raj Panthi World Health Organization
- 18. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 19. Mr. Toru Yagi WASMIP -II
- 20. Mr. Kenta Hayashi WASMIP-II
- 21. Mr. Deepak Subedi WASMIP- II
- 22. Mr. Vivek Shrestha WASMIP-II
- 23. Ms. Bineeta Shahi WASMIP- II
- 24. Ms. Shajina Subedi -WASMIP II

# **Opening Remarks**

• Mr. Ehara welcomed everyone to the meeting. He further explained the water situation of Nepal.

# Activities, Achievements of the WASMIP Mr. Satoru Oniki

- Mr. Satoru Oniki presented the activities and achievements along with WASMIP II deliverables.
- He described all the activities and achievements so far with the help of charts.

• The presentations were supported by the video materials.

# Utilization and Way forward

# Mr. Kabindra Bikram Karki

• Mr. Kabindra enlightened the fact that ISSAU will handle the management model.

# Remarks

# Mr. Sudan Raj Panthi, WHO

- Mr. Sudan appreciated the Operation and Maintenance part of WASMIP II.
- He pointed out that data regarding Water Quality Compliance are doubtful.
- He suggested to add risk management portion along with SOPs and Management Model.
- Mr. Sudan also recommended to use simple Nepali words in the video. Some words are not common and hard to understand.
- He concluded the remarks by stating that WHO will support projects for Water Quality and Safety Plans.

# Mr. Shiva Paudel

Mr. Shiva enquired If there any plan to enhance the governance model in the WUSC? Is there any linkage between O&M and governance?
 Mr. Kabindra explained that WASMIP II has focused improving the working performance and capacity development of the WUSCs.

# Ms .Tripti Rai

• Ms. Tripti interrogated how to make the training materials more accessible to everyone. Mr. Kabindra explained that the materials shall be made accessible to WUSCs by uploading the document in the NWSSTC website and by distributing booklet to WUSCs.

# **Concluding Remarks**

# Ms. Miha Matsubayashi

- Ms. Miha expressed her appreciation towards all the supporting bodies of the project. She congratulated the team for successful project.
- Ms. Miha expressed her willingness to collaborate for further WASH project.

# Chat History for Reference:

10:57:49 From Miha Matsubayashi, JICA HQ to Everyone;

• This video is very good material and thank you WASMIP team!

# 12:01:55 From Bidhya Pokhrel to Everyone;

• Many thanks Meena Ma'am for encouraging DWSSM and NWSSTC to share and promote utilization of Management Model to other water utilities, very important.

12:08:56 From JICA Ryuji Ogata to Everyone;

• Thank you for nice JCC meeting. Sorry but I have to leave for another meeting now.

13:05:54 From Rajit Ojha (DWSSM, Nepal) to Everyone :

• Dear all, due to my other commitments I need to leave soon. It is very insightful. I as an ISSAU chief commend highly of this effort and we are taking over the SOPs /Management models if further customization/scaling up is needed. we collaborated during the project as well. And we are very happy JICA delivered this continuous service improvement model. In the near future we are registering KPI's online integrating with NWASH. Thank you for your hard effort-Rajit

13:07:05 From Bidhya Pokhrel to Everyone:

• many thanks Rajit ji, highly appreciate your cooperation as always.

13:11:19 From Sudan Raj Panthi/ WHO to Everyone:

 It is really great support under WASMIP. So many activities, including te SOPs, Training and support for chlorination could help to improve WQ. I doubt, 97% schemes are complying NDWQS. In case, if we have new WASMIP project, my recommendation would be; to provide safe water consistently, WUSC should go for risk assuagement and risk management approach, including WQ surveillance as third party monitoring. Success examples of Pragatinagar and Mangadh, are may be because of implementation of WSP, including WQ surveillance.

13:33:57 From Bidhya Pokhrel to Everyone:

• Many thanks Sudan sir for very productive feedback.

13:45:41 From Tripti Rai to Everyone:

• Thank you Kabindra Sir, for the presentation. WaterAid is supporting different WOPs in Godavari and Lahan Municipality. It will be good to establish some learning mechanisms for sector shared learning.

13:48:06 From Tripti Rai to Everyone:

• On the WASMIP II resources, making those accessible to WUSC through different medium so they can maximise use would be good. The videos were simple and easy. peer to peer exposure and learning may also be helpful for onsite learning. Ensuring a vibrant trainers pool is desirable and should be invested in.

13:51:29 From Bidhya Pokhrel to Everyone:

• Thank you very much Tripti ji, yes it's very necessary to make it accessible as much as possible...also they are dynamic tools to be updated

13:56:55 From Tripti Rai to Everyone:

• Thank you Bidhya ji for the coordination and ongoing shared learning with the sector actors.

# Appendix 2.56.2

# Memorandums of Discussion With WUSCs

# **Re: Mangadh WUSC Operation and Management status**

Date: 2016/7/4 Time: 10:00 – 15:00 Location: Mangadh WUSC, in Morang Attendants:

- 1. Mr. Ram Bahadur Ghimire, Chairman, WUSC, Mangadh
- 2. Mr. Ganga Prasad Acharya, Manager, WUSC, Mangadh
- 3. Mr. Jyotish Kumar Mishra, Engineer, WSSDO, Morang
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Mikita Amano, Team Member, WASMIP Team
- 6. Mr.Yoshio Chikamatsu, Team Member, WASMIP Team
- 7. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 8. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

# **Meeting conclusions:**

- Mangadh WUSC produces yearly report on its activities and distribute it to consumers and journalists. The information in the report is supported by the recorded documents from technical and non-technical management. About 300 copies of report is produced and distributed to consumers.
- Presently, 2 out of 3 tube wells are functional, another well is under construction. Other two tube wells are going to be added as new project. A new overhead tank of capacity 225m<sup>3</sup> is under construction. They are also planning to construct 3 new treatment plants. A toilet and new office with training is also under construction.
- The fund for new projects are produced by collaboration of Nepal government and Mangadh WUSC. 70% of fund is from government and remaining is from Mangadh WUSC. There are 5 sites with 36 km pipeline extension project which is estimated to cost about NRS 20 million.
- The inflow meter from tube well to filtration unit and outflow meter have stopped working for about 6 months. They have tried to replace them (two meters) with local meters but WUSC also didn't last for long time. This has caused difficulty in keeping production and distribution records. Currently, WUSC has recorded the production volume based on the deep tube wells flow meters.
- > The Free Residual Chlorine (FRC) in treated water was tested and found to be 0.4 mg/l.

# Re: Condition of water supply services and operation/maintenance of Gauradaha WUSC

Date: 2016/7/5 Time: 10:40 – 15:00 Location: Gauradaha WUSC, Attendants:

- 1. Mr. Prasad Tajpuriya, Manager, Gauradaha WUSC
- 2. Mr. Durga Prasad Gautam, Deputy Chairman, Gauradaha WUSC
- 3. Mr. Juddha Bahadur Bista, Accounting Coordinator, Gauradaha WUSC
- 4. Mr. Shanta Parajuli, Treasurer, Gauradaha WUSC
- 5. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 6. Mr. Mikita Amano, Team Member, WASMIP Team
- 7. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 8. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 9. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

# Meeting conclusions:

# Intake:

- Gauradaha WUSC has 2 deep tube wells 200m apart. The tube well inside the office compound pumps about 900litre/min and other pumps about 1000litre/min.
- > The flow meter on the pumps are damaged and they are unable to find the spare parts.

# Aeration tank:

- Flow meter is damaged. New local flow meters were bought (Global Impex International) and replaced but they were also damaged.
- Due to high concentration of iron in raw water, the pipes connecting aeration tank is regularly cleaned to prevent blockage.
- The tank is cleaned monthly.

# **Pressure filter tanks:**

- The tank vent filter is not working.
- > The tank is cleaned regularly as iron content is high.
- > Media for the filter tank is ordered from Hetauda.

# **Control Chlorination:**

- > Flange set and dosing control unit are broken. No spare parts are found.
- > The chlorine is not stored as it is readily available in the local market.

# Other:

- A compression pump's piston is broken. The piston was not found in local market.
- > The fuel injection unit of the generator is not working properly.
- > The working hours of generator is not recorded.
- Servicing and maintenance record of generator is kept.
- Water quality in tap water is not satisfactory as pH and iron content are still above NDWQS standard.

# Re: Condition of water supply services and operation/maintenance of Dhulabari WUSC

Date: 2016/7/6 Time: 10:00 – 16:00 Location: WUSC, Dhulabari Attendants:

- 1. Mr. Ajay Ghimire, Secretary, Dhulabari WUSC
- 2. Mr. Indra Bdr. Budhathoki, Chairman, Dhulabari WUSC
- 3. Mr. Gayatri Prasad Dhungana, Manager, Dhulabari WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Mikita Amano, Team Member, WASMIP Team
- 6. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 7. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team

# Meeting conclusions:

- The ground water spring intake is under the threat of landslide. The DWSS has been helping in sand removal and construction of gabion wall to protect the source.
- A new boring unit at WTP and magurmadhi is constructed with full financial help of DWSS and Nepal Government respectively.
- > The panel of magurmadhi was damaged due to lightning 4 years ago.
- Presently, the control panel is used manually.
- > Dosing control unit in WTP are broken since last year. No spare parts are found.
- A mixing pump is also out of order 2 months ago. The manager has arranged a mechanic to repair it.
- The dosing of chlorine was done by directly injecting in pipes in magurmadhi. But due to drying out of the tube well 1 year ago; the chlorine dosing is stopped. Presently, water from new tube well is directly supplied to the overhead tank without dosing. The manager informed of the plan to shift the dosing unit to the new pipeline.
- > The DWSS has constructed a compound wall around the perimeter of WTP.
- The sedimentation tank is cleaned in a period of 6 months. The flow towards the sedimentation tank from intake ranges from 1500-3000 liter/min in rainy season.
- > The slow sand filter is cleaned in a period of 2-3 months.
- The rapid sand filter is provided with a screening unit. There is a colored level in the tank; the tank is cleaned after the water level exceeds the colored region.

# Other:

- The Overhead tank in office premise was destroyed by recent earthquake. The tank at magurmadhi is functional.
- > The secretary mentioned lack of skilled manpower and difficulties in updating business plans.
- They are unable to increase tariff as per the business plan as they are unable to convince the consumers to pay the increased rate.
- The secretary also informs a problem regarding setup of new service connection. As the distribution pipe line is about 1.5m below the ground level; it is difficult to excavate and connect new connections using primitive tools. The process takes lots of time and effort which is difficult because of insufficient staffs. So. He feels need of new and easy tools for excavating and connecting pipelines.
- Operating procedures like inspection and recording leakage, meter reading, filing complaints are carried out effectively.

- But as the business plan designed by the previous WASMIP model was not followed properly due to management issues and budget issues; the organization has not revised the business plan.
- The chairman also mentions the lack of inspection, supervision and monitoring from the DWSS and WSSDO.
- The regular transfer of staffs between WUSCs is found to be one of the major reason of failure in adaptation of the WASMIP model. As the skilled and trained staff in the model moves to other place it is difficult to guide and train new staff on the model.

# **Re: Chautara WUSC Operation and Management status**

Date: 2016/7/10 Time: 11:00 – 14:00 Location: WUSC, Chautara Attendants:

- 1. Mr. Subash Karmacharya, Chairman, WUSC
- 2. Mr. Shyam Krishna Shrestha, Secretary, WUSC
- 3. Mr. Krishna Bahadur Thakuri, Co- Secretary, WUSC
- 4. Mr. Tanka Bahadur Shrestha, Treasurer, WUSC
- 5. Ms. Dil Kumari Shrestha, Member, WUSC
- 6. Mr. Indra Mani Shrestha, Member, WUSC
- 7. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 8. Mr. Mikita Amano, Team Member, WASMIP Team
- 9. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 10. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 11. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

# Meeting conclusions:

- There are two springs from which water is carried out to WTP via 5 transmission pipeline of diameter 110 mm by gravity flow. As, the intake is in remote area with no human settlement the intake is somewhat free from pollution.
- > The pipeline extends about 24 km from intake to WTP.
- Selang VDC, Syaule and pipal dada receives the untreated water directly from the transmission line before the water reaches WTP. No tariff is received from those areas.
- As the intake was constructed about 28 years ago, there are cases of pipe deterioration and leakages. Due to recent earthquake and landslide the pipe lines were further damaged.
- There was also noted decrease in discharge from the intake. The flow decreased from about 12 liter per sec to 5 liter per sec.
- > Presently, there are no water meters installed to calculate the inflow and outflow discharge.
- The water treatment facility was constructed about 10 years ago. Presently, the chlorine dosing unit and mixing pump are out of order.
- A temporary 1000 liter tank is placed for dosing bleaching powder as the chlorine dosing unit after the filtration unit is broken. Two separate pipelines are used to supply water to the filtration unit and temporary bleaching unit.
- About 7 kg of chlorine is stored in the facility. Normally, WHO, Department of health, WSSDO and other NGOs provide chlorine to WUSC.
- No regular dosing is done. The dosing is done every 3 days in rainy season but it is not frequent in other seasons.
- Due to the earthquake the slow sand filter suffered damage which caused leakage in the system. Currently out of 3 compartments of filter only 2 are functioning after repair works.
- The sand from the filter is taken out every 2 years. The accumulated sand is then cleaned every 5 year.
- The water from the filter and bleaching unit enters the reservoir. The capacity of the reservoir is about two hundred and forty thousand liter.
- The water is then transferred to other reservoir located in laxman dada of capacity 100 thousand liter and also supplied to general public via two 90mm GI pipelines. The GI pipe lines are about 2/3 of the total distribution line and remaining 1/3 comprises of HDPE pipeines.
- > There are presently 2 permanent guards in WTP and 2 other guards in intake.

# **Re: Besishahar WUSC Operation and Management status**

Date: 2016/7/13 Time: 10:00 – 15:00 Location: Besishahar WUSC Attendants:

- 1. Mr. Subash Karmacharya, Chairman, WUSC
- 2. Mr. Shyam Krishna Shrestha, Secretary, WUSC
- 3. Mr. Krishna Bahadur Thakuri, Co- Secretary, WUSC
- 4. Mr. Tanka Bahadur Shrestha, Treasurer, WUSC
- 5. Ms. Dil Kumari Shrestha, Member, WUSC
- 6. Mr. Indra Mani Shrestha, Member, WUSC
- 7. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 8. Mr. Mikita Amano, Team Member, WASMIP Team
- 9. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 10. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

# **Meeting conclusions:**

#### **INTAKE:**

- There are presently 5 sources from which water is collected and distributed to town area of besishahar.
- The deep tube well in besishahar WUSC compound had initial discharge of 10 liter per second. The tube well was constructed 2 years ago. There is no flow meter installed in the deep tube well. The water pumped from tube well is carried to the reservoir no.1 via 125mm HDPE pipeline. There is a check valve, washout valve and valve controlling flow to reservoir.
- > A local spring source near WTP supplies water to reservoir no.4 via two 110mm HDPE pipelines.
- There are other 3 river sources lable khola, mahavir khola and dud khola. Water is collected from mahavir and lable khola by a HDPE pipeline of diameter 90mm each. The water from dud khola is collected by a GI pipe of diameter 100mm. The water from these sources are collected to reservoir no 2 and 3 after a series of treatment procedures.
- There are other 4 major sources from which water is supplied to rural area of besishahar by besishahar WUSC. Water from furkevir khola and puma khola are collected by 80mm HDPE pipeline, a 50 mm HDPE pipeline collects water from dhad khola and a 25mm HDPE pipeline collects water from Sapli khola.

# WTP:

- The collected water from Mahavir, Lable and Dud khola enters sedimentation tank, horizontal rough sand filter, slow sand filter and finally to the reservoir no. 2 and 3.
- Water collected from tube well and the thulo padhera spring source is not treated and sent directly to the reservoirs no 1 and 4.
- Presently, chlorination unit is not used due to clogging of dosing pipe. Although the problem is minor the pipe is still not replaced. Chlorination is done manually 2 times every day.
- The water from Furkevir khola is filtered by rough sand filter while water from Puma khola is treated by sedimentation tank. But, no filtration unit is setup for Dhad khola and Sapli khola.

# **Reservoirs:**

There are 4 reservoirs in WTP site. Reservoir 1 has capacity of 150 thousand liters and remaining other 3 reservoirs has capacity of 100 thousand liters. These reservoirs distributes water to town area of besishahar.

- The besishahar WUSC supplies water to the rural areas by 6 other reservoirs. The water from sapli khola first collected to 5000 liter reservoir by 25mm HDPE pipeline. The water is then distributed to local consumers and other reservoir of capacity 20 thousand liter by 90mm HDPE pipeline. The water is then distributed to the consumers by 40mm HDPE pipeline from 20 thousand liter reservoir.
- The water from Puma khola is collected by a 100mm diameter HDPE pipe to a reservoir of capacity 150 thousand liter and distributed to local consumers by 100mm diameter HDPE pipeline.
- Furke vir is the major source from which water is collected by 75 mm diameter HDPE pipeline to a reservoir of capacity 200 thousand liter. This reservoir supplies water to two different 20 thousand liter reservoirs.
  - The 20 thousand liter reservoir which collects water from sapli khola also collects water from furkevir by a 40mm pipeline.
  - The 200 thousand reservoir then supplies water to other 20 thousand reservoir by a 100mm HDPE pipeline. The water is then supplied to public by two 50mm diameter HDPE pipeline.
- The water from dhad khola is collected in a reservoir of 25 thousand liter by a 50mm diameter HDPE pipeline which distributes water to public by a HDPE pipeline of 50mm diameter. The access water from this reservoir is supplied to 200 thousand liter reservoir of furkevir khola by a HDPE pipeline of 50mm diameter.
- The chlorination is done in 200 thousand liter reservoir of furke vir and 150 thousand reservoir of puma khola. No chlorination is done in other reservoirs.

# Distribution:

- The GI pipelines numbered 1,2,3,4 and 5 originates from reservoir no.3. The GI pipelines numbered 6,7,8,9 and 10 originates from reservoir no.2. Other GI pipelines 11, 12 and 15 originates from reservoir no. 1. Remaining GI pipelines 13 and 14 originates from reservoir no. 4.
- The GI pipelines from reservoir 2 and 3 are of diameter 50 mm. The GI pipes 11 and 12 from reservoir 1 are of diameter 100mm and GI pipe no 15 is of diameter 50mm. The GI pipes no 13 and 14 from reservoir no.4 are of diameter 100mm.
- The GI pipes numbered 1,2,3,4 and 5 are connected to valves then connected to HDPE pipes of diameter 90mm is used to distribute water.
- Similarly, GI pipes numbered 6,7,8,9 and 10 are connected to valves then connected to HDPE pipes of diameter 50mm is used to distribute water.
- GI pipes numbered 11 and 12 are connected to valves then connected to HDPE pipes of diameter 110mm is used to distribute water. While, GI pipe no 15 is connected to valve and then connected to 100mm HDPE pipe for distribution.
- Lastly, GI pipes no 13 and 14 are connected to valves then connected to 110mm HDPE pipes for distribution.

# Water Quality Lab:

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- The lab was constructed 7 months ago in the compound of Water Treatment facility with collaboration of Besishahar WUSC and World Vision A.D.P Lamjung.
- > Before the construction of lab, tests were carried out in WRMSO lab in Pokhara.

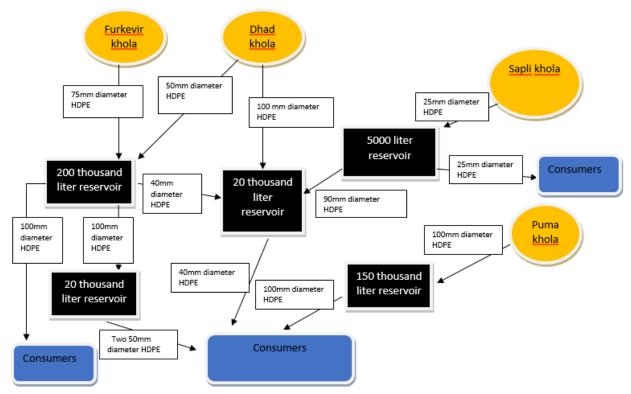


Figure 1: Water distribution system for rural areas by Besishahar WUSC

<sup>&</sup>lt;sup>i</sup> All the information are gathered according to Mr. Tri lochan paudel, Technician of Besishahar WUSC

# **Re: Manthali WUSC Operation and Management status**

Date: 2016/7/21 Time: 12:00 – 15:00 Location: Manthali WUSC Attendants:

# 1. Mr. Ramchandra Biyogi, Chairman, WUSC

- 2. Mr. Shiva Kumar Karki, Assistant chairman, WUSC
- 3. Mr. Jagdish Subedi, Manager, WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Yusaku Namujiri, Team Member, WASMIP Team
- 6. Mr. Akira Hasebe, Team Member, WASMIP Team
- 7. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 8. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# **Meeting conclusions:**

# INTAKE:

- There are presently 3 types of water sources which are spring, stream & shallow tube well from which water is collected and distributed to town area of Manthali by Manthali WUSC.
- The shallow well in Battichaur was constructed 10 years ago. There are two shallow wells in Battichaur. There are no flow meters installed in the transmission line from the wells.
- There is another shallow well in Akase which was also constructed 10 years ago. The transmission line from this well also doesnot possess water meter.
- Water from Bhalua khola(spring) and lampate khola(stream) is carried out to slow sand filter and distributed to consumers. The reservoir in WTP site is under repair due to damage by earthquake. The water in receiving chamber before the slow sand filter has a very small discharge due to lack of water in intakes.
- Another source of water is Machhaware stream & Sadi Stream where the discharge is also low for supplying.
- > Another new shallow well is under construction.

# WTP:

- The collected water from Bhaluwa spring & Lampate stream enters slow sand filter and distributed to consumers. Due to lack of water in these sources, water stored from Battichaur well is also supplied to this filter and distributed.
- Presently, periodic chlorination is not done Chlorination is done manually 2 times every day during rainy season or during high turbidity.

# **Reservoirs:**

There are 5 reservoirs in total that are collecting and distributing water to Manthali area. Reservoir at WTP site is under reconstruction due to the earthquake. This reservoir has a capacity of 200 thousand liters. Previous, the capacity was 150 thousand liters. All other reservoirs has a capacity of 2-20 thousand liters.

# **Distribution:**

> The diameter and material of distribution pipes are shown in diagram below.

# Water Quality Lab:

The water testing is normally done by WSSDO ramechaap. Normally, tests on 3 parameters are conducted (pH, Turbidity and e-coli).

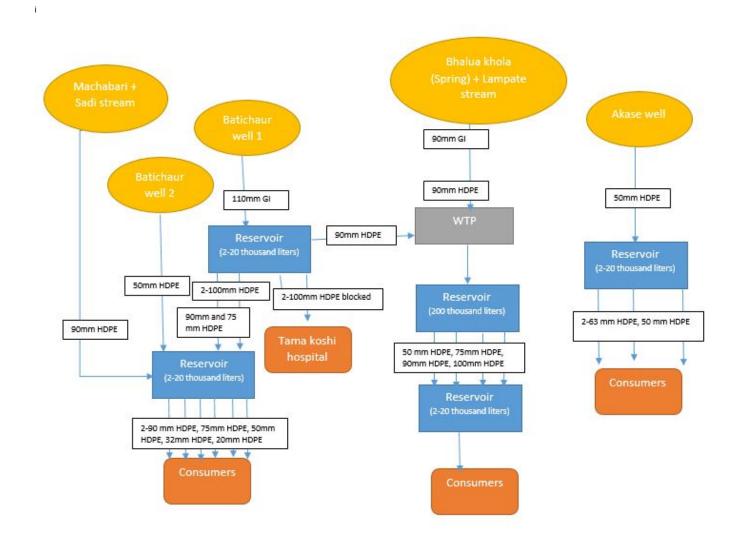


Figure 1: Water distribution system by Manthali WUSC

<sup>&</sup>lt;sup>i</sup> All the information is gathered according to Mr. Jagdish Subedi, Manager at Manthali WUSC

# **<u>Re: WASMIP model explanation to the WUSC Beljhundi and feedback</u>**

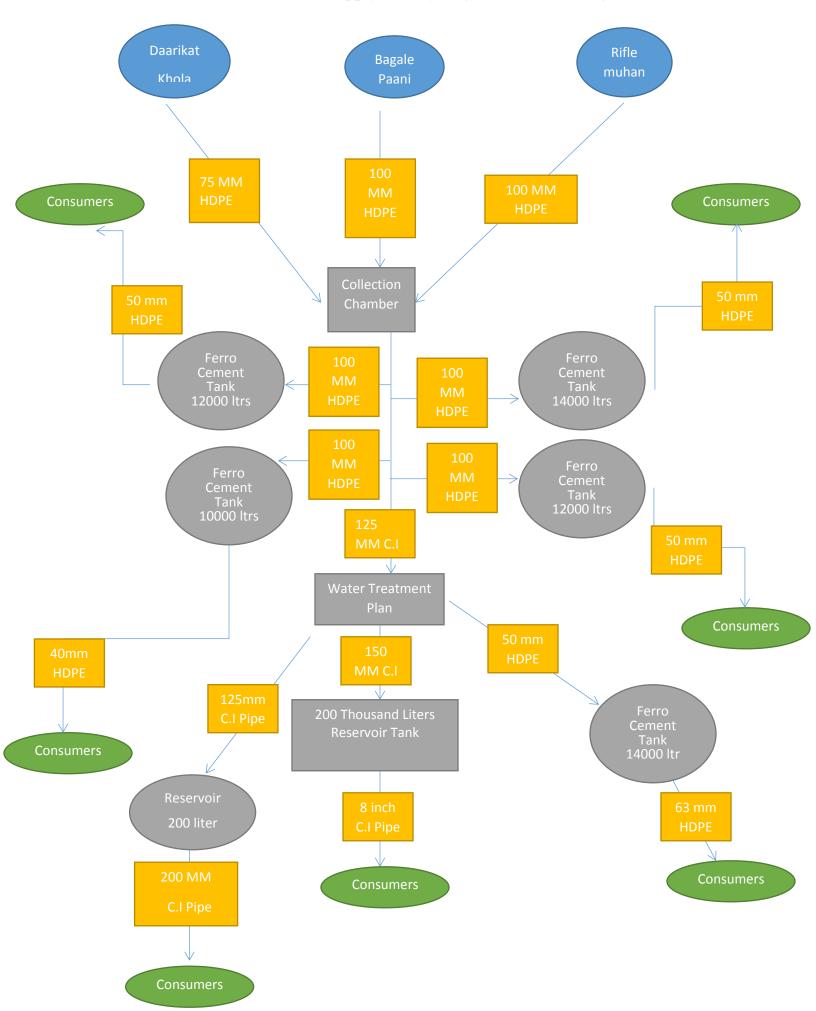
Date: 2016/7/27 Time: 8:00 – 10:00 Location: WUSC Office, Beljhundi Attendants:

- 1. Mr. Pradeep Gautam, President, Beljhungdi WUSC
- 2. Mr. Gehendra Bahadur Basnet, Vice President, Beljhungdi WUSC
- 3. Mr. Binay Paudel, Secretary, Beljhungdi WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Akira Hasebe, Team Member, WASMIP Team
- 6. Mr. Yusaku Numajiri, Team Member, WASMIP Team
- 7. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team
- 8. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# Meeting conclusions:

- > Date of construction of water treatment plant is 1977 A.D.
- > 26 Public taps and 100 Private taps at the time of design and construction.
- Source: 2 Stream water source and 1 spring water source.
- Length of pipeline from Intake to Reservoir around 12.6 Km.
- Distribution line around 44.8 Km.
- ▶ In September 24<sup>th</sup>, 1999 water supply facilities handed over to WUSC from government.
- 2 service area which includes ward no. 4,5,6,7,8,9 of Bijouri VDC and ward no.1,2,3,7 of Manpur VDC.
- ➤ 5 nos. of Ferro cement reservoirs.
- ➤ All connections has a water meter.
- ▶ No. of service connections is approx.1000 numbers.
- ➢ Water Tariff is of two types: Private and Commercial (Institution).
- ▶ Water Safety Plan was introduced from 2068 B.S (2012 AD).
- Access Road built by the cement factory to their mine-site at the source is the main problem.
- > Presence of Lime and Calcium in the raw water.
- Transmission pipes made up of C.I material is very old and is blocked by the presence of calcium.
- A new deep well is under construction and so far 75% is completed.
- Water Testing is done in their own Testing Lab by their staff. The staff has received a training to use a wagtech kit provided by the WHO.

# Distribution of water supply of Beljhungdi WUSC at Dang



# Re: Beljhungdi WUSC Operation and Management status

Date: 2016/7/27 Time: 12:00 – 15:00 Location: Beljhungdi WUSC Attendants:

- 1. Mr. Pradeep Gautam, President, Beljhungdi WUSC
- 2. Mr. Gehendra Bahadur Basnet, Vice President, Beljhungdi WUSC
- 3. Mr. Binay Paudel, Secretary, Beljhungdi WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Akira Hasebe, Team Member, WASMIP Team
- 6. Mr. Yusaku Numajiri, Team Member, WASMIP Team
- 7. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team
- 8. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# **Meeting conclusions:**

# INTAKE:

- There are presently 2 sources of water which are spring and stream from which water is collected and distributed to town area of Beljhundi.
- The water from 1 spring is carried to the collection chamber via 75 mm and 100 mm HDPE pipe line & from spring intake to collection chamber via 100 mm HDPE pipeline.

# WTP:

- The collected water from the collection chamber enters sedimentation tank via two pipes consisting of 90 mm HDPE pipeline and 125 mm C.I pipeline.
- Water collected in the sedimentation is send to Roughing filter via 150 mm G.I pipe & is treated and send to sand wash tank via 150 mm G.I pipe and to reservoir via 200 mm HDPE pipe having capacity of 200 thousand liter.
- Presently, chlorination unit is not used at all before it was used but due to absence of skilled resource.
- Water treated from this plant goes to reservoir no 1 and 1 Ferro cement tank. The remaining 4 Ferro cement tank directly collects water from the transmission line and supplies the water directly.

# **Reservoirs:**

There are 7 nos. of reservoir in total that are collecting and distributing water to Beljhungdi area. Reservoir 1 has capacity of 200 thousand liters and reservoir 2 is recently completed which has capacity of 200 thousand liters. These reservoirs distributes water to town area of Beljhungdi.

- The Beljhungdi WUSC supplies water to the rural areas by 4 Ferro cement reservoir too. The capacity of the 4 Ferro cement tank is 2 nos. 12000 liter and 10000 liter and 14000 liter respectively. The water from collection chamber is supplied to 4 Ferro cement tank and from there it is distributed to the consumers by 3 nos. 50 mm HDPE pipeline and 40 mm HDPE pipeline. These Ferro tank receives directly from the transmission pipe before reaching WTP.
- The water from WTP is also send to 1 Ferro cement tank of capacity 14000 liter via 50 mm HDPE pipeline and from the water is distributed via 63 mm HDPE pipe to the consumers.
- There is one reservoir not in operation next to the existing reservoir 1 which is now completed having capacity of 200 thousand liter capacity. The water from this reservoir is distributed to consumers via 150 mm G.I pipeline.

# Water Quality Lab:

There is a water quality lab with the wagtech kit at Beljhundi WUSCs. Water quality tests are conducted by the Manager of the Beljhundi WUSC. Manager has received a training in using the wagtech kit.

# Re: WASMIP model explanation to the WUSC Gulariya and feedback

# Date: 2016/7/28 Time: 8:00 – 10:00 Location: WUSC Office, Gulariya Attendants:

- 1. Mr. Kosh Raj Niraula, President, Gulariya WUSC
- 2. Mrs. Indira Subedi, Vice President, Gulariya WUSC
- 3. Mr. Chandra Bahadur Baniya, Treasurer, Gulariya WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Akira Hasebe, Team Member, WASMIP Team
- 6. Mr. Yusaku Numajiri, Team Member, WASMIP Team
- 7. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team
- 8. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# Meeting conclusions:

- > Date of construction of the plant was at 1981 A.D.
- Population was around 5300 at the time of design and construction.
- Source: 2 Underground deep tube well of 125 meter deep.
- > Presence of sand in the raw water is the main problem.
- > No Washout facility at distribution line.
- Length of total pipeline was around 21 Km and now it is around 42 km.
- Shortage of water due to increase in population causing high demand.
- No presence of water quality laboratory but send to regional water quality testing lab at Nepalgunj.
- 1 service area which includes ward no. 6, 7, 8, 9, 10, 11.
- > 1 nos. Over Head Reservoir Tank of 225 cum having height of 21 meter.
- > Capacity of the Reservoir is low in comparison to the population of the se.
- > Outlet flow meter is installed in the main distribution line.
- Record is maintained only once a month of the outlet flow meter.
- Water Supply is 5 hours per day.
- Wusc express doubts of Iron presence in the raw water observing the color of tap water.
- > No Dosing of chlorine at this facility.
- Generator is operating and WUSC makes a record of daily operation hours and fuel consumption.
- > WUSC has the invoice of procurement of spare parts for generator.
- WUSC has a problem outsourcing the skilled technician for the maintenance of electrical panel and generator.

# **Re: Gulariya WUSC Operation and Management status**

Date: 2016/7/28 Time: 10:00 – 15:00 Location: Gulariya WUSC Attendants:

- 1. Mr. Kosh Raj Niraula, President, Gulariya WUSC
- 2. Mrs. Indira Subedi, Vice President, Gulariya WUSC
- 3. Mr. Chandra Bahadur Baniya, Treasurer, Gulariya WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Yusaku Namujiri, Team Member, WASMIP Team
- 6. Mr. Akira Hasebe, Team Member, WASMIP Team
- 7. Mr. Deepak Thapa, Mechanical Engineer, WASMIP Team
- 8. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# Site Status:

# INTAKE:

- There are presently 2 nos. of Deep tube well from which water is collected and distributed to the overhead reservoir of capacity of 225 cum capacity at a height of 21 mtr and from it to town area of Gulariya.
- The Deep tube well of Gulariya WUSC is the main source of water in this region. The tube well was constructed 35 years ago. There is no flow meter installed in the Deep Tube well. The water pumped from the well no 1 is carried by 15 HP pump to the O/H reservoir via 150mm C.I pipe & from tube well no.2 to O/H reservoir through 150 mm C.I pipeline.
- > The water collected from the well contains large amount of sand.
- > There is no source of water beside the tube well.
- The inlet pipes to the reservoir have problems of leakage which is difficult to replace due to the leakage in the joints.
- > The inlet pipes is cast iron pipes which are old and needs repair.
- The pumps are regularly replaced.

# WTP:

> There is no presence of water treatment facilities and the chlorine dosing unit in this WUSC.

# **Reservoirs:**

- There is only 1 reservoir in total that are collecting and distributing water to certain ward area of Gulariya.
- This O/H Reservoir has capacity of 225 thousand liters and there goals is to construct 400 thousand liters in the future.
- > These reservoirs distributes water to town area of Gulariya.

# Distribution:

The outlet from the O/H reservoir is 200 mm C.I pipeline. There is a flow meter in the outlet pipe to record the distribution volume.

# Water Quality Lab:

There is no water quality lab at Gulariya WUSCs and WSSDO. They send the sample to the regional lab at Nepalgunj.

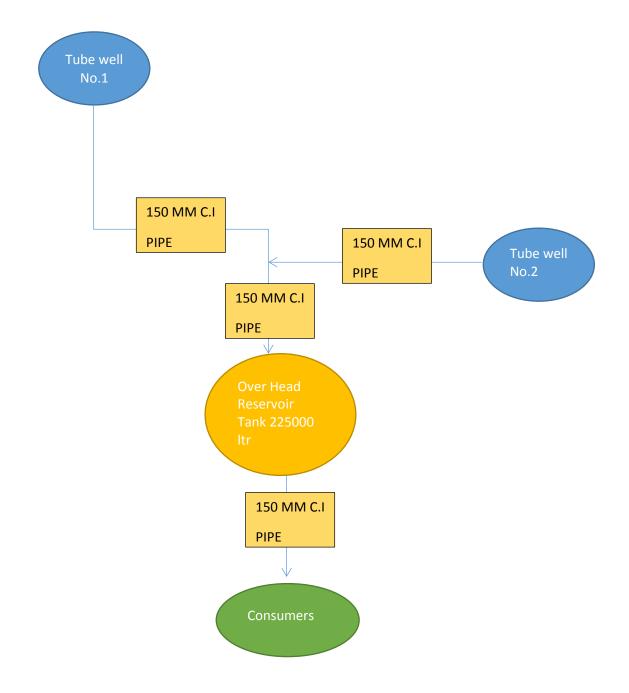


Figure 1: Water distribution system for semi-urban areas by Gulariya WUSC

# **Re: Ramgram WUSC Operation and Management status**

# Date: 2016/8/9 Time: 11:00 – 16:00 Location: Ramgram WUSC Attendants:

- 1. Mr. Ram Briksya Yadav, Chairman, WUSC
- 2. Mr. Chandra Prasad Gupta, Vice Chairman, WUSC
- 3. Mr. Prabandha Sapkota, Manager, WUSC
- 4. Ms. Saralawati Yadav, Accountant, WUSC
- 5. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 6. Mr. Yusaku Namujiri, Team Member, WASMIP Team
- 7. Mr. Akira Hasebe, Team Member, WASMIP Team
- 8. Mr. Kozo Hayashishita, Team Member, WASMIP Team
- 9. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 10. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

# **Meeting conclusions:**

# INTAKE:

- There are 1 deep tube well in Ramgram WUSC.
- > Another new deep well under new co-financing project is under construction.
- > The capacity and depth of tube wells are as follows:

Tubewell De		Dept	Depth (m)		Pump(HP)			
n	ю.							
×	>	1	$\succ$	210	$\succ$	15(KSB)		

# Estimated discharge of the pump is 20ltrs per sec.

# **Chlorination:**

- > Chlorine dosing is done to the inlet pipe in tube well 1 going to the overhead tank.
- Mixing of the solution is done manually and the dosing is done by automatic dosing pump.
- > There are 2 dosing pumps used for this operation.

# **Reservoirs:**

- $\blacktriangleright$  The overhead tank is of 225 m<sup>3</sup>.
- A new overhead tank if capacity 450 m<sup>3</sup> is under construction.

# **Distribution:**

> The diameter and material of distribution pipes are shown in diagram below.

# Water Quality Lab:

No water quality records were found.

# Other issues:

- > Arsenic was not found in Ramgram WUSC.
- > There are no flow meters installed in inlet and outlets.

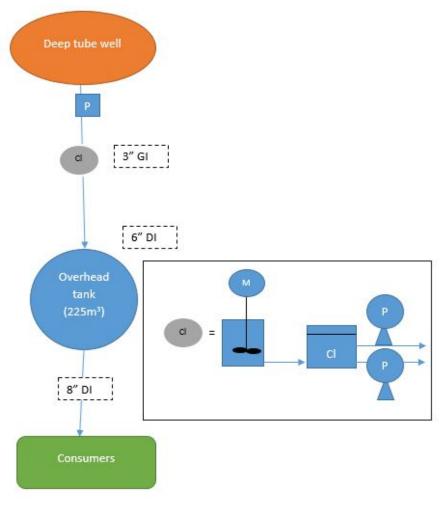


FIGURE 1: WATER DISTRIBUTION SYSTEM BY RAMGRAM WUSC

<sup>&</sup>lt;sup>i</sup> All the information is gathered according to Mr. Ram Chandra Kafle, Nawalparasi Division Chief

# **Re: Pragatinagar WUSC Operation and Management status**

Date: 2016/8/9 Time: 11:00 – 16:00 Location: Pragatinagar WUSC Attendants:

- 1. Mr. Parsuram regmi, Chairman, WUSC
- 2. Mr. Pumkant basel, Manager, WUSC
- 3. Ms. Hemant Kumar, Secretary, WUSC
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Yusaku Namujiri, Team Member, WASMIP Team
- 6. Mr. Akira Hasebe, Team Member, WASMIP Team
- 7. Mr. Kozo Hayashishita, Team Member, WASMIP Team
- 8. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 9. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

# Meeting conclusions:

# Intake:

- There are 3 deep tube wells and a stream source in Pragatinagar WUSC.
- > There is a stopping unit in spring source.
- Water from tube well no. 2 is observed to have high turbidity.
- > The capacity and depth of tube wells are as follows:

Tube	Tube well no.		Depth (m)		Pump(HP)	
$\checkmark$	1(inside WTP)	$\checkmark$	77	٨	15(KSB)	
$\triangleright$	2	$\checkmark$	110	$\checkmark$	15(KSB)	
$\checkmark$	3(inside office)	$\checkmark$	110	$\checkmark$	15(KSB)	

# **Chlorination:**

- > Chlorine dosing is done to the outlet pipe from slow sand filter going to the reservoir.
- Mixing of the solution is done manually and the dosing is done by gravity.

# **Reservoirs:**

- > There are two reservoirs of capacity 100 m<sup>3</sup> and 500 m<sup>3</sup>.
- Water from stream source and deep tube well 1 is supplied to the reservoirs.
- Water is directly supplied to the public from tube wells 2 and 3.

# **Distribution:**

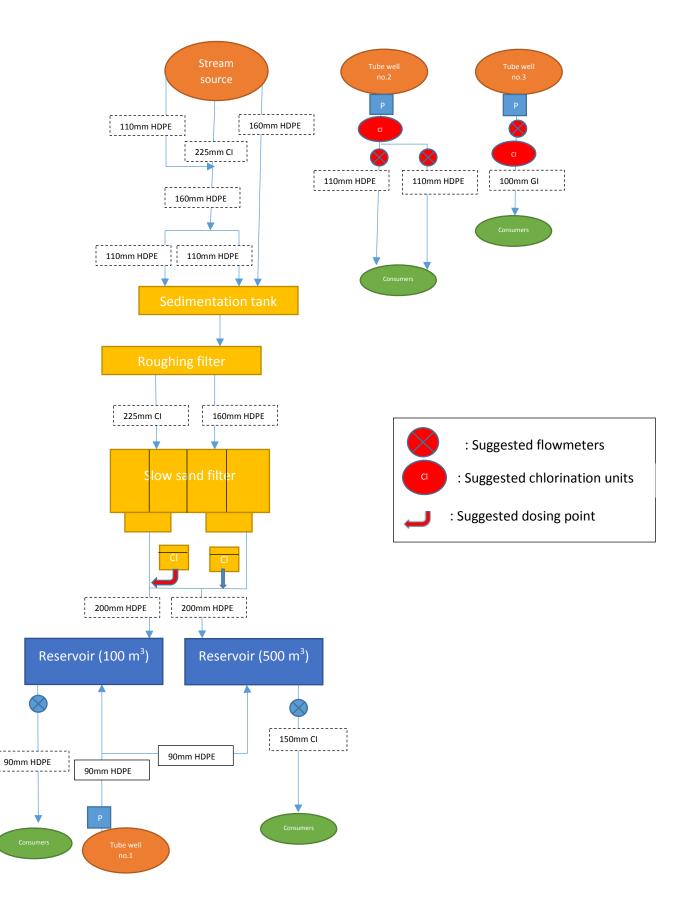
> The diameter and material of distribution pipes are shown in diagram below.

# Water Quality Lab:

- > Tests on 4 parameters (pH, FRC, turbidity and e-coli) are done every month.
- > Tests are conducted in 14 different points including intake, reservoir and service taps.

# Other issues:

The manager explains need of training program for both staffs and board members as most of them are newly recruited and elected.



Transmission and Distribution system of Pragatinagar WUSC

# **Re: Amlekhgunj WUSC Operation and Management status**

Date: 2016/8/29 Time: 10:00 – 16:00 Location: Amlekhgunj WUSC Attendants:

# 1. Mr. Narayan Lamichane, Chairman, WUSC

- 2. Ms. Bidya Pokhrel, JICA representative
- 3. Mr. Takashi Kondo, JICA representative
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Kazuhiko Nakamura, Team Member, WASMIP Team
- 6. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 7. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# **Meeting conclusions:**

# INTAKE:

- > There are 4 spring sources in Amlekhgunj WUSC.
- > There are 4 pipes (2-100mm HDPE, 75mm HDPE and 50mm HDPE) used as transmission lines.

# **Chlorination:**

- > Dosing is done manually by making a bleaching powder solution.
- > The dosing is done once a month and when high turbidity is observed.

# **Reservoirs:**

- The reservoir was built 120 years ago.
- > The capacity of the reservoir is  $2400 \text{ m}^3$ .
- > The outlet valves are out of order and leakage was observed.

# **Distribution:**

> The diameter and material of distribution pipes are shown in diagram below.

# Water Quality Lab:

> No water quality records were found.

# Other issues:

- > There are no flow meters installed in inlet and outlets.
- > As the system is very old, the condition and information on distribution network is very unclear.
- > There is lack of public awareness regarding water safety.
- During high turbidity either inflow pipes to reservoir are removed or bleaching powder solution is made and dosed.
- > There is no operation and maintenance records.
- > There is no domestic water meter in each household.

# **Re: Karmaiya WUSC Operation and Management status**

Date: 2016/8/30 Time: 10:00 – 17:00 Location: Karmaiya WUSC Attendants:

- 1. Mr. Dol Raj Pandey, Chairman, WUSC
- 2. Ms. Bidya Pokhrel, JICA representative
- 3. Mr. Takashi Kondo, JICA representative
- 4. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 5. Mr. Kazuhiko Nakamura, Team Member, WASMIP Team
- 6. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 7. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

# Meeting conclusions:

#### INTAKE:

- > There are 2 deep tube wells under operation and 1 new tube well under construction.
- > Another new deep well funded by DWSS is under construction.
- > The capacity and depth of tube wells are as follows:

Tubewell no.	Capacity (liter per sec)	Depth (m)	Pump(HP)
1	4	110	35
2	4	110	25
3	3	110	35

# **Chlorination:**

- About 1300 gram of chlorine is manually mixed to create solution. The solution is then pumped to the overhead tank and dosed.
- The chlorine solution is prepared 2 times every day and dosed before supplying water to consumers according to water supply time (Twice a day).
- The Karmaiya WUSC purchases chlorine drums by themselves. Each drums weighs around 50 kg and costs about NRS 3600.

# **Reservoirs:**

 $\blacktriangleright$  The overhead tank is of 450 m<sup>3</sup>.

# Distribution:

- > The diameter and material of distribution pipes are shown in diagram below.
- > Their distribution map does not show the valve location.

# Water Quality Lab:

- > The Karmaiya WUSC has a test kit by which it conducts quality test.
- > Tests on 4 parameters are conducted (pH, turbidity, color and Residual chlorine) by their test kit.

# Other issues:

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- The WUSC has been facing huge water loss (Non-revenue water). They are unable to identify the reason of such loss.
- The WUSC also faces lack of public help for identifying leakage related problems in distribution facilities.
- The committee of water service providers has asked Government to waver electric charge related to water pumping for distribution by the WUSC. So far no action has been taken on this topic.

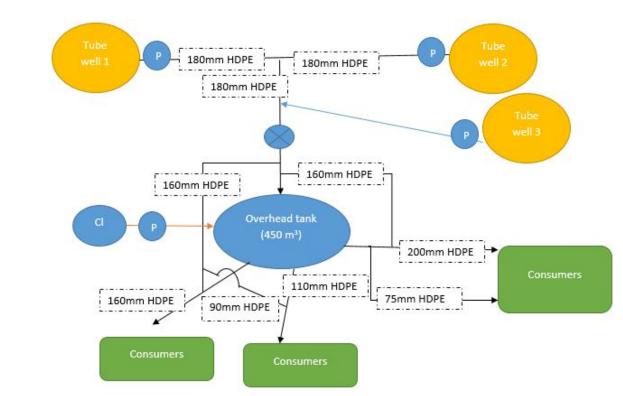


FIGURE 1: WATER DISTRIBUTION SYSTEM BY KARMAIYA WUSC

<sup>&</sup>lt;sup>i</sup> All the information is gathered according to Mr. Dol Raj Pandey, Karmaiya WUSC Chairman

# Re: Meeting with Beljhundi Chairman.

Date: 2017 March 21st

Time: 15:20-15:45

Venue: WASMIP-II Office

# Attendants:

- 1. Mr. Pradip Gautam- Chairman, Beljhundi WUSC
- 2. Mr. Satoru Oniki Chief Adviser, WASMIP-II
- 3. Ms. Kozo Hayashishita- Team Member, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II

# **Meeting Conclusions:**

# **Chairperson mentioned as followings**

- 1. Beljhundi WUSC is using the slow sand filter for the water treatment without any problem.
- 2. Beljhundi WUSC is using the SOPs of the WASMIP model for the operation and maintenance of the facilities.
- 3. DWSS is positive to allocate the budget for electrical transformer for the deep well pump constructed in the Beljhundi WUSC.
- 4. Beljhundi WUSC is checking the water quality regularly using their own laboratory.
- 5. The limestone factory has agreed not to use the intake area for the lime extraction.
- 6. It would be beneficial trainings such as accounting/ and O&M of water supply facilities for WUSCs staffs.
- 7. Beljhundi WUSC feels that awareness campaign is necessary to increase the house connections and satisfaction level of the consumers.

# Re: Mangadh WUSC site visit and Meeting with Mangadh WUSC

Date: 2018/09/04 Time: 12:00 – 14:00 Location: Mangadh WUSC, Morang

# Attendants:

- 1. Mr. Ram Bahadur Bhandari Chairman, Mangadh WUSC
- 2. Secretary of Mangadh WUSC.
- 3. Board Member of Mangadh WUSC.
- 4. Ms. Haruka Ota JICA Nepal
- 5. Mr. Satoru Oniki Chief Advisor, WASMIP Team
- 6. Mr. Deepak Subedi National Staff, WASMIP Team
- 7. Mr. Vivek Shrestha National Staff, WASMIP Team

# Meeting conclusions:

- 1. JICA Officer and the Chief Advisor of WASMIP met the Board Members of Mangadh WUSC and had an interview.
- The Chairman of Mangadh WUSC mentioned that the Manager of Mangadh WUSC has retired. Mangadh WUSC's Board Members will discuss the recruitment of new manager in a Board Meeting.
- 3. Ms. Ota confirmed the water quality tests in Mangadh WUSC.
- 4. The Chairman mentioned that Mangadh WUSC has a portable water quality test kit called WAGTECH and an ENPHO test kit to conduct 6 basic daily water quality parameters by their staffs. 27 parameters as per NDWQS (Nepal Drinking Water Quality Standard) are conducted in the private laboratory in Biratnagar. The frequency of tests is according to NDWQS.
- 5. Department of Water Supply and Sewerage (DWSS) and other governmental bodies (Department of Food Technology & Quality Control) also collects sample of treated water from Mangadh WUSC and conduct water quality tests. If any negative results are found, the WUSC is informed and suggestion is given.
- 6. Ms. Ota confirmed about the problems in Mangadh WUSC.
- 7. The Chairman mentioned that the main problem is a damage of distribution pipelines due to road construction (highway and feeder roads).Distribution pipelines are sometimes damaged and some pipes are difficult for repair works. So, Mangadh WUSC has informed its consumers of the situation and asked them to use chlorine in households until the pipes of affected areas are repaired or replaced. This problem has raised due to lack of coordination between concerned authorities (WUSC, road department, contractor etc.). WUSC complains the Chief District Officer (CDO), municipality, Department of Road (DOR) for compensation. If the compensation is not provided WUSC uses own budget for pipe replacement and repairing works.
- 8. Japanese water flow meter (installed by the grant aid project) on the distribution pipeline is damaged and the spare parts could not be found on local market to repair it. Instead of the Japanese flow meter, WUSC installed Chinese product.
- 9. Ms. Ota confirmed the use of Standard Operating Procedures (SOPs) by Mangadh WUSC.
- 10. The Chairman mentioned that Mangadh WUSC is using Standard Operating Procedure (SOPs) and business plan from WASMIP-I on their daily operation and maintenance. The business plan is further revised for 2025-2040.
- 11. Ms. Ota confirmed the budget for conducting regular water quality tests.
- 12. The Chairman mentioned that Mangadh WUSC allocates budget for water quality management every year. The amount is used in purchase of test chemicals, chlorine powder and water quality tests in a private laboratory.
- 13. Ms. Ota confirmed the need of training for Mangadh WUSC.

- 14. The Chairman mentioned that Mangadh WUSC needs a refresher training on SOP and business plan to new board members because they had election last August, 2018.
- 15. The Chief Advisor mentioned that in the Basic Training, NWSSTC will invite a board member from each WUSC.
- 16. The Chief Advisor introduced the good practice of other WUSCs (i.e. knowledge sharing with staffs after receiving training at NWSSTC.)
- 17. Ms. Ota confirmed the dissemination of information to the consumers by Mangadh WUSC.
- 18. Mangadh WUSC provides information of 7 basic parameters daily by displaying on a bulletin board in front of tariff collection counter. Information on other parameters are included in the annual report and distributed to consumers in the annual general assembly.
- 19. Mangadh WUSC is also preparing their website which shall include all the details like WUSC information, tariff, water quality, audit report etc. WUSC has already launched a mobile application from which consumers can get information and pay water bills.

#### Re: Urlabari WUSC site visit and Meeting with Urlabari WUSC.

Date: 2018/09/04 Time: 15:00 – 17:00 Location: Urlabari WUSC, Morang

#### Attendants:

- 1. Mr Raju Budhathoki Manager, Urlabari WUSC
- 2. Ms. Ota Ota JICA Nepal
- 3. Mr. Satoru Oniki Chief Advisor, WASMIP Team
- 4. Mr. Deepak Subedi National Staff, WASMIP Team
- 5. Mr. Vivek Shrestha National Staff, WASMIP Team

- 1. JICA Officer and the Chief Advisor visited Urlabari WUSC and had a meeting with the Manager of Urlabari WUSC.
- 2. The Manager of Urlabari WUSC has revised their business plan since they developed it in WASMIP-I.
- 3. The Manager finds it difficult to convince board members in the WUSC regarding importance of business plan and other technical aspects. Because the Board members are busy in their own works, they do not allocate enough time for WUSC.
- 4. Ms. Ota confirmed the water quality tests by Urlabari WUSC.
- 5. The Manager mentioned that Urlabari WUSC has its own water quality test laboratory with ENPHO test kit to conduct test on basic daily parameters. In addition, 27 parameters are conducted annually in a private laboratory at Biratnagar. The daily test results are shown on bulletin board near tariff counter and other parameters are included in annual report and disseminated to consumers during general assembly.
- 6. Ms. Ota confirmed the advisory support by DWSS/WSSDO to Urlabari WUSCs.
- 7. The Manager mentioned that the Director General (DG) of DWSS and Secretary of Ministry of Water Supply (MOWS) have visited Urlabari WUSC to observe the co-finance project. (Co- finance project of DWSS is a cost-sharing project. 70% funding by DWSS and out of remaining 30%, WUSC has to share 10% in cash and 20% in either labor or cash.)
- 8. During the visit DWSS advised Urlabari WUSC to share their skill and knowledge to other WUSCs in their vicinity because Urlabari WUSC is a good model to other WUSCs.
- 9. As another support, the consultant contracted by DWSS has conducted survey work and submitted report to DWSS for SCADA system in Urlabari WUSC.
- 10. Ms. Ota confirmed the budget for water quality tests in Urlabari WUSC.
- 11. The Manager mentioned that Urlabari WUSC allocates enough budget for water quality test in their annual budget plan. The budget is used in purchase of test chemicals, chlorine powder and water quality tests in private laboratory.
- 12. The Chief Advisor confirmed if the WUSC's staffs share information after they come back to office from the trainings.
- 13. The Manager mentioned that all training materials are archived in the WUSC office and knowledge of training is shared among all the staffs under the Chairperson understanding.
- 14. Ms. Ota confirmed the problems of Urlabari WUSCs in their daily operation and maintenance of the water supply system.

- 15. The Manager mentioned that due to road construction (highway and feeder roads) distribution pipelines are sometimes damaged because of lack of information by the contractor.
- 16. The Chief Advisor asked for comments on the training materials.
- 17. The Manager mentioned that SOPs, business plan and training programs in WASMIP-I has helped Urlabari WUSC in conducting daily operation maintenance and also to plan future goals. However, the quality of translation from English to Nepali and vice versa, training materials is sometimes difficult to grasp and understand.
- 18. Ms. Ota confirmed about the consumer complaints in Urlabari WUSC.
- 19. The Manager mentioned that sometimes consumers make complaint about red water (iron content) from taps which is because of accumulation of rust inside pipelines.
- 20. Ms. Ota confirmed about the dissemination of information to consumers in an Urlabari WUSC.
- 21. The Manager mentioned that Urlabari WUSC disseminates information mainly through annual report which is provided to all the consumers. Regarding water quality test report, Urlabari has a bulletin board with test data which can be seen by the consumers whenever they come to pay the water bills. Other test reports are included in an annual report.
- 22. Urlabari WUSC has also introduced a mobile application by which consumers can pay their water bills.
- 23. The Chief Advisor suggested to share the good practice of Urlabari WUSCs to other WUSCs in their neighboring area.

#### Re: Dhulabari WUSC site visit and Discussion with WUSC staffs

Date: 2018/09/05 Time: 10:00 – 12:00 Location: Dhulabari WUSC, Jhapa

#### Attendants:

- 1. Mr. Ajay Kumar Ghimire Secretary, Dhulabari WUSC
- 2. Ms. Haruka Ota JICA Nepal
- 3. Mr. Satoru Oniki Chief Advisor, WASMIP Team
- 4. Mr. Vivek Shrestha National Staff, WASMIP Team

- 1. The secretary of Dhulabari WUSC mentioned that WUSC provides good quality water with a low tariff to the residents.
- 2. Dhulabari WUSC conducts water quality test in regional laboratory at Itahari and private laboratory at Biratnagar. WUSC is planning to establish their own laboratory and to hire an experienced staff to conduct water quality tests.
- 3. Dhulabari WUSC notifies water quality test results to consumers by display in a bulletin board and through annual reports.
- 4. Consumers have complains regarding water volume. But there is no complain regarding water quality.
- 5. Dhulabari WUSC has a Facebook page where they post information like meeting, visit etc.
- 6. Dhulabari WUSC frequently communicates with Jhapa WSSDO and acquires hardware supports like pipes and pumps.WSSDO also advices WUSC regarding maintenance of intake facility.
- 7. Dhulabari WUSC is using Standard Operating Procedure (SOPs) on their daily operation and maintenance. The business plan is not revised as well as water tariff is not increased.
- 8. Dhulabari WUSC allocates budget for water quality tests every year. The amount is used in purchase of test chemicals, chlorine powder and water quality tests in private laboratory.
- 9. Dhulabari WUSC board members appoint 59 sub committees all over the service area. The subcommittee consists of around 7 people. These committee reports any problem regarding water quality, leakages and supply in their area to the board member.
- 10. Dhulabari WUSC visits other WUSCs and other WUSCs visit Dhulabari WUSC for observation of water supply facilities and knowledge sharing.
- 11. The Chief Advisor introduced Dhulabari WUSC to create a web site and mobile application system as a good practice of other WUSCs. WASMIP team also advised Dhulabari WUSC to develop an annual report which contains water production, distribution, NRW, no. of connections etc. to disseminate information to the consumers.

#### Re: Prithvinagar WUSC site visit and Meeting with Prithivinagar WUSC.

**Date:** 2018/09/05 **Time:** 14:00 – 16:00 **Location:** Prithivinagar WUSC, Jhapa

#### Attendants:

- 1. Mr. Falgunanda Limbu Chairman, Prithivinagar WUSC
- 2. Ms. Haruka Ota JICA Nepal
- 3. Mr. Satoru Oniki Chief Advisor, WASMIP Team
- 4. Mr. Deepak Subedi National Staff, WASMIP Team
- 5. Mr. Vivek Shrestha National Staff, WASMIP Team

- 1. Prithivinagar WUSC was established 20 years ago.
- 2. Prithivinagar WUSC has constructed treatment plant 3 years ago and started to operate the water supply system.
- **3.** Presently, there are around 205 house connections and a one deep well pump as a source. Another deep well is under construction.
- **4.** Prithivinagar WUSC has a major problem regarding low income from the water tariff. The consumers has a low level of awareness about piped water so WUSC cannot increase the water tariff.
- 5. WUSC also requires generator because of frequent power failure.
- **6.** The chairman of Prithivinagar WUSC mentioned that equipment and training materials in NWSSTC is outdated which decreases the effectiveness of the training.
- 7. Prithivinagar WUSC has 3 staffs which is not enough for regular O&M.
- **8.** Prithivinagar WUSC is planning to establish a water quality laboratory and requests WASMIP to support by providing equipment.
- **9.** Prithivinagar WUSCs top priority is to increase household connections. WUSC also requests technical training for staffs and management training for board of members.
- **10.** Water quality test is not conducted by Prithivinagar WUSC because of no capacity to conduct tests even after the portable water quality test kit was provided. The National staffs of WASMIP instructed WUSC's staff to use the test kit and the Chairman and staffs understood the importance of water quality test.
- **11.** Prithivinagar WUSC has given high priority to increase household connections for the sustainability of the WUSC. Second priority is to provide safe water for which WUSC has installed chlorine dosing equipment along with water treatment plant.
- **12.** The consumer has complains regarding water smell due to chlorine dosing. WASMIP team suggested to conduct Free Residual Chlorine (FRC) test to control chlorine dosing amount.
- 13. The Chief Advisor suggested Prithivinagar WUSC to ;
  - Conduct water quality test and inform to consumers.
  - Share knowledge obtained from training programs to other staffs and board of members.
  - Prepare Facebook page to share information with consumers.
  - Visit successful WUSCs like Dhulabari, Urlabari to acquire knowledge on their good practices.

#### Re: Meeting with Jhapa WSSDO.

Date: 2018/09/06 Time: 10:00 – 11:30 Location: Jhapa WSSDO

#### Attendants:

- 1. Mr. Sitaram kafle Chief, Jhapa WSSDO.
- 2. Ms. Haruka Ota JICA Nepal
- 3. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 4. Mr. Deepak Subedi National Staff , WASMIP-II
- 5. Mr. Vivek Shrestha National Staff , WASMIP-II

- Jhapa WSSDO frequently visits and monitors WUSCs in Jhapa according to the request of WUSCs. During their visit they advise WUSCs on technical and management aspects of Water Supply Systems.
- 2. Jhapa WSSDO mentioned that many WUSCs have operation and maintenance problems.
- 3. Jhapa WSSDO uses rehabilitation budget to support WUSCs. When WUSC asks for hardware support, the WSSDO engineer goes to site and inspect the situation. If the situation can be solved by small repaire work or easily available equipment, the WUSC is asked to repair or replace by themselves. If major equipment is required then, the WSSDO supports the WUSC if the equipment is available. If the equipment is not available with WSSDO, WSSDO contacts DWSS for support.
- 4. WSSDO suggests to repair and replace minor equipment by WUSC themselves.
- 5. WSSDO staff are invited to general assembly of WUSCs and they take part.

#### Re: Chandragadi-I WUSC site visit and Meeting with Chandragadi-I WUSC.

Date: 2018/09/06 Time: 12:00 – 13:00 Location: Chandragadhi-I WUSC, Jhapa

#### Attendants:

- 1. Mr. Kaji khadka Chairman, Chandragadi-I WUSC
- 2. Ms. Haruka Ota JICA Nepal,
- 3. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 4. Mr. Deepak Subedi National Staff, WASMIP-II
- 5. Mr. Vivek Shrestha National Staff, WASMIP-II

- 1. Chandragadhi-I WUSC expressed thanks to WASMIP and JICA for the continuous support to the WUSC.
- 2. The generator and pump motors supported by JICA 25 years ago is difficult to repair as spare parts are not available in local market. WUSC has contacted local government for new generator.
- 3. Chandragadhi-I WUSC states following as their problems:
  - Road Construction has affected distribution pipelines. Many pipelines are damaged and under the new constructed road. So, pipe lines needs to be replaced.
  - Tariff is low, so the WUSC is unable to secure enough budget to replace pipes.
  - Information on the replacement of pipelines is given to WSSDO, but WSSDO itself has limited budget and priority is given to new projects.
- **4.** Chandragadhi-I WUSC has constructed an elevated tank by co-finance project.
- 5. Chandragadhi-I WUSC frequently contacts WSSDO for support and WSSDO supports them by equipments and technical advices.
- **6.** Chandragadhi-I WUSC conducts water quality tests twice a month. The result is displayed on display board and annual report.
- **7.** Chandragadhi-I WUSC mentioned that they have supplied enough water with good quality to their consumers.
- **8.** Chandragadhi-I WUSC uses and follows SOP developed in WASMIP-I. They find some contents of SOP of moderate difficulty to understand.
- **9.** Chandragadhi-I WUSC often receives complains about inadequate water pressure.
- **10.** Chandragadhi-I WUSC asks assistance from consumers to inform WUSC about leakage. The assistance notice is printed on tariff receipt and also in general assembly.
- **11.** Chandragadhi-I WUSC has prepared a facebook page and are planning a banking system for monthly bill payment.
- **12.** Chandragadhi-I WUSC communicates with other WUSCs during general assembly and observation tours. During the meeting the WUSCs members discuss O&M, tariff revision, information on spare parts unavailable on local market.
- **13.** Chandragadhi-I WUSC's staff after training at NWSSTC shares knowledge to other staffs. However, the staffs don't share the training material. So they will make copies and share it.
- **14.** Chandragadhi-I WUSC manager fills up a monthly format and submits to Board members. The Board members then analyze the data from the format and finds solution.

- **15.** WASMIP team suggests Chandragadhi-I WUSC to submit a data while asking help from DWSS, WSSDO and local government.
- **16.** Chandragadhi-I WUSC conducts Water Quality tests by ENPHO test kit provided by DWSS.
- **17.** Chandragadhi-I WUSC allocates budget for water quality test every year for laboratory.
- **18.** WASMIP team suggests Chandragadhi-I WUSC to inform consumers by showing water leakage in terms of Rupees Instead of volume.
- **19.** Chandragadhi-I WUSC recognizes necessity to train board members about management mechanism.

#### Re: WUSC site visit and Discussion with WUSC staffs

Date: 2018/09/06 Time: 10:00 – 11:00 Location: Kakarvitta WUSC, Jhapa Attendants:

- 1. Mr. Harka Bahadur Subba, Chairman, Kakarvitta WUSC
- 2. Mr. Deepak Pokharel Manager, Kakarvitta WUSC
- 3. Ms. Haruka Ota JICA Nepal
- 4. Mr. Satoru Oniki Chief Advisor, WASMIP Team
- 5. Mr. Deepak Subedi National Staff, WASMIP Team
- 6. Mr. Vivek Shrestha National Staff, WASMIP Team

- 1. Kakarvitta WUSC was constructed 24 years ago. Kakarvitta WUSC obtained loan for construction of 2<sup>nd</sup> facility from ADB and finished construction 3 years ago.
- 2. There is no future support from small town to the Kakarvitta WUSC.
- 3. Kakarvitta WUSC feels the need of solar system to reduce their annual electricity bills as they have to pay their debt towards small town.
- 4. Kakarvitta WUSC feels their staffs are well trained and they don't need any management related support.
- 5. Kakarvitta WUSC has filed application for co-finance project for construction of treatment plant.
- 6. Kakarvitta WUSC's staff after returning back from NWSSTC shares training material and knowledge to other staffs too.
- 7. Kakarvitta WUSC has an operating guide book prepared by contractor during handover.
- 8. The local municipality suggests Kakarvitta WUSC to expand service area.
- 9. Kakarvitta WUSC's flowmeter has frequently damaged due to poor quality. The WUSC doubts the accuracy of such flowmeter so Kakarvitta WUSC has stopped taking record.
- 10. During visit to other WUSCs, Kakarvitta WUSC found problems like:
  - o lack of knowledge, skills, staffs
  - Conflict between staffs and board members
  - Inability to secure sufficient budget
- 11. WASMIP team advised Kakarvitta WUSC to create a web site and mobile application system. WASMIP team also advised Kakarvitta WUSC to develop an annual report regarding water production, distribution, NRW, no. of connections similar to Urlabari WUSC.

## Site Visit at Simara WUSC

Venue: Simara WUSC, Bara

Time: March 31, 2019 to April 1st, 2019

Attendants:

- 1. Kasim Hussein Chairman, Simara WUSC
- 2. Sashi Kumar Gautam Treasurer, Simara WUSC
- 3. Suraj Raj Baidhya- Manager, Simara WUSC
- 4. Birju Kumar Chaudhary -Technician, Simara WUSC
- 5. Fekan Chaudhary Technician, Simara WUSC

- Operation & Maintenance practice:
  - 1. They are recording Voltage and Ampere during pump operation recently after the WASMIP trainings in 1 pump and are applying for others pumps too.
  - 2. They have installed 5 flowmeters at 5 pumps recently.
  - 3. They have started recording the quantity of water production of 1 Pump recently after taking WASMIP trainings and are applying to other pumps too.
  - 4. Bleaching powder is procured for the chlorine dosing units.
  - 5. Laboratory room is also constructed for the water quality works.
  - 6. Store room is allocated for storing of accessories.
  - 7. For each pump they have experienced technicians to operate.
  - 8. During power cut they used the generator to supply water to public.
  - 9. For problems regarding pipelines in the site technicians are available all time.
- Management and administrative Practices:
  - 1. General assembly is held every year.
  - 2. Billing software is used for billing and receipt.
  - 3. 2 meter reader records water meter regularly each month.
  - 4. There are in total 19 staffs in the WUSC of which 7 are technicians.
  - 5. Water is supplied 7.5 hrs. daily to the public.
  - 6. Board meeting is held at every first Saturday of each month.
  - 7. Information related to water is informed to the public by radio and local newspapers.
  - 8. If bill is not paid on time public has to pay fine.
  - 9. Each staff has to attend their attendance daily for proper administration.
  - 10. WUSC directives is available for proper regular, systematic operation of administration.
- 1. Simara WUSC consisting of 17 board members had an observational tour to the Eastern part of the country where they visited Kakadvitta WUSC, Birtamod WUSC, Damak WUSC and Itahari WUSC. They have this kind of observation tour every year.
- 2. The General Assembly of Simara WUSC was held recently where the existing board members won again.
- 3. The manager has prepared a presentation file for presenting on 16<sup>th</sup> of april. They have hall capacity for 30 people.

- 4. They have 3 <sup>rd</sup> (Auraha Tole) and 4 <sup>th</sup> project (Ramban Tole) which are under construction. Auraha Tole project consists of 2 deep tube well pump where 1<sup>st</sup> deep tube well is complete and is running 7.30 hrs per day supplying average of 50,000 ltr and 2 <sup>nd</sup> deep tube well is not completed. Flow meter (150 mm) is installed at 1<sup>st</sup> deep tube well and record of water production is maintained. Over Head Tank of 225.0 cum is under construction and will be finished by this fiscal year 2075/2076 as told by the Treasurer.
- 5. Record keeping of voltage and Ampere of 1<sup>st</sup> pump is maintained on daily basis at Auraha tole. There is no Generator available at the moment.
- 6. Chlorine Dosing unit shall be required for the Auraha tole project which is under construction.
- 7. Training list: Water Safety plan (WHO), Water quality (NWSSTC), Enpho test kit (WASMIP).
- 8. Flowmeter (150 mm x 2 set) and Chlorine dosing unit (2 set) is installed at Scheme-2 of Simara WUSC. One electric panel of scheme-2 is not in good condition. They have contacted the supplier but no support is made till now.
- 9. Flowmeter (150 mm x 1 set) and Chlorine dosing unit (2 set) is installed at scheme-1 of Simara WUSC.
- 10. Enpho test kit is not utilized for testing water quality of ground water. Laboratory room is also constructed. The technician has already received training on Enpho Test kit and water quality standards.



Under construction of Deeptube well at Auraha Tole. Project 3



Over Head Tank 225 cum is under construction. Project-3



Flowmeter installed at deep tube well. Project-3. Valve chamber is under construction.



Flowmeter installed at samara WUSC Project-2



Flowmeter installed at samara WUSC Project-1



Flowmeter installed at samara WUSC Project-2



4 nos of Pressure Gauge received but not installed.

Date: 2019/04/23 Time: 12:00 - 14:00

Location: Rajahar WUSC, Nawalpur

#### Attendants:

- 1. Mr. Ganga Bahadur Thapa, Chairman, Rajahar WUSC
- 2. Mr. Bhawani Prasad Pathak, Vice Chairman, Rajahar WUSC
- 3. Mr. JagdishNeupane, Manager, Rajahar WUSC
- 4. Ms. Mina Neupane, Treasurer, Rajahar WUSC
- 5. Mr. NawrajAdhikari, Technician, Rajahar WUSC
- 6. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 7. Mr. Yoshio Chikamatsu, Financial Advisor, WASMIP Team
- 8. Mr. Vivek Shrestha, Engineer, WASMIP Team
- 9. Mr. Deepak Subedi, Engineer, WASMIP Team
- 10. Mr. Swiss Gauchan, Engineer, WASMIP Team
- 11. Ms. Shajina Subedi, Financial Management, WASMIP Team

#### Purpose of Visit:

- To confirm the operation & maintenance, and management in Rajahar WUSC.
- To find out good practices and improvement points in Rajahar WUSC.

- > Rajahar WUSC has not attended the Basic Training in WASMIP-II.
- Rajahar WUSC conducts water quality tests in every 10 days using the Enpho test kit and Wagtech kit. Tests are conducted on 9 parameters such as Free Residual Chlorine (FRC), E-coli, turbidity, pH, manganese, iron, chloride, ammonia and nitrite. Once every 3 month sample is sent to the Chitwan regional laboratory for thorough check. The result of the tests is displayed on board outside of customer counter (windows) and also in Facebook.
- The chlorine dosing units provided by DWSSM were installed and bleaching powder is purchased from local market.
- After installation of chlorine dosing unit, consumers near the WTP area complain about smell of chlorine in water, but Rajahar WUSC has managed to convince the consumers of the importance of chlorine disinfection by showing the FRC test result and explaining that the FRC is within the range of NDWQS.
- Rajahar WUSC has a sedimentation tank, roughing filter and slow sand filter. To increase the capacity of the treatment plant, Rajahar WUSC is constructing new set of treatment plant: sedimentation, roughing and slow sand filter for the same water source. The new treatment plant is 100% funded by Government of Nepal and is estimated to cost around NRs 20 million.
- Rajahar WUSC received pressure gauges provided by DWSSM but has not installed because the WUSC is busy in construction of new WTP. WUSC did not understand the importance of pressure gauge. WASMIP team advised to install the pressure gauge to safeguard and increase the life of the pump.
- Rajahar WUSC recently visited Kakarvitta WUSC in Jhapa by their own resources to observe their water supply facilities and O&M. Rajahar WUSC visits other WUSCs once a year.
- Rajahar WUSC started keeping flowmeter records after the installation of flowmeters provided by DWSSM.
- Rajahar WUSC has surveillance cameras installed in WTP area and displayed in monitor inside office for monitoring and safeguarding the facilities.

#### Site visit of Simara WUSC

Date: 24/04/2019 Time: 12:30-14:00 Location: Simara WUSC

#### Attendants:

- 1. Mr. Kasim Hussain, Chairman, Simara WUSC, Bara
- 2. Mr. Krishna Rimal, Vice Chairman, Simara WUSC, Bara
- 3. Mr. Ramesh Kumar Paudel, Secretary, Simara WUSC, Bara
- 4. Mr. SashiGautam, Treasurer, Simara WUSC, Bara
- 5. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 6. Mr. Yoshio Chikamatsu, Financial Advisor, WASMIP Team
- 7. Mr. Vivek Shrestha, Engineer, WASMIP Team
- 8. Mr. Deepak Subedi, Engineer, WASMIP Team
- 9. Mr. Swiss Gauchan, Engineer, WASMIP Team
- 10. Ms. Sajina Subedi, Financial Management, WASMIP Team
- 11. 5 WUSCs. Total 32 participants excluding Simara WUSC and WASMIP team.

#### Purpose of visit:

• The Chief of NWSSTC recommended to have a conference at Simara WUSC to learn the good practices ( O&M, and Management) in the 1<sup>st</sup> Observation tour.

- In presentation by Simara WUSC, they introduced their water supply facilities and management. After presentation, there were discussions among participants.
- Simara WUSC was established 20 years ago.
- In 1999 (2054 BS), there were only 800 house connections. In 2019, there are 3170 private connections.
- During 2054 BS there were only 800 connections in Simara WUSC which was very less compared to 3170 connections now.
- Simara WUSC has 2 schemes (service areas with water supply facilities) that are operating successfully. Now 3<sup>rd</sup> scheme is under construction.
- Simara WUSC has a plan to construct the 4<sup>th</sup> scheme in Ramgram in near future.
- There are total of 19 staffs in Simara WUSC.
- Simara WUSC has not started the chlorine dosing in supplied water. WUSC needs consensus from consumers about the smell of chlorine is due to safe water and they will start to use the chlorine dosing equipment.
- Simara WUSC conducts water quality test such as Turbidity, pH, and E. coli once a day, and 27 parameters are tested every 6 months in Kathmandu laboratory.

- Simara WUSC is facing problems in water distribution pipelines because pipes were destroyed by road construction without communication with WUSC. It is necessary to have a meeting among related organizations such as road department and WUSCs to avoid an accident.
- Before Simara WUSC was established, Government of Nepal had operated water supply in Simara service areas.
- After every training, Simara WUSC has a meeting to share the acquired skills and knowledge in the training.
- Simara WUSC has not installed all and pressure gauges because of lack of necessary fitting equipment. Some parts (fittings) of the equipment were not available here in a local market, so Simara WUSC is planning to get fittings and tools from Kathmandu.
- In addition, Simara WUSC has old CI pipes and it is difficult to install flowmeters and pressure gauge.
- Simara WUSC collects 100% tariff from the consumer. The major cause of non-revenue water is leakage.
- Simara WUSC has started to keep records of production and consumption of water after they received and installed all flowmeters.

Date: 2019/04/26

Time: 10:00 - 12:00

Location: Agauli WUSC, Nawalpur

#### Attendants:

- 1. Mr. Sovit Sharma, Chairman, Agauli WUSC
- 2. Mr. Saroj Bhandari, Manager, Agauli WUSC
- 3. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 4. Mr. Yoshio Chikamatsu, JICA Expert, WASMIP Team
- 5. Mr. Vivek Shrestha, Engineer, WASMIP Team
- 6. Mr. Deepak Subedi, Engineer, WASMIP Team
- 7. Mr. Swiss Gauchan, Engineer, WASMIP Team
- 8. Ms. Sajina Subedi, WASMIP Team

#### Purpose of visit:

- To confirm the operation & maintenance, and management in Agauli WUSC.
- To find out the good practices and the improvement points in Agauli WUSC.

- Agauli WUSC conducts water quality tests once a week using the Enpho test kit and Wagtech kit. Tests are conducted on 7 parameters such as Free Residual Chlorine (FRC), E-coli, turbidity, pH, iron, ammonia and nitrite. Once a year water samples are sent to Chitwan regional laboratory for water quality test. The results of the 7 tests are displayed on board outside of customer counter (windows).
- Agauli WUSC discloses basic information such as; Income /expenditure statement of every month and other information like NRW, served household, served population, new connections, total production volume and total distribution volume etc. are also displayed outside the office for staffs and consumers.
- > Agauli WUSC has purchased necessary fitting equipment for pressure gauge from India.
- Agauli WUSC has a water quality test laboratory with meter calibration unit. Agauli WUSC has established meter calibration unit to check the water meter of consumers.
- After taking part in training programs in NWSSTC in Nagarkot, staffs share acquired knowledge and skill with others in a meeting conducted every first Friday of every month.
- > Agauli WUSC has computerized billing and reading system.
- > Agauli WUSC has generated about total NRs 11 million profits till now.
- Agauli WUSC is constructing a storage tank for backwash water from WTP with the help of Kawasoti municipality's 75% investment and 25% investment from Agauli WUSC.
- Agauli WUSC currently requests and receives assistance and support from province, federal government and local government.
- > Agauli WUSC needs training of technical knowledge for staffs.
- Agauli WUSC has fundamental information/ data related to O&M and Management. Therefore, data management of Agauli WUSC is comparatively high.

#### Meeting Memo with Beljhundi WUSC

Date: 2019-5-25 (Saturday) Time: 11:00 am -5:00pm Venue: Beljhundi WUSC, Dang.

Site Visited: Intake, WTP Site, Reservoirs.

#### **Attendants:**

Pradeep Gautam- Chairman, Beljhundi WUSC Basant Thapa - Treasurer, Beljhundi WUSC Rudra Raj Pandey – Board Member, Beljhundi WUSC Madan Mani Pokhrel – Manager, Beljhundi WUSC Rewat Kumar Puri -Techician, Beljhundi WUSC Satoru Oniki – Chief Advior, WASMIP-II Deepak Subedi – WASMIP-II Swiss Gauchan - WASMIP-II

**Purpose of visit:** Follow-up O&M after the Basic Training, and confirm the procured equipment by DWSSM.

#### Memo:

1. Chairman explained that;

[High turbidity and calcium in raw water]

- Spring intake sources of Beljhundi WUSCs are highly affected with high turbidity and calcium by the cement factory. High turbidity and calcium content in raw water has also affected in a proper operation and maintenance of Water Treatment Plant (WTP).
- WUSC reported the situation to all stakeholders (Chief District Officer, WSSDO, Ward Chairman, Municipality, and local medias). The stakeholders have visited the intake sites and confirmed the situation. The problem has not been solved yet and intake sites are still affected.

[Water Supply Facilities]

- WTP consists of Sedimentation tank, Roughing Filter, and Slow Sand Filter. Only sedimentation tank is used in the treatment process now. After the sedimentation tank, water is conveyed to the reservoirs (bypassing roughing and slow sand filter) due to clogging (high turbidity).
- DWSSM provided 6 flowmeters and 5 sets of chlorination equipment for Beljhundi WUSC. Three flowmeters and one set of chlorination equipment were already installed at the site. WUSC has not installed some flowmeters and chlorination equipment because of security reason (there are NO fences in reservoir sites). WUSC will construct a barbed wire fence around reservoirs within one month and install remaining flow meters and chlorination equipment.

• Dang WSSDO has allocated NPR 2.5 million for Beljhundi WUSC. WUSC will use this budget to replace filter media of Roughing Filter and Slow Sand Filter. WUSC can use all treatment facilities after replacement of filter media.

[Distribution Pipelines]

- WUSC has been facing the problem on water distribution pipeline damages by road constructions.
- WUSC has requested Municipality office to coordinate before road constructions. The main purpose of coordination with municipality is to avoid the damage of distribution pipelines during road construction. WUSC learned the coordination mechanism (persuading the municipality to include cost estimate of pipelines during planning of road construction) in the 1<sup>st</sup> Observation and Interaction Workshop at Pragatinagar WUSC.
- 2. The Chief Advisor discussed with WUSC;
  - Regarding maintaining a record of water quality test, the record of water quality test can be useful to explain the actual situation of water quality at intake sites, to the stakeholders and the cement factory.
  - To install and use flow meters and chlorination equipment grasps the production and distribution volume and provides safe water to consumers. These are fundamental data and helpful to calculate KPIs.
  - Chairperson agreed and mentioned that WUSC will install all equipment and start to keep records.

## Memo with Amritpur/ Jhakredhunga WUSC

Venue: Amritpur /Jhakredhunga WUSC, Dang. Time: 10:00 am -1:00pm Date: 2019-5-26 (Sunday)

#### Attendees:

Jit Bahadur Khadka - Treasurer, Amritpur/ Jhakredhunga WUSC Tara Kumari Sapkota - Vice Secretary, Amritpur/ Jhakredhunga WUSC Tara Sunar - Member, Amritpur/ Jhakredhunga WUSC Satoru Oniki – Chief Advisor, WASMIP-II Deepak Subedi – WASMIP-II Swiss Gauchan – WASMIP-II

#### Visiting Purposes:

- To confirm the operation & maintenance, and management
- To find out good practices and improvement points

- 1. The Treasurer mentioned that:
  - 9 numbers of flowmeters were received from DWSSM and 8 flowmeters are installed and record keeping of all the flowmeters are maintained.
  - Chlorine dosing equipment is manually used at the collection chamber due to malfunction of the dosing pump. WUSC will repair the dosing pump and use the chlorine dosing equipment.
  - WUSC has no water treatment plant. WUSC distributes water through 4 reservoirs.
  - WUSC has a high demand of new connections. WUSC is laying new transmission pipeline, distribution pipeline and constructing a reservoir (500cum) by its own resource to meet water demand.
  - Co-finance project will start from next fiscal year in cooperation with DWSSM. The detailed project report of the co-finance project will be prepared by this fiscal year.
  - WUSC constructed a deep tube well (120m) inside the office premises by its own resources but it was not successful. The deep tube well is abandoned now. Spring is only source of water.
  - WUSC's Manager has received the training on using Enpho test kit which was provided by DWSSM. Water quality tests have been conducted regularly and record keeping of data has been maintained daily.
  - Spring source is not enough for the increasing water demand. Surface water source with water treatment plant can be an option to supply enough and safe water in future.
  - Periodic follow up and visit from WASMIP is necessary to monitor and provide feedback on record keeping and data analyze. Although WUSC is keeping record but they are not sure if it is in proper manner and accurate.
  - Training for the board members on technical and managerial aspects of water supply system is necessary.
- 2. The Chief Advisor explained the importance of flowchart diagram, flowmeters, chlorine dosing unit. Analyzing data can detect problem and it will help to persuade to get support from related stakeholders.

## Memo with Narayanpur WUSC

Venue: Narayanpur WUSC, Dang. Time: 2:00 pm -5:00pm Date: 2019-5-26 (Sunday)

#### Attendees:

Kul Prasad Rajaure, - Chairman Resham Bahadur Basnet - Vice-Chairman Santosh Kc - Secretary Basant Neupane - Member Prakash Subedi - Member Prakash Kumar Neupane - Member Dharam Bahadur Basnet -Member Satoru Oniki, Chief Advisor – WASMIP-II Deepak Subedi – WASMIP-II Swiss Gauchan – WASMIP-II

#### **Visiting Purposes:**

- To confirm the operation & maintenance, and management
- To find out good practices and improvement points

- 1. The Chairman mentioned that;
  - WUSC has spring and groundwater sources. Spring source is abandoned due to high turbidity. WUSC is requesting support from WSSDO and/or DWSSM for the construction of a water treatment plant for spring source.
  - WUSC received 6 flowmeters from DWSSM. 4 flowmeters were installed.
  - Record keeping of flowmeters cannot be maintained due to lack of skilled staffs.
  - 2 sets of chlorine dosing units received from DWSSM and installed to provide safe water to consumers.
  - A new water supply scheme (co-finance project) which consists of 4 deep tube wells, Aeration tank, Pressure Filter, reservoir tank (200 cum) and overhead tank (450 cum) has been completed and started to operate.
  - WUSC requests a training on water quality management for staffs.
  - WUSC will visit other WUSCs in Jhapa and Sunsari district in this fiscal year to observe and learn the good practices.
  - A Forum of WUSCs ("Dang district WUSC network") organizes program once a year. WUSCs discuss problems and challenges which WUSCs are facing and submit program minutes to WSSDO in Dang for necessary supports to each WUSC.
  - Regular monitoring from WASMIP team is helpful for proper O&M of water supply systems.
  - Training for Board Members is necessary to understand the water supply and system. It will help board members to give instruction to staffs.

# Memo in Bharatpur WUSC

Venue: Bharatpur WUSC, Dang. Time: 11:00 am -1:00pm Date: 2019-5-27 (Monday)

#### Attendees:

- 1. Shankar Gautam Chairman, Bharatpur WUSC
- 2. Ekendra Bahadur Rana- Secretary, Bharatpur WUSC
- 3. Binod Shrestha Manager, Bharatpur WUSC
- 4. Basu Dev Thapa Technician, Bharatpur WUSC
- 5. Krishna Prasad Chaudhary -Technician, Bharatpur WUSC
- 6. Satoru Oniki, Team Leader WASMIP-II
- 7. Deepak Subedi WASMIP-II
- 8. Swiss Gauchan WASMIP-II

#### **Visiting Purposes:**

- To confirm the operation & maintenance, and management
- To find out good practices and improvement points

- 1. The Chairman mentioned that;
  - WUSC has signed a contract to construct Co-finance project in 2019. It will consist of 4- deep well, 1- collection chamber, 1-pressure filter and 1- Over head tank of capacity 450 cum.
  - Before WASMIP-II, WUSC used to supply raw water without treatment. Now, WUSC understands the importance of safe water. WUSC start to use the chlorination equipment (provided by DWSSM) for disinfection of raw water.
  - WUSC is using billing software and online payment system to reduce workload and to maintain proper accounting.
  - WUSC collaborates with other satellite WUSCs to procure bleaching powder for chlorination. WUSCs order in bulk and divide the quantity to each WUSC.
  - WUSC has 2 technicians and 3 pump operators for operation & maintenance.
  - It was 456 households for supplying water, but now there are 1,050 households (connections). Water demand is high in this service area.
  - WUSC cannot use ENPHO test kit and electrical equipment which were provided by DWSSM due to lack of training to staffs. WUSC requests the training on water quality management.
  - WUSC also requests the support from WSSDO. WSSDO provides support on replacing valves etc.
  - WUSC is affiliated to a forum of WUSCs called "Dang district WUSCs network'. This forum conducts a program once a year. There are more than 100 WUSCs of Dang associated with forum. In forum, basically issues and challenges faced by the WUSCs are discussed. MoWS, DWSSM, and WSSDO are invited in an annual meeting of forum.

# Memo in Chaughera WUSC

Venue: Chaughera WUSC, Dang. Time: 2:00 pm -5:00pm Date: 2019-5-27 (Monday)

#### Attendees:

- 1. Raju Lal Sharma Chairman, Chaughera WUSC
- 2. Hari Subedi- Vice Chairman, Chaughera WUSC
- 3. Narayani yogi Treasurer, Chaughera WUSC
- 4. Padam Bahadur K.C Secretary, Chaughera WUSC
- 5. Hira Nath Yogi Member, Chaughera WUSC
- 6. Lila Nepali, Member Chaughera WUSC
- 7. Bishwomaya Lamichane Member, Chaughera WUSC
- 8. Krishna Bahadur Dangi Manager, Chaughera WUSC
- 9. Basant Yogi Technician, Chaughera WUSC
- 10. Satoru Oniki Chief Advisor, WASMIP-II
- 11. Deepak Subedi WASMIP-II
- 12. Swiss Gauchan -WASMIP-II

#### Visiting Purposes:

• To confirm the operation & maintenance, and management

- 1. The Chairman mentioned that;
  - WUSC staffs have less capacity to conduct water quality tests. WUSC requests trainings for staffs and board members.
  - The water source is only surface water. Current source is not enough for the water demand. There is a high demand of new connections. WUSC has only 373 households of service connections now.
  - WUSC has no other sources available in the service area. WUSC has requested WSSDO for new surface water source.
  - WUSC can dispatch staffs and board members for trainings in Nagarkot when NWSSTC has trainings for WUSCs.

#### Meeting with Pragatinagar WUSC.

**Date:** 2019-6-1 (Saturday)

Time: 11:00 am to 12: 30 pm

Venue: Devchuli Municipality, Pragatinagar, Nawalpur District.

#### Attendees:

- 1. Khimananda Bhusal, Chairman, Pragatinagar WUSC
- 2. Rukmagad Bhusal, Vice Chairman, Pragatinagar WUSC
- 3. Indramani Bhusal, Secretary, Pragatinagar WUSC
- 4. Bina Baral Magar, Treasurer, Pragatinagar WUSC
- 5. Top Prasad Neupane, Member, Pragatinagar WUSC
- 6. Lila Devi Sharma. Member, Pragatinagar WUSC
- 7. Yam Bahadur Thapa, Member, Pragatinagar WUSC
- 8. Sabitri Timilsina, Member, Pragatinagar WUSC
- 9. Pum Kanta Basel, Manager, Pragatinagar WUSC
- 10. Satoru Oniki, Chief Advisor, WASMIP-II
- 11. Yusaku Numajiri, Water Quality and Mechanical Expert, WASMIP-II
- 12. Deepak Subedi, WASMIP-II
- 13. Swiss Gauchan, WASMIP-II

#### Visiting Purposes:

- To collect pictures of water supply facilities including O&M and cleaning of the facilities
- To check O&M records and feedback to the SOPs

- 1. WASMIP team suggested the improvement point on O&M in water supply system in Pragatinagar WUSC.
- To link water distribution pipeline information (map) with customer complain data can find occurred problem places and analyze the causes.
- Suggestions from hardware viewpoints, 1) to get additional water quality test kit (Enpho kit) for WTP. Another Enpho kit is for intake and tap because of a lot of places for water quality tests. 2) weir improvement at the intake site because of leakage and fragile weir, 3) inflow volume equalization from the collection chamber at the intake site, 4) weir level equalization in the slow sand filter because of the irregularities of three weir levels.
- 2. The Chairman mentioned that;
- Pragatinagar WUSC gar WUSC is thankful for WAMSIP team for visiting time to time and providing valuable comments and feedbacks for improving daily operation and maintenance of water supply system.
- Recommendations from WASMIP team are highly welcomed and Pragatinagar WUSC will follow the recommendations and implement it in the site as soon as possible.

- WUSC has a very good relation with the community and other stake holders. Good relation has helped to get technical and financial support from stakeholders.
- WUSC always welcome the feedbacks from expert to improve the O&M of water supply facilities.
- Pragatinagar WUSC and WASMIP team are family. WASMIP team has given lot of time to find problems and helped WUSCs to improve O&M and to provide safe water to the consumers. Meanwhile, WUSC has to follow the proper O&M instructed by WASMIP for the sustainability of water supply system.
- WUSC understood the importance of O&M, record keeping and data analyzing. WUSC will start to analyze data to detect the problem and to find countermeasures.
- 3. The Manager mentioned that;
- WASMIP has taught valuable lessons for improving the present O&M, record keeping and to provide safe water to the consumers.
- WUSC will continuously follow WASMIP materials (management and SOPs) and suggestion for maintaining the record keeping and for providing safe water.
- WUSC has gained consumers satisfaction by providing safe water for 24 hours and WUSC feels very proud of it.
- Before WASMIP, WUSC was focused more on quantity of supplied water but now Pragatinagar WUSC provides enough quantity and quality of water because they feel that it's the right of consumers to get safe water.
- Each WUSC has different type of problems and but it can be solved if Board member and WUSC's staffs cooperate with each other in finding a solution.
- WUSC should make use of feasible technology to reduce work in WUSC. Billing software, account keeping, online payment, meter reading application have been introduced in Pragatinagar WUSC for easy and efficient accounting.
- Pragatinagar WUSC will continue the O&M and record keeping as suggested by WASMIP team.

#### Meeting with Agyauli WUSC.

Date: 2019/08/29

**Time:** 10:30 - 11:00

Location: WASMIP Office

#### Attendants:

- 1. Mr. Sovit Sharma Chairperson, Agyauli WUSC.
- 2. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi National Staff , WASMIP-II

- 1. The Chairperson mentioned that;
  - Regarding water distribution pipelines construction support, Agyauli WUSC has received support from the ward office for expansion of distribution network. The ward is a smallest unit of the municipality. Every ward has its own budget.
  - WUSC requested the ward office to support for the expansion of distribution network in a ward's service area. The ward office provided financial support for expansion of pipelines. However, the ward office has no capacity to provide technical support.
  - The municipality can provide bigger financial support than ward such as deep well construction. The municipality cannot provide technical support since municipality has no sufficient technical manpower.

## **Meeting Memo with Pragatinagar WUSC**

**Date:** 2019/10/1

Time: 10.30 AM to 11:30 AM

Venue: WASMIP- II,Office,DWSSM.

#### Attendees:

- 1. Khimananda Bhusal, Chairman, Pragatinagar WUSC
- 2. Indramani Bhusal, Secretary, Pragatinagar WUSC
- 3. Satoru Oniki, Chief Advisor, WASMIP
- 4. Deepak Subedi, National staff, WASMIP-II

Memo: Board member of Pragatinagar WUSC visited the WASMIP office (DWSSM)

- 1. The Chief Advisor explained; WASMIP-II Activities
  - The second Basic Training was held at NWSSTC, Nagarkot from 24<sup>th</sup> to 28<sup>th</sup> September 2019.
  - Video materials used in Basic Training were taken in the Pragatinagar WUSC site.
  - WASMIP-II team plans to conduct the questionnaire survey to local bodies including Devchuli Municipality which is located in the same premises as Pragatinagar WUSC.
  - The latest materials such as PowerPoint slides and video files were delivered to Pragatinagar WUSC
- 2. The Chairman mentioned their activities and achievements:
  - Pragatinagar WUSC will have a water quality laboratory because they were successful in persuading Devchuli Municipality to establish it.
  - The water quality laboratory in their office is financed by the Municipality.
  - The board member of Pragatinagar WUSC actively have been taking part in the Municipality's program (not only water supply related but also others such as budgeting, policy making and so on) to keep good relationship.
  - Pragatinagar WUSC should regularly have a meeting with the Municipality to collect information so that support can be requested based on this information.
  - The Municipality plans to organize workshop for WUSCs in November, 2019.
  - Pragatinagar WUSC will share the contents and schedule of workshop with the WASMIP team.

#### Meeting with Manager of Urlabari WUSC.

Date: 2020 January 27<sup>th</sup>.

Time: 12:00-13:00

Venue: WASMIP-II Office

#### Attendants:

- 1. Mr. Raju Budathoki Urlabari WUSC, Morang, Province No.1
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Manager of Urlabari WUSC visited WASMIP office on January 27<sup>th</sup> and explained the following topics;
  - Impose of 25% income tax by the Government for WUSCs across Nepal.
  - Income Tax Exemption procedure.
  - Updated Business Plan of Urlabari WUSC.
  - Second phase co-finance project of Urlabari WUSC.
- 2. The Chief Advisor confirmed impose of income tax to all 68 target WUSCs of WASMIP.
  - The Manager mentioned that all WUSCs across Nepal are imposed to pay the income tax. Urlabari WUSC invited Chairpersons and Secretaries of 60 WUSCs in Morang district to discuss on the tax issue and to find the solution to this issue.
- 3. The Chief Advisor confirmed the tax exemption procedure.
  - The Manager mentioned that; firstly, WUSC has to get the Permanent Account Number (PAN) from the related Income Tax office. Secondly, WUSC has to file an application for tax exemption certificate by November 15<sup>th</sup> of the fiscal year. WUSC has to submit an audit report during filing the application for tax exemption certificate.
- 4. The Chief Advisor confirmed if all the WUSCs has a Permanent Account Number.
  - The Manager mentioned that currently most of the WUSCs have no PAN. However, Urlabari WUSC has acquired the PAN number in this fiscal year (FY 2076/77). According to him, Pathari-Sanischare WUSC (WASMIP-II target) also has the PAN.
- 5. The Chief Advisor confirmed the duration to get a tax exemption certificate.
  - The Manager mentioned that Urlabari WUSC applied for tax exemption certificate in November, 2019. Tax office mentioned that in 3 months (February 2020), Urlabari WUSC get the tax exemption certificate.
  - WUSC has applied for the tax exemption and in a meanwhile WUSC is persuading political parties and advocating this issue with Director General of DWSSM and other related parties for the subsidy of tax for WSUCs.
  - The Wash bill is still draft so Urlabari WUSC is advocating with related stakeholders to incorporate tax exemption in the draft wash bill.

- 6. The Chief Advisor confirmed that 25 percent income tax is imposed to larger WUSCs only or all WUSCs regardless of size.
  - The Manager mentioned that all WUSCs across Nepal regardless of size are imposed to pay 25% income tax.
  - The Manager mentioned that Government has an Income Tax Act. According to this act, Government is strictly imposing this rule from current fiscal year (FY 2076/77). However, he is not sure when it is started.
  - According to the Manager, most of the WUSCs are neglecting this issue right now. WUSCs have to suffer a lot if the income tax is imposed and if WUSC cannot get a tax exemption certificate.
- 7. The Chief Advisor appreciated that Urlabari WUSC has continuously updated their Business Plan which WUSC developed in WASMIP-I.
- 8. The Chief Advisor confirmed how often Urlabari WUSC update or revise Business Plan.
  - The Manager mentioned that preparing and updating Business Plan requires high skill. Every year Urlabari WUSC has updated Business plan based on the data of annual report.
- 9. The Chief Advisor confirmed the advantages of Business Plan for Urlabari WUSC.
  - The Manager mentioned that Business Plan helps to manage staffs for preventive maintenance and regular monitoring and forecast the need of additionally facilities.
- 10. The Chief Advisor confirmed if the Urlabari WUSCs evaluate their performance using Key Performance Indicators (KPIs). KPIs were introduced in a Basic Training of WASMIP-II.
  - The Manager mentioned that Urlabari WUSC has calculated all KPIs.It is a daily process to maintain record to determine KPIs.
  - Business Plan is a compilation of KPIs but special skill is required to prepare it.
- 11. The Manager informed that;
  - Urlabari WUSC signed a contract with DWSSM to start the second phase co-finance project II. This project consists of 2 elevated tank of 450 m<sup>3</sup> and 225 m<sup>3</sup> respectively and it will have 4 deep tube wells. This project is expected to finish in 2022.
  - 30 percent of total cost will be shared by Urlabari WUSC. Urlabari WUSC will borrow a loan (10% of total cost) form Town Development Fund.

# Appendix 2.56.3

# Memorandums of Discussion With NWSSTC

#### TITLE: WASHMIP-2

#### VENUE: NWSSTC

#### PARTICIPANTS:

#### WASHMIP SIDE:

- 1. Mr. Satoru Oniki
- 2. Mr. Yoshio Chikamatsu
- 3. Mr. Mikita Amano
- 4. Mr. Deepak Subedi

#### NWSTC SIDE:

- 1. Mr. Rajeeb Ghimire Director
- 2. Mr. Kamal Adhikari- Sociologist
- 3. Mr. Jay Prakash Mishra- Lab Technician
- 4. Mr. Bijaya Singh Mahat- Librarian
- 5. Mr. Ramesh Bahadur Karki- WSSPC
- 6. Mr. Saroj Subedi- Account Officer
- 7. Mrs. Hema Thebe- Woman Worker
- 8. Mrs Usha Karki Woman worker
- 9. Mrs Kalpana Aryal- WSSPC
- 10. Mr. Ram Krishna Mishra- Computer Operator

On June 29<sup>th</sup> Wednesday, the meeting has been held at NWSSTC, Nagarkot between the WASHMIP-2 team led by Mr. Satoru Oniki and the NWSSTC team. The WASHMIP-2 team received a warm welcome from the Director of NWSSTC Mr. Rajeeb Ghimire and staffs. The welcoming Speech followed by the presentation titled "Past, Present and Future of National Water Supply and Sanitation Training center" was given by Mr. Kamal Adhikari from NWSSTC. The WASHMIP-2 team has questions regarding the presentation which were assured to be explained later that day on a director's office. The participants from the NWSSTC side mentioned that they are really excited to work in collaboration with the WASHMIP-2 project.

The WASHMIP-2 team visited all the facilities like seminar hall, classroom, meter testing unit, plumbing unit, water testing lab, IT room, library, store room and entertainment hall available at the NWSTC. The meeting held again at the director's office after lunch. Mr. Rajeeb Ghimire informed that the NWSSTC is the only government agency in Nepal that has ISO 9001:2000 quality certificate. He also mentioned about water safety plan to be available in the web in near future. The Trainers are outsourced from the local market and NWSSTC is working to prepare an electronic roaster of resource persons or trainer in partnership with Water Supply and Sanitation Collaborative Council. The WASHMIP-2 team leader Mr. Satoru Oniki inform about the arrival of JICA experts in august. The Director agreed to try to conduct a lecture or training sessions in WASHMIP model with target to WSSDO staffs. WASHMIP-2 team member Mr. Yoshio Chikamatsu makes an inquiry about the feedback and trainee selection system on a training. NWSSTC has a pre and post questionnaire and 33 percent women trainee are selected to meet the gender inclusion theory. The Director explained about the of capacity development of NWSSTC's staff to deliver more trainings on different subjects effectively. The discussion on MTOT and promoting of WASHMIP-2 model was fruitful. The meeting ended after signing the visitor's log book by the WASHMIP-2 team and the greetings were exchanged hoping to see again.

#### Re: Meeting with Mr. Kamal Adhikari about NWSSTC.

Date: 2016/08/28 Time: 11:30 – 12:30 Location: DWSS, Building. Attendants: Counterpart side:

1. Mr. Kamal Adhikari

#### WASMIP-2 Side:

- 1. Kozo Hayashishita- Team Member.
- 2. Deepak Subedi- National Staff.

- 1. No special criteria for selecting the trainees.
- 2. NWSSTC has training participants mainly from three areas:
  - DWSS Staffs
  - Stakeholders (DWASH-CC, VWASH-CC)
  - WUSCs
- 3. Local Development Officer (LDO) who is the head of the DWASH-CC and the WSSDO chiefs consults and dispatch trainees from DWASH-CC.
- 4. DWASH-CC participants are usually teachers, health professionals and journalists.
- 5. VWASH-CC selects teachers and village health workers for the training.
- 6. WSSDO is supposed to select the training candidate from the WUSCs.
- 7. NWSSTC also outsources trainers from NGO, Other government organizations, professor of colleges etc.
- 8. NWSSTC informs and invites WSSDOs to dispatch trainees by corresponding through letters.
- 9. NWSSTC does not conduct evaluation test for 3 days training.
- 10. NWSSTC conduct pre and post test with questionnaire of 40 questions for 5 days and 7 days training.
- 11. No standard format to evaluate the enhancement of skills of trainees after training.
- 12. Lack of skilled trainer at the regional and district level is the problem.
- 13. Lack of updated and competent trainer at NWSSTC is also the problem.
- 14. Refreshment training for the trainers at NWSSTC is very necessary.
- 15. No special method to check if the training content is implemented in a district or the trainees' organization after they received a training.
- 16. NWSSTC instructs gender guidelines to be followed while selecting trainees. 33 percent of women inclusion is mandatory.
- 17. NWSSTC collects expectations of the trainees using "the met card" (it is a kind of questionnaire) in the beginning of the training.
- 18. Review the expectation and tally with the schedule and content of training.
- 19. If the skill gap is higher between the trainees, NWSSTC forms group and tries to maintain the balance of trainees.
- 20. Although NWSSTC does not have any criteria for selecting the general trainees, NWSSTC follows a criteria for Master Trainer training.
- 21. Most of the WUSCs usually dispatch trainees from the topmost five position from their board members.
- 22. NWSSTC feels the need of improvement of facilities and training materials for conducting training on technical aspects of water supply and sanitation.

#### Re: NWSSTC facility status

Date: 2016/9/01 Time: 10:00 – 14:00 Location: NWSSTC Nagarkot Attendants:

- 1. Mr. Kamal Adhikari, Sociologist, NWSSTC
- 2. Mr. Takashi Kondo, JICA representative
- 3. Mr. Kazuhiko Nakamura, Team Member, WASMIP Team
- 4. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 5. Ms. Trishna Khadgi, Project Secretary, WASMIP Team

- NWSSTC has been providing its facilities to different colleges, national and international agencies by charging them certain amount.
- All the amount collected goes to Government. Later, government allocates budget to the NWSSTC.
- They conduct approximately 25 training programs in a year, the training differs according to the demand.
- > The district officers after getting training in NWSSTC train WUSCs under their district office.
- If the WSSDO Engineer finds any difficulty in answering queries of participants, they contact other WSSDOs or NWSSTC or find in internet to get answer.
- The necessary chemicals for the quality laboratory is bought just before the training. Quality test training on 27 parameters is conducted.
- > The NWSSTC sometimes outsources consultancies to conduct technical trainings.
- Normally, 5-6 times water quality trainings are conducted for WUSCs each year.
- The training manuals and contents are revised with collaboration with national and international agencies.
- > There are more than 30 different types of technical trainings.
- For drinking water supply, trainings such as meter reading, pump operation, O&M training, design and drawing, non-revenue water etc. are conducted.
- Training related to documentation, report writing and other managerial elements are also conducted.
- The trainings are conducted as per the available budget and need of the district offices. Trainings are also given to other agencies and private bodies as per necessity. In average about 25 trainings are conducted every year.
- After the end of training, evaluation form is distributed among participants to understand achievements after training.
- The NWSSTC conducts TNA (Training Need Assessment) with the support of JICA, SEIU (Sector Efficiency Improvement Unit) of Ministry of Urban Development (MoUD) to determine the achievement and understanding level of participants after training.
- > The monitoring of trainee from districts is done by DWASH-CC.
- > The NWSSTC has been planning to start an online training.
- > The NWSSTC is also planning (TMIS) Training Management Information System.
- > According to Mr. Kamal Adhikari following improvements are required for NWSSTC:
  - o Online course
  - o Improvement in electronic devices like computers
  - Need to form Capacity development master plan to standardize training curriculum and skill enhancement of trainee along with knowledge
  - o Capacity development of resource person
  - o Establish international linkage with other training centers
  - o Establish research and development facilities

- The NWSSTC shares its activities by preparing reports and talking about their achievements in seminars and workshops.
- > There is regular interaction with local people and school students on health and hygiene.
- The NWSSTC forms groups of participants and engage them in group activities to make the training more effective for different skill leveled trainee.
- ➢ KUKL and NWSC have not attended training in NWSSTC.
- Mr. Kamal Adhikari suggests to decentralize the capacity of NWSSTC to sub levels. This issue will be addressed in Capacity Development master plan.

### Re: Visit at NWSSTC, Nagarkot and Questionnaire about NWSSTC laboratory

Date: 2016/11/28 Time: 10.30 – 15:00 Location: NWSSTC, Nagarkot Attendants:

- Mr. Kamal Adhikari, Sociologist, DWSS
- Mr. Prakash Mishra, Lab In charge, NWSSTC
- Mr. Ramesh Bahadur Karki, Water Supply and Sanitation Technician, NWSSTC
- Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- Mr. Yoshio Chikamatsu, JICA Expert, WASMIP Team
- Mr. Yusaku Numajiri, JICA Expert, WASMIP Team
- Mr. Swiss Gauchan, National Staff, WASMIP Team

#### **Questionaire conclusions:**

- 1. The WASMIP Team visited NWSSTC to conduct the interview survey and the laboratory facility tour.
- 2. As the results of the survey, the followings are founded.
- 3. In almost all the districts they, WSSDOs do have the Pota test Kit which can measure 5 parameters.
- 4. The method of training is by power point (a lecture style) and sometime conducted to the field (OJT style).
- 5. There is also a provision of observation tour of WUSC for site visit.
- 6. There is no individual test after the training, so there is no evaluation system after the training.
- 7. NWSSTC only gives the certificate of participation and follow strict rules to give the certificates due to the ISO implementation.
- 8. Kamal san added that the NWSSTC is lacking the documentation part.
- 9. Kamal san added that they are now aware of the current situation of NWSSTC training topics, methods due to queries from the WASMIP team to them.
- 10. Kamal san added that NWSSTC do have the equipment for water quality in their laboratory but they are not utilizing it so far.
- 11. Kamal san added that there is no training need assessment for the selection of training topics.
- 12. Kamal san further added that for the training program, WUSCs have requested respective WSSDO, and WSSDOs contact DWSS or NWWSTC for the training which is the process of selection of training subject to be given.
- 13. At the last of each training, all trainee write the training required for future.
- 14. About the training schedule, method, course, list of equipment and SOPs and manuals, Mr. Karki said he will provide the documents within this week.

#### Re: Presentation by Mr. Kozo Hayashishita on NWSSTC, Nagarkot.

Date: 2017/3/29. Time: 10:00 – 5:00. Location: NWSSTC, KUKL, Baansabari, Bhaktapur.

#### Attendants:

- 1. Mr. Kabindra Karki, Project Manager of WASMIP-II, Chief of NWSSTC.
- 2. Mr. Kamal Adhikari, Sociologist, DWSS.
- 3. Mr. Binod Gajurel, Mechanical Section, DWSS
- 4. Mr. Saroj Subedi, Account Officer, NWSSTC.
- 5. Mr. Satoru Oniki, Chief Advisor, WASMIP Team.
- 6. Mr. Daishuke Yashiro, Team Member, WASMIP Team.
- 7. Mr. Kozo Hayashishita, Team Member, WASMIP Team
- 8. Mr. Swiss Gauchan, Team Member, WASMIP Team

#### A. Meeting with Mr. Kabindra Adhikari and Kamal Adhikari at office:

- 1. Mr. Kabindra said that a new building may be built in the NWSSTC premises in the future for the users committee and technical conference, the budget is proposed too.
- 2. NWSSTC is an autonomous body, since 4 years ago and submits the annual audited documents for the certification of ISO9001, 2015.
- 3. NWSSTC has the ISO 9001:2008 certified institution and is on the process of acquiring the latest version ISO 9001:2015.
- 4. Mr. Kabindra explained the WASMIP team about the premises/facilities of the NWSSTC such as WASH museum, laboratories, conference hall, meter calibration section and so on.
- 5. Mr. Kabindra explained that there were trainers from Philippines and participants from Bhutan, Myanmar at past regarding provisions of outsourcing of resource person from outside or abroad.
- Mr. Kamal further stated that there is no collaboration with other counterparts (KUKL, NWSC) about training part too but NWSSTC has good relation with Small town Water Supply Project which is under Asian Development Bank Ioan.

#### B. After the Presentation of Mr. Kozo Hayashishita and feedbacks from participants:

- Mr. Kozo presented his three presentations (1. Lecture on training skill enhancement, 2. How to make your presentation material, 3. Techniques for trainer) and everybody appreciated it.
- 2. Mr. Kabindra said it was a good presentation and will be a good lesson and guiding tips for future trainers too.
- 3. Mr. Oniki thanked Mr. Kamal for the facilitator and asked about any comment regarding the presentation.
- 4. Mr. Kamal said first he will read the presentation materials again and will comment about them and also follow valuable ideas while giving presentation.
- 5. Mr. Oniki added that WASMIP team will try to transfer these training skills to DWSS and NWSSTC staffs and learn from this slides.

6. Mr. Kamal added that if possible this presentation can be given to DWSS upper levels staffs like DG, DDG, S.D.E and empower them.

#### C. <u>After the presentation:</u>

Mr. Kabindra showed us the NWSSTC premises and the training for plumber/ technician was going on.

WASMIP Team attended a lecture which Mr. Kamal conducted valuable presentation regarding Sanitation and Hygiene subjects to participants from Gorkha WUSCs.

#### Re: Meeting with DWSS.

Date: 2017/04/29

Time: 10:00-10:30 Venue: CRMSO Building

## Attendants:

- 1. Mr. Kamal Adhikari- NWSSTC, DWSS.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II explained the discussion of 3<sup>rd</sup> JPCM held on 22<sup>nd</sup> April.
- 2. Mr. Kamal Adhikari explained that the Director General, Joint Secretary and other high level Officers who are nominated as a trainer at NWSSTC cannot provide time as a trainers.
- 3. Mr. Kamal explained that it would be easy if WASMIP-II provides a concept paper about the training i.e. expected participants, training duration, course etc.
- 4. Mr. Kamal mentioned that he is newly assigned as a chief of community mobilization section.
- 5. Mr. Kamal mentioned if it is possible to incorporate GESI (Gender and Social Inclusion) in WASMIP model it would help the poor and marginalized people of the community.

# Meeting with NWSSTC.

Date: 2020 October 4<sup>th</sup>.

Time: 11:00-12:00

Venue: NWSSTC Office

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC, DWSSM.
- 2. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. The Chief of NWSSTC mentioned that;
  - NWSSTC is conducting online trainings until October 13<sup>th</sup>, 2020.
  - NWSSTC can conduct ToT after October 13<sup>th</sup>, 2020.
  - NWSSTC will select training candidates and approve their nomination from DWSSM.
  - DDG approves the candidate names and nominate them for training.
  - NWSSTC will invite trainees through email. WASMIP will follow up of the invitation.
  - Trainees will participate from their convenient location (home or office) using PC or smartphone. Therefore, projector is not required.
  - Trainees are engineers of DWSSM and they are familiar in using zoom application.

# Meeting with Chief of NWSSTC.

Date: 2021 August 16<sup>th</sup>.

Time: 12:00-13:00

Venue: NWSSTC Office

# Attendants:

- 1. Mr. Kabindra Bikram Karki Project Manager/Chief of NWSSTC, DWSSM
- 2. Mr. Deepak Subedi-National Staff, WASMIP-II

#### **Discussion Points:**

- 1. Approval of Management Module;
  - The final draft of management module was submitted by the project to the DWSSM in May. Mr. Kabindra Bikram Karki (Project Manager) is reviewing the final draft. After review, Mr. Kabindra will prepare a Tippani (Kesai) and propose to the Director General for approval.
  - Mr. Kabindra mentioned that it is necessary to print and publish the management modules for dissemination to semi urban WUSCs across Nepal.
- 2. Online meeting to share the design manual;
  - NWSSTC can invite and organize online meeting to share design manual with DWSSM's staffs.
  - Mr. Kabindra requested to inform any convenient schedule for Japanese trainers. Once the schedule is finalized, he can proceed to invite DWSSM's staffs.
- 3. Helpline for WUSCs;
  - NWSSTC will upload the helpline information (for construction, training, and O&M and rehabilitation) in their website.
- 4. Budget for training in new fiscal year;
  - NWSSTC has secured NPR 6 million for WASMIP's trainings in new fiscal year.
- 5. Online meeting with DG to explain WASMIP;
  - Mr. Kabindra will discuss with DG and inform the suitable time for meeting. He will try to secure the date in one week in advance.
- 6. Other Remarks;
  - Mr. Kabindra requested to collect the KPIs of WASMIP's target WUSCs. If necessary, NWSSTC will issue a letter to WUSCs for cooperation.
  - Mr. Kabindra requested to find an appropriate time to conduct onsite training of remaining WUSCs.

# Appendix 2.56.4

# Memorandums of Discussion With Others

TITLE: WASHMIP-2

VENUE: DWSS

DATE: 27/06/2016

TIME: 13:00 HRS - 13:30 HRS

**Participants** 

WASHMIP-2 SIDE:

Mr. Satoru Oniki

Mr. Yoshio Chikamatsu

Mr. Mikita Amano

Mr. Deepak Subedi

STWSSSP SIDE:

Divakar Prasad Dhakal

Sanjaya Adhikari- Wash Governence Specialist.

Keshav Raj Bista- Deputy Project Director.

Rajendra Sapkota

Ujwol Prajapati- Unit Chief, ISSAU.

JICA SIDE

MRs Bidhya Pokhrel – Senior Program Officer

On June 27<sup>th</sup> Monday, the courtesy meeting between small town water supply project and WASHMIP-2 team has been held at DWSS office Kathmandu right after the kick off meeting which was chaired by the Director General of DWSS. JICA's senior program Officer Bidhya Pokhrel introduced the WASHMIP-2 team to the small town water supply development project's officer. STWSDP officer informed about the IASSAU unit being formed but yet to start work. The purpose of IASSAU unit is to strengthen the WUSC'S under their support to develop a business plan so that they are strengthen to pay back the loan provided to them within a 20 years period of time and with 5% of interest rate. WASHMIP-2 Team Leader Mr. Satoru Oniki expressed that the IASSAU and STDWSP to meet and discuss more to find the consensus and common points in business plan developed by WASHMIP-2 team and STWSDP. Officer from STWSDP mentioned that the WUSCs supported by STWSDP if included in WASHMIP-2 project will be fruitful and effective. Team Leader Mr. Oniki explained and discuss about data accuracy in the meeting. WASHMIP-2 expert Mr.Yoshio inquired about the involvement of WUSC in the preparation of business plan of STWSDP. Today's meeting was finally adjourned with a Thank You speech by Bidhya Pokhrel from JICA.

TITLE: <u>WASHMIP-2</u> VENUE: DWSS DATE: 27/06/2016 TIME: 11:00-12:30

#### KICK OFF MEETING OF WASHMIP-2.

On June 27<sup>th</sup> Monday, the kick off meeting of WASHMIP-2 has been held at DWSS office Kathmandu. The meeting was chaired by the Director General Mr. Ram Chandra Devkota. Project Manager Mr. Rajeev Ghimire welcomed the participants to the meeting. Mr. Arun Kumar Simkhada master the ceremony. WASHMIP-2 team leader Mr .Satoru Oniki made a presentation on an outline of the project. Group discussion was held after the presentation. Participants made comments and questions about including disaster risk management section and sociologist and to link WASHMIP-2 with the WASH project which is already ongoing in some WUSCs .Team leader Mr. Oniki and the Team member Mr. Yoshio answered the questions of the participants and delivered the purpose and objective of the WASHMIP-2 project. Mr. Director General apologized and leave the meeting halfway because of his urgency and appointed an officer to chair the meeting on his behalf. Meeting was finally adjourned by the Chair wishing all the best to the project and thanking all the participants for attending the meeting.

# Re: Presentation of Functionality and Sustainability Indicators Workshop

Date: 2016/08/07

Time: 13:30 - 18:30

Location: Embassy Restaurant Conference Hall, Kathmandu.

#### Attendants:

Representatives and Officers of different National and International organizations working in the water supply and sanitation sector.

WASMIP-2 side:

1. Satoru Oniki (Team Leader). 2. Kozo Hayashishita (Team Member) 3.Deepak Subedi (National Staff)

#### Meeting conclusions:

- 1. Nepal consultant Building Design Authority (BDA) Private Limited has 5 districts as a pilot projects for Rural Water Supply and Sanitation Improvement Project.
- 2. Dolakha, Makwanpur, Salyan, Lamjung and Sunsari are the 5 districts for pilot projects.
- 3. The workshop was organized for the information, discussion and comments on the functionality and Sustainability Indicators of rural water supply schemes.
- 4. Followings are the various questions made by the workshop participants which were later answered by the organizers:

Q1. Why Social Aspect is not included as an indicator?

A1. Limited Indicators only to check if the water supply scheme is functioning or not.

Q2. Why the division of points is not equal?

A2. Points are distributed according to the priorities.

Q3. Why the institutional aspect is included in the functionality indicators?

A3. Answer was not clear and organizers asked the comments in discussion section to improve.

Q4. Why the outsourcing of Village Maintenance Worker (VMW) has less points?

A4. VMWs are supposed to be local so that they are available in odd working hours also.

Q5. How do you measure the service hours of water supply?

A5. Interview with the water supply providers and the consumers.

Q6. How do you evaluate the accuracy of data?

A6. DSOS (name of the position in district) will be employed in pilot districts and they will cross check the data by the interview in sites.

Q7. Are these indicators prepared focusing only the rural water supply or the urban water supply as well?

A7. Indicators applies for all completed and community managed projects.

Q8. Why women inclusion is not included as one of the aspect in indicators? A8. WUSC has a directive to follow. Women and marginalized groups are included according to the clause in the directive.

Q9. Do you have any special reason for 45-55 scoring system?A9. Only assumption. No any special reason for 45-55 scoring system.

Q10. Why the indicators for the terai region are not included? A10. Consider on including the indicators in the discussion session.

Q11. Do you have any method to find out the adequacy of tools?

A11. Answer was not clear. Agrees to discuss later.

Q12. Why the Business Plan is not included as an indicator?

A12. Answer was not clear. Ask for suggestions and comments.

Q13. Why the complaint management system is not included as an indicator?

A13. Considering use of a complaint management system in a mobile application later.

Q14. How do you measure the satisfactory of the consumers?

A14. Social Survey among the consumers is a tool. The BDA is planning to use to find the satisfactory level of the consumers.

Followings are the few suggestions made by the workshop participants to the organizers:

- 1. Include institutional and financial aspect in Sustainability Indicators.
- 2. Technical Aspect should be used as an Operational Aspect.
- 3. 1 tap in rural area is used by 6-7 households. So, 100 taps means around 700 households. Therefore, the tap numbers should be reduced for VMWs.
- 4. Availability of water should be season based, dry and rainy or according to the design production.
- 5. Only the presence of VMW doesn't mean, there should be an indicator to measure their capability.
- 6. There should be checklist to be prepared to measure the adequacy of tools.
- 7. Not only quantity but the quality aspects should be also included as an indicator.

The workshop schedule, Functionality Indicators, and Sustainability Indicators sheet is attached herewith.

# **Re: Meeting with FEDWASUN.**

Date: 2016/11/24 Time: 11:00 – 12:30 Location: FEDWASUN Office. Attendants:

FEDWASUN side:

- 1. Mr. Doren Thapa Program Officer
- 2. Ms. Bedbyash Lamichhane Program Officer
- 3. Mr. Pragun S. Rana Program Officer
- 4. Ms. Bipina Bajracharya Program Officer

#### WASMIP-2 Side:

- 1. Satoru Oniki- Chief Advisor
- 2. Yusaku Numajiri- Team Member
- 3. Yoshio Chikamatsu- Team Member
- 4. Deepak Subedi- National Staff

- 1. Mangadh WUSC chairman is associated with FEDWASUN.
- 2. FEDWASUN has conducted 250 WSP all over Nepal in cooperation with different donor agencies.
- 3. FEDWASUN is providing training on a scheme management, account keeping, O&M of the water supply facilities, good governance, etc.
- 4. FEDWASUN mainly focus on advocacy, capacity building and social mobilization; especially on software components.
- 5. FEDWASUN also provides WSP and VMW training.
- 6. Selects WUSCs in coordination with D-WASH CC and V-WASH CC.
- 7. FEDWASUN has a training curriculum.
- 8. FEDWASUN uses NWSSTC staffs as the resource person for trainings.
- 9. Minimum 1 day and Maximum 5 days training has been conducted.
- 10. FEDWASUN provides water quality test training using the Enpho water quality test kit.
- 11. Provides ENPHO test kit to district chapters. (Has provided to 15 districts now.)
- 12. FEDWASUN has a plan to develop a Business Plan for small scale rural water supply system.
- 13. FEDWASUN has a plan to develop income generation module for small scale water supply systems.
- 14. Currently 42,000 WUSCs. Only 25% functioning.
- 15. FEDWASUN works as an NGO and umbrella organization of WUSC across the country.
- 16. FEDWASUN develops its training program by bottom-up approaches, based on the needs analysis from WUSC through D-WASH CC/V-WASH CC (i.e., not consult with DWSS)

- 17. FEDWASUN trainings are provided in different level of venues according to the training modules; i.e., central, district, and VDC
- 18. Training target group is mainly WUSC members, while some awareness program on sanitation are provided to community members.
- 19. An example of Business plan training provided by FEDWASUN included income from alternative business to supplement scarce income from water supply.

# Re: Sharing Meeting on Assessment of Water quality in 26 towns managed by NWSC, WSMB and KUKL.

# Date: 2016 December 6<sup>th</sup>, Time: 14:00-16:00

Venue: DWSS Building, Water Quality Section Conference Room.

# Attendants:

- 1. Satoru Oniki- Chief Advisor, WASMIP-II.
- 2. Yusaku Numajjiri, Team Member, WASMIP-II.
- 3. Deepak Subedi-WASMIP-II

#### Presentation By:

- 1. Nam Raj Khatri (Water Quality Assessment).
- 2. Bhola Nath Poudyal (Water Quality Assessment).
- 3. Suraj k. Bam (Rainwater harvesting).

- 1. The capacity assessment of 26 large town water supply system has been conducted.
- 2. The list includes 23 water supply system of NWSC, 2 water supply system of WSMB and 1 water supply system of KUKL.
- 3. The all sources of 25 water supply system have been tested for full parameters.
- 4. For Kathmandu 20 sources has been tested.
- 5. 5 taps for 12 parameters has been tested for 25 water supply system.
- 6. 100 taps for 12 parameters has been tested for Kathmandu.
- 7. A data book has been prepared to be useful for service provider and sector with data and analysis.
- 8. Q. What is the solution that nearest tap has high FRC but the last tap has no FRC?
  - A. That is due to loss of chlorine in distribution system. Install washout valves to mitigate biofilms which consume chlorine.
- 9. Q. What kind of source is selected for testing?A. Source is mentioned in GPS mapping like tube well, spring and surface.
- 10. As the results of tests, the assessment found that the deep tube well with no platform and no house is contaminated with e-coli whereas deep tube well with in-house and with platforms has no bacterial contamination. (Mr. Nam Raj Khatri)
- 11. Ogata San commented that; Presence of Nitrite should be checked. Many people use water by boiling which removes the bacterial contamination but nitrite gets concentrated on boiling. So, Nitrite should also be included in NDWQS as a parameter to be monitored.
- 12. The assessment indicates that the presence of Fluoride in most of the water supply system is low (below 0.5).
- 13. Mr. Suraj K. Bam, Divisional chief of WSSDO Argakhanchi, presented a concept of rainwater harvesting as a climate change adaptation.

# **Re: Sharing Meeting on Arsenic Mitigation Program**

Date: 2016 December 20th, Time: 15:30-18:00

Venue: DWSS Building, Water Quality Section Conference Room.

#### Attendants:

- 1. Mr. Rajan Pandey (Joint Secretary, MoWSS)
- 2. Mr. Tejraj Bhatt (Director General, DWSS)
- 3. Mr. Sunil Kumar Das (Deputy Director General, DWSS)
- 4. Mr.Binod Kumar Agrawal (Deputy Director General, DWSS)
- 5. Section Chiefs of DWSS
- 6. Reprentative from various NGOs and INGOs

#### WASMIP-II side:

- 1. Satoru Oniki- Chief Advisor
- 2. Deepak Subedi-National Staff

#### **Presentation By:**

- 1. Mr. Narayan Khanal (Status of Arsenic Mitigation Program), DWSS
- 2. Mr. Binod Dangol (An assessment of the performance of Kanchan arsenic filters in Nawalparasi), ENPHO
- 3. Mr. Ryuiji Ogata (A case study of arsenic affected hotspot village), JICA
- 4. Genesis Consultant (Updated Arsenic Information Management System)

#### **Meeting Conclusions:**

- 1. The program was hosted by Ms. Manina Baidhya from DWSS.
- 2. The welcome speech was given by Mr. Sunil Kumar Das (DDG-DWSS)
- 3. The opening remarks and the objective of the meeting were explained by Mr. Tejraj Bhatt (DG-DWSS).
- 4. The participants made following questions in the discussion session:
  - Q. Does DWSS have any plan in developing capacity of WSSDOs in arsenic testing?
     A. DWSS has a plan to provide testing kits with trainings to all the 75 districts offices across Nepal.
  - Q. Is there any awareness campaign about the health aspects of arsenic during the survey?

A. Awareness about the arsenic borne diseases with pictures were presented during the survey.

- Q. Is there any correction mechanism in AIMS if data input is wrong?
   A. Data is validated two times after receiving so there is a less chance of wrong data.
- 5. The participants made the following suggestions:
  - The continuous monitoring mechanism at village level is very necessary to find out the actual status of arsenic problems.

- Empowerment of VDCs (Village Development committee) to develop arsenic filter will be more effective.
- The shallow tube wells should only be used from the second layer.
- Since Arsenicosis is now visible in Nepal, we should emphasis on public health emergencies and work together with common commitment.
- Arsenic data fluctuates according to the season. So we should consider the data of both rainy and dry seasons.
- 6. The Joint Secretary delivered the closing remarks and mentioned that we should now focus on permanent solution of mitigation of Arsenic.

#### **Re: WASMIP PARTICIPATION AT POKHARA REGIONAL CONFRENCE.**

Date: 2017/01/02

Time: 10:00-18:00

Location: Hotel Legacy, Mustang chowk, Pokhara

#### Attendants:

- 1. Mr. Deepak Khadka, MoWSS
- 2. Mr. Bhim Upadhaya, MoWSS
- 3. Mr. Ramchandra Devkota, MoWSS
- 4. Mr. Shankar Subedi, MoWSS
- 5. Mr. Tej Raj Bhatt, DWSS
- 6. Mr. Sunil Kumar Das, DWSS
- 7. Mr. Binod Kumar Agrawal, DWSS
- 8. Mr. Manoj Ghimire, DWSS
- 9. Mr. Umashankar Joshi, RMSO
- 10. Mr. Prakash Pudasaini, MoSSW
- 11. Mr. Krishna Prasad Pokhrel, DWSS
- 12. Mr. Gauri Shankar Upadhaya, Finance Ministry
- 13. Mr. Kumar Koirala, MoSSW
- 14. Mr. Arun Kumar Simkhada, DWSS
- 15. Mr. Keshav Raj Dhakal, Kolenika, Kaski
- 16. Mr. Pushparaj Paudel, MoSSW
- 17. Mr. Arjun Babu Dhakal, Nepal Water Supply Corporation
- 18. Mr. Kamal Kant Paudel, MoSSW
- 19. Mr. Tulsi Basnet, WSSDO, Syanja
- 20. Mr. Ratna Prasad Lamichhane, WSSDO, Gorkha
- 21. Mr. Shekhar Chandra KC, WSSDO, Myagdi
- 22. Mr. Arjun Neupane, RMSO
- 23. Mr. Purna Bahadur Jawarchan, WSSDO, Nawalparasi
- 24. Mr. Surat Kumar Bam, WSSDO, Argakhachi
- 25. Mr. Narayan Prasad Ghimire, WSSDO
- 26. Mr. Haridatt Paudel, DWSS
- 27. Mr. Bashudev Paudel, WSSDO, Rupandehi
- 28. Mr. Keshav Lal Shakya, WSSDO, Palpa
- 29. Mr. Prem Prasad Dotel, WSSDO, Parbat
- 30. Mr. Jagarnath Das, WSSDO, Lamjung
- 31. Mr. Bal Mukunda Shrestha, WSSDO, Gulmi
- 32. Mr. Kailash Nayak, WSSDO, Kapilbastu
- 33. Mr. Bijay Kumar Yadav, WSSDO, Mustang
- 34. Mr. Prem Bdr. KC, Accountant, Mustang
- 35. Mr. Ram Sharma Lamichane, Accountant, Parbat
- 36. Mr. Purna Bdr. Upadhaya, WSSDO, Baglung
- 37. Mr. Ramkrishna Sapkota, Accountant, Baglung

- 38. Mr. Shiva Pd. Paudel, Accountant Palpa
- 39. Mr. Purna Paudel, Accountant, Palpa
- 40. Mr. Krishna Pd. Pokhrel, Accountant, Syanja
- 41. Mr. Mukunda Pd. Parajuli, Accountant, Nawalparasi
- 42. Mr. Panchadev Pd. Gupta, Accountant, Nawalparasi
- 43. Mr. Thakur Kumar Shrestha, Accountant, Argakhachi
- 44. Mr. Devi Prasad, Engineer, Rupandehi
- 45. Mr. Buddhi Sagar Pandey, Accountant, Rupandehi
- 46. Mr. Nandalal Banjade, SDE, Kaski
- 47. Mr. Bikash Lamsal, Accountant, Manang
- 48. Mr. Surya Pd. Adhikari, Accountant, Lamjung
- 49. Mr. Bharat Adhikari, Nepal Water Supply Corporation, Kathmandu
- 50. Mr. Mohan Datt Bhatt, Nepal Water Supply Corporation, Butwal
- 51. Mr. Niran Maharjan, Nepal Water Supply Corporation, Pokhara
- 52. Mr. Gopal Pd. Gautam, Nepal Water Supply Corporation, Bhairawa
- 53. Mr. Kiran Paudel, SDE, RMSO- Pokhara
- 54. Mr. Shivahari Acharya, Engineer, RMSO- Pokhara
- 55. Mr. Ishori Pd. Sharma, Engineer, RMSO- Pokhara
- 56. Mr. Muktinath Acharya, RMSO- Pokhara
- 57. Mr. Laxmi Malla, RMSO- Pokhara
- 58. Mr. Bhagwati Adhikari, RMSO- Pokhara
- 59. Mr. Ganga Pd. Bhandari, RMSO- Pokhara
- 60. Mr. Tul Bdr. B.K., RMSO- Pokhara
- 61. Mr. Ganesh Lama, RMSO- Pokhara
- 62. Ms. Sarita Gautam Aryal, DWSS
- 63. Mr. Deepak Shrestha, MoWSS
- 64. Mr. Narayan Pd. Khanal, DWSS
- 65. Mr. Bhakta Bdr. Shah, DWSS
- 66. Mr. Ek Raj Shakya, DWSS
- 67. Mr. Lal Bdr. Thapa, Small town
- 68. Mr. Ram Binod Lamsal, Small town
- 69. Mr. Tej Pd. Poudel, Accountant, Myagdi
- 70. Mr. Kabindra Bikram Karki, DWSS WASMIP Side:
- 1. Mr. Swiss Gauchan, Engineer, WASMIP
- 2. Ms. Trishna Khadgi, Project Secretary, WASMIP

- WASMIP presentation started from 16:15 to 17:15.
- WASMIP presentation was given by Mr. Kabindra Bikram Karki.
- National staffs of WASMIP-II assisted in the presentation.
- WSSDO Chief mentioned that, Why does WASMIP-II commence even though there is already Water Safety Plan (WSP)?
- National Staff of WASMIP-II answered that, WSP focus mostly on quality and WASMIP focus both on water quality and the O&M of water supply systems.
- WSSDO chief of Argakhanchi District said, it would be good if WSP is added as component in WASMIP.
- Instead of isolating WSP and WASMIP, it would be good if we integrate both together hence it will be effective. (WSSDO Chief of Arghakhanchi district)
- WSSDO Chief of Arghakhanchi district said that WSP is excellent but it is not functioning properly so if we include WSP in WASMIP II it can be effective and sustainable.
- WSSDO Chief of Arghakhanchi further added if WASMIP-I was a success, why has WASMIP-I been implemented all over Nepal?
- WASMIP-II national Staff further explained that WASMIP-I is insufficient for disseminating the Model since it was developed based on only in 3 projects (WUSCs) of Jhapa and Morang districts. So WASMIP-II has just commenced in the 13 pilot projects with different water supply systems and water resources to revised and update the model.
- WSSDO Chief of Arghakhanchi district) added that the WSSDO is responsible for the sustainability of the WUSCs in technical areas but WSSDO is lacking to perform this duty because of various reasons (lack of budget, manpower), so WASMIP may be helpful in the overall improvement of WUSCs.
- WSSDO chief of Arghakhanchi district added that this WASMIP II should be institutionalized and implemented by DWSS as a mainstream project all over Nepal.
- D.G at last clarified about the WASMIP model in brief to the attendees and for the rehabilitation program 99 crore budget is allocated in which 150 lakhs is allocated for WASMIP.

# Re: WASMIP presentation and discussion on Eastern regional conference.

Date: 2017/02/11 Time: 05:00 – 06:00 Location: Eastern Star Hotel, Biratnagar Attendants:

- 1. Mr. Arun Simkhada, Planning Division, DWSS
- 2. Ms. Jyoti Tamang, Engineer, DWSS
- 3. WSSDO chiefs from eastern region
- 4. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team
- 5. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team

- Mr. Ram Kumar shrestha (division chief of Udayapur WSSDO) asked methodology of dissemination of WASMIP on overall goal 159 WUSCs.
- The WASMIP team explained the use of cascade model, training through NWSSTC and different workshops/liaison conference to be organized by WSSDOs to disseminate WASMIP model on all the WUSCs.
- > Mr. Hari Dutta from DWSS asked future plans of WASMIP.
- The WASMIP team and Mr. Simkhada explained plans like training programs for technicians, updating SOPs and preparation of business plan to be the next step.
- The participants of eastern regional conference seemed to be positive about WASMIP and suggested DWSS to follow up the program to all WUSCs all over Nepal.

# Re: <u>Presentation and discussion of WASMIP II and its cascade model at Regional Meeting,</u> <u>Surkhet.</u>

Date: 2017/2/26 Time: 4:00 – 5:30 Location: Hotel Namaste, Birendranagar, Surkhet

# Attendants:

- 1. Mr. Dilip Shah, WSSDO, Bardiya.
- 2. Mr. Chok Prasad Dhital, WSSDO, Dang.
- 3. Mr. Raj Kumar Chaudhary, WSSDDO, Banke.
- 4. Mr. Shiva Prasad Devkota, WSSDO, Salyan.
- 5. Mr. Diwakar Sharma, Engineer, Water quality Section, DWSS.
- 6. Akira Hasebe, Team Member, WASMIP II.
- 7. Deepak Subedi, National Staff, WASMIP II.
- 8. Mr. Swiss Gauchan, National Staff, WASMIP Team.

# Meeting conclusions:

- 1. Diwakar sir presented about the Water Safety Plan.
  - Out of 75 districts, 38 districts has Portable kit.
  - This year DWSS is giving 15 districts on which 7 nos for WSSDO and 8 nos for ongoing projects which has a good record of management.
  - For implementation of WSP on users committee a team is formed.
  - For WSP DWSS is giving Rs 100,000 for the implementation on which 30% & 70 % is given to WSSDO and WUSC respectively.

# 2. Personal brief discussion of WASMIP II CASCADE MODEL with WSSDO chief of Bardiya, which is one of the target WSSDO.

- Mr. Hasebe explained about the cascade model to Mr. Dilip Shah.
- Mr. Dilip mentioned that cascade model 2 is a feasible one which will be also suitable in the near future on which the provincial system will overcome the regional system.
- Mr. Dilip told us that R.M.S.O should make a year wise plan of the training given by the Support Unit in a manner that it should not affect their normal work i.e probably feasible from July to September due to budget planning works.

# 3. Questions from the participants on WASMIP II

- Mr. Raj Kumar Chaudhary of WSSDO Banke asked if there is provision of WASMIP II (JICA) plan to strengthen the Nepalgunj Regional lab like giving equipment and also software part too.
- Mr. Hasebe mentioned that the problem is lack of human resources in which DWSS should enhance the resources in the regional lab otherwise the equipment even installed newly is to be deteriorated soon.
- Mr. Diwakar Ghimire of Water Quality Section added human resources is the major problem in regional lab and requested the WASMIP II to provide the human resources and the support of lab equipment that water quality section is working on.

- Mr. Dibakar Ghimire further told us that Water Quality Section is sending budget to the Regional Lab to check water Quality Parameters in 5 projects of each districts as a regular task.
- Mr. Chok Prasad Dhital of WSSDO Dang further added that it is clear that WASMIP II
  will not provide the required human resources which is our responsibility to
  mobilize it.
- Mr. Chok Prasad Dhital asked if there is any provision of support that will be provided to the WSSDO like provided to Jhapa and Morang in WASMIP I. He added that the WSSDO's monitoring part was a good aspects of WASMIP I as seen in Mangadh.
- 4. Mr. Deepak Subedi presented the WSSDO about the cascade model 2 and questioned from the participants.
  - The District officers' main issue was that it will be difficult to send their engineers to others districts for the dissemination of training due to the work load on engineers.
  - Mr. Chok Prasad Dhital suggested that both Division Chief and Respective engineers should get training so that it would be easy if one is not able to go then another one can go for the training purpose.
  - Mr. Shiva Prasad Devkota of WSSDO Salyan suggested that the training program can be implemented during the July-September due to less work load on division offices.
  - Mr. Hasebe shared an idea that engineers from the neighboring districts can form a team and can be dispatched for training mutually.

#### Re: Meeting with DG, RD on February 26<sup>th</sup>, 2017.

Date: 2017 February 26th

Time: 14:00-14:20

Venue: Mid-Western Regional Conference Hall

#### Attendants:

- 1. Mr. TejRaj Bhatta, Director General, DWSS
- 2. Mr. Arun Simkhada , Planning Section, DWSS
- 3. Mr. Chandra Bahadur KC, Regional Director MWRMSO ,DWSS
- 4. Mr. Akira Hasebe, WAMIP-II
- 5. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Hasebe explained about the details of the two proposed support models to the DWSS officials.
- 2. Mr. Regional Director mentioned that the support model through the RMSO is a very good idea and it can be implemented if necessary budget is allocated.
- 3. Mr. Director General asked if WASMIP can consider to deploy 5 numbers of human resources in each region for the initial implementation of this model so that it would be easy for DWSS as well to provide one engineer for each region as a counterpart to manage the proposed support unit activities.
- 4. Mr. Hasebe explained that WASMIP can consider to dispatch their national staff in the pre training and during training procedures.
- 5. Mr. Hasebe handed over the copy of MoU to the Director General to have his comments on the points mentioned in the MoU.
- 6. Mr. Arun Simkhada mentioned that he will explain the MoU contents to the DG in DWSS, KTM.

# Re: Conference on the outline and activities of the DWSS.

Date: 2017/03/17 Time: 12:00 – 14:00 Location: DWSS, Kathmandu

# Attendants:

- 1. Mr. Jeevan Bahadur Shahi, Minister, Ministry of water supply and sanitation.
- 2. Mr. Bhim Prasad Upadhyaya- Secretary, Ministry of water supply and sanitation.
- 3. Mr. Ram Chandra Devkota, Joint Secretary, Ministry of water supply and sanitation.
- 4. Mr. Tejraj Bhatt, Director General, Department of water supply and sewerage.
- 5. Mr. Sunil Kumar Das- Deputy Director General, DWSS.
- 6. Mr. Manoj Ghimire- Deputy Director General, DWSS.
- 7. Mr. Arun Simkhada- Chief of planning section, DWSS.
- 8. Mr. Kabindra Bikram, NWSSTC, DWSS
- 9. Section Chiefs of DWSS.
- 10. Mr. Saturo Oniki, Chief Advisor, WASMIP-II
- 11. Mr. Kozo Hayashishita, Team Member, WASMIP-II
- 12. Mr. Swiss Gauchan, National Staff, WASMIP-II
- 13. Mr. Vivek Shrestha, National Staff, WASMIP-II
- 14. Mr. Deepak Subedi, National Staff, WASMIP-II

- Mr. Manoj Ghimire (DDG) made a welcome speech.
- > Mr. Tejraj Bhatt (DG) presented the outline, activities and achievement of the DWSS.
- Mr. DG mentioned that DWSS has 48 WSSDOs, 22 WSSSDOs and 5 RMSOs (Total 75) in its structure.
- Mr. DG mentioned that there are 5,187 running projects in which 250 projects will be completed in this fiscal year.
- Mr. DG mentioned that DWSS likes to achieve the 'one house-one connection' (water service connection) target.
- Mr. DG mentioned that JICA is supporting in Chautara WUSC transmission line (the grant aid project) and WASMIP-II.
- > Mr. DG mentioned that WASMIP is assisting DWSS in capacity development.
- Mr. Ram Chandra Devkota (Joint Secretary of MoWSS) suggested that DWSS should focus more on preparing the budget for the next fiscal year.
- Mr. Devkota also informed that the sector development plan is to be introduced after finalization from Nepal Government in the next fiscal year.
- Mr. Bhim Prasad Upadhyaya (Secretary of MoWSS) suggested DWSS to be more focused in increasing the service coverage in coming years.
- Mr. Upadhyaya focused on the fact that DWSS increased their water service coverage by only 5% in last 14-15 years.
- Mr. Upadhyaya also suggested DWSS to include waste water management and asked to cooperate with other water service providing organizations (KUKL, NWSC) to meet the goal.

# **Re: Meeting with STWSSP.**

Date: 2017/04/27

Time: 11:00-11:30 Venue: CRMSO Building

# Attendants:

- 1. Mr. Sanjay Adhikari- WASH Advisor.
- 2. Mr.Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr.Yoshio Chikamatsu- Team Member, WASMIP-II
- 4. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Yoshio Chikamatsu explained the draft master schedule of WASMIP-II.
- 2. The Chief Advisor of WASMIP-II explained and handed over the copy of Operational Guidelines.
- 3. Mr. Sanjay Adhikari mentioned as followings :
  - Institutional Support and Service Advisory Unit (ISSAU) is a specific unit to provide range of services on technical, financial and management issues to the ADB (Asian Development Bank) water supply projects.
  - ISSAU will be completely formed after hiring the consultants within two months (First week of July).
  - ISSAU and WASMIP-II can have regular meetings after its complete formation in July.
  - Operational Guidelines should accommodate small, medium and large size water supply systems.
  - Ministry of Water Supply and Sanitation (MoWSS) has a RWSSIP (Rural Water Supply and Sanitation Improvement Project) with the aid of World Bank. WASMIP-II may refer to the RWSSIP documents for further plan of the project.
  - Harmonization with stakeholders is an important step for the revision of Operational Guidelines.
  - DWSS's planning section should facilitate regular meeting with WASMIP-II and other stakeholders to discuss and work together for reviewing and revising the Operational Guidelines.

# Re: Meeting with DWSS.

Date: 2017 December 11<sup>th</sup>.

Time: 11:30-12:30

Venue: DWSS Building

# Attendants:

- 1. Mr. Ram Chandra Shah Project Director, Small town water supply and sanitation project, DWSS.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II.
- 3. Mr. Kazuhiko Nakamura Deputy Chief Advisor , WASMIP-II
- 4. Mr. Yusaku Numajiri Team Member, WASMIP-II
- 5. Mr. Deepak Subedi-National Staff, WASMIP-II.
- 6. Mr. Roshan Suwal National Staff, WASMIP-II

- 1. The Chief Advisor of WASMIP-II explained the project outline and project purpose to Mr. Ram Chandra Shah, the Project Director.
- The Chief Advisor mentioned about the Memorandum of understanding (MoU) that has been signed on June 9 2015. The MoU mentions to harmonize the project activities between ISSAU (Institutional Support and Service Advisory Unit) and WASMIP-II.
- 3. The Chief Advisor briefly explained about the current activities of WASMIP-II. The Chief Advisor mentioned that ISSAU members can attend the WASMIP-II trainings and workshops as observers.
- 4. The Project Director mentioned that he has no problem in dispatching the ISSAU staffs to WASMIP-II trainings.
- 5. The Project Director mentioned that he has no problem in inviting the 76 small town WUSCs in WASMIP-II trainings and workshops.
- 6. The Deputy Chief Advisor explained the draft training curriculum prepared for the WUSCs.
- 7. The Project Director mentioned that curriculum covers almost all the issues that WUSCs are currently facing in operation and maintenance of their water supply system.
- 8. The Project Director mentioned that small town water supply system has a SOP for a respective WUSCs. After the completion of the project, the SOP may be provided to WUSCs.
- 9. The Project Director mentioned that the number of total target WUSC is 76, 70 of 76 WUSCs has been decided, the remaining 6 WUSCs are under selection.
- 10. The Project Director mentioned that regarding SOP on a water supply system, 55 projects has the SOP for each project. It means one project has the SOP. Hence, 55 SOPs are provided in the completed project.
- 11. The Project Director mentioned that SOPs prepared by WASMIP-II must be useful for small town projects as well.
- 12. The Chief Advisor explained that the current draft SOP of WASMIP-II is mainly for engineers for training purpose. Candidate Trainer in the ToT will prepare a brief and easy-to-use SOP for the WUSCs.
- 13. The Project Director mentioned that after one and a half month, consultant for ISSAU will be hired.

14. The meeting agreed to continuously discuss together (ISSAU and WASMIP-II) and harmonize the project.

# Re: Meeting with Joint Secretary (MoWSS).

Date: 2017 December 22<sup>nd</sup>.

Time: 10:30-11:15

Venue: MoWSS Building

# Attendants:

- 1. Mr. Jyoti Shrestha- Joint Secretary, Ministry of Water Supply and Sanitation.
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

# Meeting Conclusions:

- 1. The Chief Advisor introduced and explained brief outline of WASMIP-II to Joint Secretary.
- 2. The Chief Advisor explained about the letter from JICA Headquarter regarding the JCC meeting in the end of February, 2018.
- 3. Mr. Jyoti Shrestha mentioned that he is pleased to know that he is a JCC Chairperson of WASMIP-II.
- 4. Mr. Jyoti mentioned that, so far he has no information that he is a Chairperson of JCC of WASMIP-II.
- 5. Mr. Jyoti mentioned that MoWSS is implementing the capacity development project for WUSCs in 5 districts as a pilot project. The project is funded by the World Bank.
- 6. Mr. Jyoti requested to change the WASMIP-II target WSSDO (i.e. Lamjung WSSDO). MoWSS is also implementing a capacity development project in a Lamjung district. Mr. Jyoti mentioned that duplication of a project is not a good use of resources.
- 7. The Chief Advisor mentioned that WASMIP-II is focusing on semi- urban water supply systems. World Bank project is for rural water supply systems (Project Name: Rural Water Supply and Sanitation Improvement Project).
- 8. Mr. Jyoti requested to provide the regular updates and information (Target WUSCs, activities, Project progress and Plan) about WASMIP-II.
- 9. The Chief Advisor suggested that WASMIP-II will provide necessary information to the Joint Secretary through the DWSS (Mr Kabindra Karki/ Project Manager).
- 10. Mr. Jyoti agreed that he will request Mr. Kabindra Karki (Project manager/ DWSS) to provide the updates on WASMIP-II.

(After the discussion with Joint Secretary. The Chief Advisor informed Mr. Kabindra of meeting's discussion. Mr. Kabindra recognized the importance of communication between DWSS and MoWSS.)

# Re: 1st Joint Coordinating Committee Meeting (JCC) m

Date: 2018/02/28 Time: 11:30 – 01:00 Location: DWSS Office, Panipokhari

# Attendants:

# Counterpart side:

- 1. Mr.Anil Bhadra Khanal Joint Secretary, MoWSS
- 2. Mr. Tej Raj Bhatt- Director General, DWSS
- 3. Mr. Kozo Nagami- Senior Representative, JICA Nepal
- 4. Mr. Yoji Toriumi Representative, JICA Nepal
- 5. Ms. Bidhya Pokhrel- Senior Program Officer , JICA Nepal
- 6. Mr. Arun Kumar Simkhada- Chief of Planning Section, DWSS
- 7. Mr. Kabindra Bikram Karki- Chief of NWSSTC, DWSS
- 8. Mr. Pradip Kumar Mudavari- Regional Director, Far Western RMSO.
- 9. Mr. Devendra Kumar Jha SDE, DWSS
- 10. Mr. Narayan Prasad Khanal, Chief of Water Quality Section, DWSS
- 11. Mr. Tika Bahadur Chaudhary- SDE Sewerage, DWSS
- 12. Ms. Jyoti Tamang- Planning Section, DWSS
- 13. Mr. Bipin Kumar Thakur, Senior Divisional Engineer (Mechanical), DWSS
- 14. Mr. Kamal Adhikari, Sociologist, NWSSTC/DWSS

# WASMIP side:

- 1. Mr. Satoru Oniki- Chief Advisor, WASMIP Team
- 2. Mr. Deepak Subedi- Engineer, WASMIP Team
- 3. Mr. Vivek Shrestha-Engineer, WASMIP Team
- 4. Mr. Swiss Gauchan- Engineer, WASMIP Team
- 5. Ms. Shajina Subedi- Financial Management, WASMIP Team
- 6. Ms. Bineeta Sahi- Project Secretary, WASMIP Team

#### **Opening Remarks (Mr. Arun Simkhada):**

- 1. Joint Coordinating Committee (JCC) is held to review the achievements and outputs of WASMIP-II.
- 2. JCC is a platform to exchange views and ideas on major issues that may arise during implementation of project.
- **3.** The purpose of JCC is to discuss and approve the Project Design Matrix (PDM) and amendments of Record of Discussion

#### Kabindra Bikram Karki Remarks:

- 1. Nepal is undergoing federal restructuring process. However, DWSS will remain in central level.
- **2.** DWSS shall remain central implementing agency and it has to provide supports to federal and local governments.
- **3.** The roles of DWSS as described by federal constitution shall be planning, implementing, maintaining and regulation of WASH sector.
- 4. DWSS will replicate WASMIP model to other WUSCs in future.

#### Discussion Session:

#### **DG Remarks:**

- 1. WASMIP model should be a comprehensive model by including standard guidelines and formats (Standard guidelines for Water Meter Management, Water Treatment Plants, Distribution Facilities, and Business Planning) so that it can be replicated to other WUSCs of Nepal.
- 2. WASMIP will be supported for all the training programs by NWSSTC and in case of any structure changes in future, support shall be provided according to the restructured context.

# Kabindra Sir Remarks:

- **1.** NWSSTC has facilitated TOT and shall facilitate to conduct basic trainings, onsite training and refresher training in future.
- **2.** The procurement works for rehabilitation of 13 pilot WUSCs has been completed and rehabilitation works for 55 target WUSCs shall be finished in this fiscal year.

# Arun Sir Remarks:

- **1.** Budget is allocated for WASMIP in central level, NWSSTC and RMSOs for rehabilitation and training purposes.
- 2. Budget for WASMIP has been purposed for next fiscal year.

# **Conclusion:**

The PDM and Plan of Operation (PO) were approved in the 1st Joint Coordinating Committee Meeting.

# Nagami san Remarks:

- 1. JICA is refining the system strategy for WASH sector referring the SDG indicators.
- 2. As referred in SDG, Universal safe water is main priority but service delivery should also be taken into consideration. In this sense, WASMIP-II is working in enhancing service delivery of WUSCs of Nepal.
- **3.** For the success of the project, JICA would like to request DWSS for human resources and cooperation and thanks DWSS and ministry for allocated budget on the WASMIP.
- **4.** JICA would also like to request the government of Nepal to support WASMIP even after possible changes due to federal restructuring.

# Joint Secretary Remarks:

- 1. The main objective of WASMIP aligns with SDG goals, WASMIP shall prove valuable support in achievement of SDG. The Joint Secretary mentioned that he has no problem in implementing the 'Technical Support Mechanism'.
- 2. Even though Nepal is in restructuring stage, it shall not hamper the project in any way.
- **3.** Government of Nepal will work to replicate learning from WASMIP to other WUSCs of Nepal.
- **4.** The outputs and the project purpose mentioned in PDM of WASMIP-II is helpful to attain SDG goals. After receiving no objection letter from Ministry of Finance signing on the Record of Discussion shall be done by the Joint Secretary and Director General of DWSS.

Date: 2018/06/07 Time: 15:00 – 16:00 Location: DWSS Building.

#### Attendants:

- 1. Mr. Ramchandra Shah- Director, Third Small Town Project.
- 2. Mr. Keshab Bista Third Small Town Project
- 3. Mr. Pushpanjali Rana Third Small Town Project.
- 4. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 5. Mr. Deepak Subedi WASMIP Team

- 1. The Chief Advisor of WASMIP-II explained about the WASMIP-II scope of works and the project duration.
- 2. The Chief Advisor explained about the Basic Training and On-site Trainings for the target WUSCs in semi-urban towns, and the importance of inviting Chairpersons of the WUSCs in the trainings to understand the purpose and contents of the trainings. It is one of important factors that chairpersons recognize the WASMIP-II activities for the smooth training implementation.
- 3. The Director of STWSSSP (Small Town Water Supply and Sanitation Project), Mr. Ramchandra Shah agreed upon the idea of inviting Chairman of WUSCs in the trainings.
- 4. The Director mentioned that STWSSSP has hired the consultant for Institutional Support and Service Advisory Unit (ISSAU) in two weeks.
- 5. The Team Leader of ISSAU is Mr. Ramdip Shah who is the ex-Director General of DWSS.
- 6. The Director mentioned that ISSAU is now preparing the inception report. ISSAU may start work from the 3<sup>rd</sup> week of June.
- 7. The Director mentioned that the main subject of ISSAU is the capacity enhancement of WUSCs.
- 8. The Director mentioned that ISSAU will prepare the business plan of DWSS and NWSSTC.
- The Chief Advisor mentioned that the WASMIP-II and ISSAU works has a clear demarcation in the MoU signed on June 9, 2015. WASMIP-II and ISSAU has to discuss the plans and activities so that there will be no duplication of works.
- 10. The Director mentioned that Mr. Kabindra and Mr. Arun are the members of Advisory Committee of ISSAU. WASMIP-II and ISSAU can sit together and discuss to determine that there is no duplication of works.
- 11. The Director mentioned that ISSAU is financially supported by STWSSSP. ISSAU is under the Monitoring and Evaluation Section of DWSS. ISSAU is responsible to report to the chief of M&E section of DWSS and the Deputy Director General Mr. Sunil Kumar Das.

#### **<u>Re: Meeting with ISSAU.</u>**

Date: 2018 June 15<sup>th</sup>.

Time: 11:00-12:00

Venue: JICA Building

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC, DWSS.
- 2. Mr. Purna Upadhyaya Chief of Monitoring and Evaluation Section, DWSS.
- 3. Mr. Ramdeep Shah Team Leader, ISSAU.
- 4. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 5. Mr. Toshiaki Ooka– Deputy Chief Advisor, WASMIP-II
- 6. Mr. Yushaku Numajiri Team Member , WASMIP-II
- 7. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Kabindra explained about the activities of WASMIP-II.
- 2. Mr. Purna Upadhyaya welcomed the participants of meeting.
- 3. Mr. Purna mentioned that the consultant team of ISSAU (Institutional Support and Service Advisory Unit) has recently joined in DWSS.
- 4. Mr. Purna mentioned that the main task of ISSAU is to strengthen the capacity of WUSCs by providing trainings and other activities.
- 5. The Chief Advisor of WASMIP-II explained briefly about the project purpose and activities in WASMIP-II.
- 6. Mr. Ramdeep Shah (Team Leader of ISSAU) introduced the ISSAU team. The team consists of financial and institutional expert, Legal expert, and Program Manager.
- 7. Mr. Ramdeep mentioned that ISSAU is now preparing an inception report. The Inception report will be submitted to DWSS by August, 2018. ISSAU and WASMIP need to work in a close connection to avoid duplication of works.
- 8. The Chief Advisor explained that WASMIP-II is now preparing the draft Work Plan 2. The Work Plan 2 is made based on the Project Design Matrix (PDM). The WASMIP team would like to discuss purpose and activities with the related persons of DWSS and get a consensus.
- 9. The Chief Advisor mentioned about the Memorandum of Understanding (MoU) that has stipulated the activities of both ISSAU and WASMIP.
- 10. Mr. Ramdeep mentioned that ISSAU would like to work in a coordination with WASMIP-II.

- 1. Supplemental ToT (Training of Trainers)
- 1) Date: December 27 28 (2 days)
- 2) Trainer's Number: 13 (refer to trainers lists: ANNEX-1)
- 3) Venue: NWSSTC (Nagarkot)
- 4) Syllabus:

Day Group 27 Group 1 Dec (Management)		Session 2 H 15-12:45 ToT for Management, Tra	13/45-15115	15:30-17:00
Group 2 (SOP)		<ul> <li>Module 1</li> <li>Tot for SOP: Trainer, Mr.</li> <li>Module 6 &amp; 7</li> </ul>	<ul><li>Module 2</li><li>Oniki &amp; Ooka</li><li>Module 8</li></ul>	•Module 3 •Module 9 & 10
Day Group 28 Group l	09:45-10:45	Session 2 11:00-12:30 nt, Trainer: Mr. Chikamatsu	A REAL PROPERTY AND	BACKEYER, DREED, SALEY HARANG, SALEYER, BACKEYER, BACKEYER, BACKEYER, BACKEYER, BACKEY BACKEYER, BACKEYER, BACKEY

Dec (Management) & Hayashishita	•Practice of Basic Training	•Advice for
•Module 4 •Module 5	(Management)	Lecturers: by
Group 2 (SOP) ToT for SOP, Trainer: Mr. Oniki & Ooka •Module 11 •Module 12 & 13	•Practice of Basic Training (SOP)	Hayashishita ●Closing

- 5) Training methods:
  - > Japanese Experts instructed the trainer candidates with Power Point slides with Notes.
  - > 2 groups: 1) Management, 2) SOPs
  - > Determination who takes charge of each module
  - Lecture contents: instruction of key points in the slides
- 6) Lecture scene



Photo-1 Trainer Candidates



Photo-2 ToT conducted by Expert



Photo-3 Lecture Demonstration by Candidates



Photo-4 Kabindra PM remarks

- 2. Basic Training
  - 1) Date: December 30, 2018 January 4, 2019 (6 days)
  - 2) Trainer's Number: 13 (refer to trainers lists: ANNEX-1)
  - 3) Trainees Number: 28

10 WUSCs participated, 3 WUSCs absent

3 persons (board member, Manager and key technician) from WUSC

- 4) Venue: NWSSTC (Nagarkot)
- 5) Syllabus

		Session 1 (Day1)10:00-11:00 9:30-11:00	Session 2 11:15-12:45	Session 3 13:45-15:15	Session 4 15:30-17:00	
		Orientation	Module 1	Module 2	Module 3	
Day 1	l len		Management	Operational	Financial	
	gen		Model	Performance	Performance	
	nag	Module 4			Module 5	
Day 2	Day 1 Day 2 Day 2 Day 2 Day 1 Day 2				Business Planning	
		Module 6	Module 7	Module 8	<u> </u>	
Day 3		Standard Operation	Intake Facility	Facility Water Treatment Plant (Facilit		
	nce	Procedures				
Module 9			Module 10			
		Water Treatment Pla	int	Water Quality Management		
		(M&E Equipment)				
	1 pr	Module 11	Module 12	Module 13	Practice	
Day 5	a la	Distribution	Water Meter	Repair Work,	Explanation of Next	
Day 5 u	Facility		Report of	Day's Practice		
			Inspection Result			
	0 l	Practice		Closing (Trainees)		
Day 6		Practice of utilizing Standard Operation		Orientation (On-		
		Procedures		site Trainers)		

- 6) Contents of Basic Training
  - $\triangleright$ Training materials and Power Point slides were developed by the Experts.
  - $\triangleright$ Trainers added supplemental slides to the original Power Point slides (training materials).
  - $\triangleright$ Trainers used video in the lectures.
  - $\triangleright$ WUSCs introduced their activities with Power Point slides.
- 7) Lecture scene



Photo-5 WUSC Participants



Photo-6 Basic training by Nepali trainer



Photo-7 WUSC presentation on Water supply system Photo-8 Presentation of WUSC's own SOP



8) Feedback on Basic Training from Trainees (WUSCs)

Questionnaire survey was conducted to trainees at the end of the Basic training.

a) Training



Figure-1 Basic Training Validity

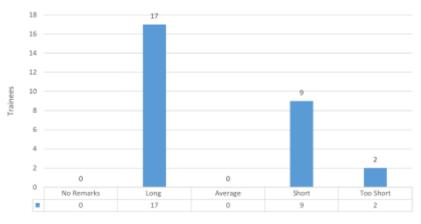


Figure -2 Training Duration (6 days)

b) Evaluation on trainers by trainees

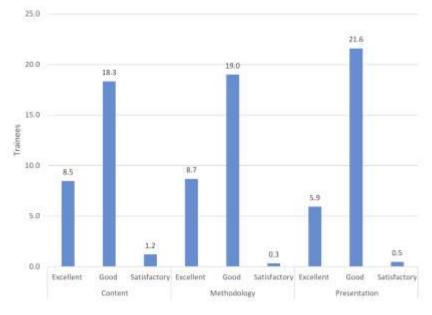


Figure-3 Average to All Trainers

9) Feedback on SOPs from Trainers

Nepali trainers made comments on the materials.

- Correction of words and grammars
- Comments on "Intake facility SOP"
  - $\checkmark$  Transmission pipeline maintenance included in valve chamber
  - ✓ Correct arrangement for sluice valve, water meter, check valve, air valve and pressure gauge in well pump system
  - $\checkmark$  Intake protection such as fence and cleaning
- > Distribution network looping to minimize deteriorated water/ washout operation
- Pressure gauge function for a pump
- It may be difficult for board members and key technicians regarding some SOP portions. (NWSSTC Chief comment)

- 10) Expert team's Impressions
  - > Manager's capacity is high and easily understandable for the training contents.
  - > Participant's desire to learn and apply what they learned in the Basic training is high.
  - > Trainers have knowledge of training contents and facilitation skills.
  - Some trainers are not rich in experience at field works (included in WUSC routine works).
  - ▶ It a need to study how trainers teach to apply learned knowledge in the Basic training.
  - Most of the trainers have their own work (not full-time trainer). Therefore, in case that training is held, it is necessary to issue an invitation letter for trainers.
- 3. Follow-up WUSC after Basic Training
- 1) Site: Pragatinagar WUSC (Nawalparasi district, Gandaki Province)
- 2) Date: January 16, 2019
- 3) Follow-up on activities
  - > Pragatinagar WUSC has developed their own record sheets/books and started to keep records.
  - > WUSC has the periodical meeting to share problems with staffs and plans to solve them.
  - The board members were assigned last July 2018. They accompanied the Expert team and staffs to sites (intake, WTP and elevated tank) to recognize the facilities.
  - > The team recommended WUSC to replace the flow meters at WTP and to install the meters/chlorination units at the well pump sites.
  - > The team recommended using software (excel) for keeping records and analyzing data.
- 4) Site visiting scene



Photo-9 Deep tube Well



Photo-10 Record Books



Photo-11 Chlorination unit provided by DWSSM in 2017. The Expert instructed how to make proper solution with breeching powder. But the powder was refractory. WUSC changed the powder and purchased new on from the market. It is dissolved well.

# 4. Federal transition system investigation

- 1) Date: January 13 15, 2019
- 2) Visiting Agencies: FWSSPO, MoPID (Gandaki province), Rupandehi WSSDO
- 3) Demarcations of water supply facility construction
  - Large scale construction/co-finance project belong to FWSSPO
    - Definitions of the project criteria;
    - Mountain area: design population is more than 5,000
    - Hill area: design population is more than 10,000
    - Plain area: design population is more than 30,000
  - Except above-mentioned scale belongs to MoPID
- 4) Federal and Provincial systems
  - $\blacktriangleright$  DWSSM FWSSPO (15)
  - ➢ MoPID (each province) WSSDO (total 28; each province 2~4)
- 5. Main Points to discuss
- 1) Re-definition of Target WUSC
  - Investigation of WUSCs under FWSSPO
  - Re-confirmation of 229 WUSCs as a semi-urban towns
- 2) Review the training system
  - > In Basic training: participants from WUSC, training duration, frequency
  - > On-site training contents: availability of FWSSPO staffs (securing human resources)
  - Refresher training as an observation tour (Kabindra PM suggested)
- 3) Review the training contents
  - > Review the Basic training materials for manager level
  - Video materials
  - > Shearing the training contents with ISSAU
- 4) Trainer development
  - ➢ FWSSPO staffs
  - WUSC managers

#### ANNEX-1

Basic Training Trainer's list

Direct Direct Change 1		Field	Speciality	TOT 2017	S-TOT	Basic T
Binod Prasad Gajurel	NWSSTC	Planning	Water meter, Electro Mechanical	1	1	1
Sudhir Kumar Sah	DWSS, Co-Finance	Engineer	Water Treatment Plant	1	1	
Mahesh Neupane	MOWSS	Engineer	Water Treatment Plant	1		1
Aashutosh kumar Thakur	DWSS	Engineer	Water Treatment Plant	1	1	
Dibakar Ghimire	DWSS	Engineer	Water Quality	1	1	1
Chet Narayan Shrestha	DWSS	Engineer	Water Quality		1	1
Dr. Kamal Raj Sharma	DWSS	Sociologist	Buisness Plan	1	12	1
Jiblal Basyal	NWSSTC	Account Officer	Buisness Plan	1	19 m	1
Kamal Adhikari	NWSSTC	Sociologist	Buisness Plan	1	1	1
	Mahesh Neupane Aashutosh kumar Thakar Dibakar Ghimire Chet Narayan Shrestha Dr. Kamal Raj Sharma Jiblal Basyal	Mahesh Neupane MOWSS Aashutosh kumar Thakur DWSS Dibakar Ghimire DWSS Chet Narayan Shrestha DWSS Dr. Kamal Raj Sharma DWSS Jiblal Basyal NWSSTC	Mahesh Neupane         MOWSS         Engineer           Aashutosh kumar Thakur         DWSS         Engineer           Dibakar Ghimire         DWSS         Engineer           Chet Narayan Shrestha         DWSS         Engineer           Dr. Kamal Raj Sharma         DWSS         Sociologist           Jiblal Basyal         NWSSTC         Account Officer	Mahesh Neupane         MOWSS         Engineer         Water Treatment Plant           Aashutosh kumar Thakur         DWSS         Engineer         Water Treatment Plant           Dibakar Ghimire         DWSS         Engineer         Water Quality           Chet Narayan Shrestha         DWSS         Engineer         Water Quality           Dr. Kamal Raj Sharma         DWSS         Sociologist         Buisness Plan           Jiblal Basyal         NWSSTC         Account Officer         Buisness Plan	Mahesh Neupane         MOWSS         Engineer         Water Treatment Plant         ✓           Aashutosh kumar Thakur         DWSS         Engineer         Water Treatment Plant         ✓           Dibakar Ghimire         DWSS         Engineer         Water Quality         ✓           Chet Narayan Shrestha         DWSS         Engineer         Water Quality         ✓           Dr. Kamal Raj Sharma         DWSS         Sociologist         Buisness Plan         ✓           Jiblal Basyal         NWSSTC         Account Officer         Buisness Plan         ✓	Mahesh Neupane         MOWSS         Engineer         Water Treatment Plant         ✓           Aashutosh kumar Thakur         DWSS         Engineer         Water Treatment Plant         ✓           Dibakar Ghimire         DWSS         Engineer         Water Quality         ✓         ✓           Chet Narayan Shrestha         DWSS         Engineer         Water Quality         ✓         ✓           Dr. Kamal Raj Sharma         DWSS         Sociologist         Buisness Plan         ✓           Jiblal Basyal         NWSSTC         Account Officer         Buisness Plan         ✓

On site Training Trainer's list

5.N	Name	Affilated Organization	Field	Speciality	TOT 2017	S-TOT	Basic T
	1 Tilak Ram Shrestha	Province 3, Bhaktapur Division	Engineer	Water Distribution Facility	1		
- 8	2 Tilak Neupane	DWSS	Engineer	Water Distribution Facility	1	1	1
	3 Dilip Kumar	WSSDO, Bhaktapur	Engineer		1	1	1
- 23	4 Pradip Kumar Sah	DWSS	Engineer			1	1
- 2	5 Kashi Kant Thakur	Freelancer	Sanitation Trainer		1	1	1
- 33	6 Satya Narayan Lakhey	Province 3, Bhaktapur Division	Engineer		1		
1	7 Rameshwor Parajuli	Dhulikhel WSP	Manager	C-	1		1
3	8 Bidur Jha	Province 3, Bhaktapur Division	Engineer		1		
Ĩ.	9 Jyoti Tamang	DWSS	Engineer	C	1		1
- 3	0 Atulesh Kumar Karna	Central R.M.S.O	Engineer		1		
1	I Kamal Aryal	WSSDO, Lamjung	Engineer		1		1
- 1	2 Sujit Mahato	WSSDO, Lamjung	Engineer		1		1
1	3 Bamdev Poudel	WSSDO, Lamjung	Engineer		1	1	1
1	4 Ghanashyam Mishra	DWSS	Engineer				
1	5 Bhojendra Aryal	DWSS	Sociologist	6	1	1	1
1	6 Shiva Amatya	Lekhnath STWSSP	101007/00004010		~		
1	7 Prakash Bahadur Rawal	hamos are	Engineer	÷.	1	1	1
1	8 Binod Kumar Biswakarma	WSSDO, Bhaktapur	Engineer	· ·		1	
1	9 Sanjeev Kumar Sah	MOPID, Province 3	Engineer			1	1

# **1**<sup>st</sup>Observation Tour in Pragatinagar WUSC

Date: 2019/04/25

Time: 10:00 - 17:00

Location: Pragatinagar WUSC, Nawalpur

#### 1. Attendants:

#### **Chief Guest:**

1. Ms. Parwata Tiwari, Deputy Mayor, Devchuli Municipality

#### NWSSTC:

- 2. Mr.Kabindra Bikram Karki, Chief, NWSSTC
- 3. Mr. Kamal Adhikari, Sociologist, NWSSTC
- 4. Mr. Binod Gajurel, Engineer, NWSSTC
- 5. Mr. Dibhakar Ghimire, Engineer, DWSSM
- 6. Mr. Tilak Neupane, Engineer, Rupandehi WSSDO

#### WASMIP-II:

- 7. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 8. Mr. Yoshio Chikamatsu, Financial Advisor, WASMIP Team
- 9. Mr. Vivek Shrestha, Engineer, WASMIP Team
- 10. Mr. Deepak Subedi, Engineer, WASMIP Team
- 11. Mr. Swiss Gauchan, Engineer, WASMIP Team
- 12. Ms. Sajina Subedi, WASMIP Team

#### Model WUSC (Pragatinagar WUSC):

- 13. Mr. Khimananda Bhusal, Chairman, Pragatinagar WUSC
- 14. Mr. Indramani Bhusal, Secretary, Pragatinagar WUSC
- 15. Mr. Pumkant Basel, Manager, Pragatinagar WUSC
- 16. Mr. Dandiraj Neupane, Pragatinagar WUSC

#### Participating WUSCs

- 17. Mangadh WUSC, Morang
- 18. Karmaiya WUSC, Sarlahi
- 19. Beljhundi WUSC, Dang
- 20. Ramgram WUSC, Parasi
- 21. Chautara WUSC, Sindhupalchowk
- 22. Shankarnagar WUSC, Rupandehi
- 23. Simara WUSC, Bara
- 24. Agyauli WUSC, Nawalpur
- 25. Gauradaha WUSC, Jhapa
- 26. Rajahar WUSC, Nawalpur
- 27. Gaidakot WUSC, Nawalpur
- 28. Devdaha WUSC, Nawalpur
- 29. Manthali WUSC, Ramechaap

#### Total 13 WUSCs (83 participants) except Pragatinagar WUSC and WASMIP team.

#### 2. Objectives of tour:

1) To observe facilities of Pragatinagar WUSC as good practices: intake, sedimentation tank, roughening filter, slow sand filter, Deep Well Pump, Chlorination system, reservoir tanks etc.

- 2) To observe operation and maintenance, record keeping, water quality testing and sharing test result etc. of water supply facilities.
- 3) Interaction and discussion among DWSSM and WUSC members on issues and challenges on water supply management and counter measures.

#### 3. Presentation Session:

- 1) Remarks from Mr. Khimananda Bhusal (Chairman, Pragatinagar WUSC) presentation:
- Pragatinagar WUSC has convinced municipality to stipulate a policy to protect pipe networks during road construction. During any kind of road construction after damage of existing pipes, new pipes are to be installed as replacement.



Mr. Khimananda Bhusal (Chairman of Pragatinagar WUSC) during presentation to participants

- Pragatinagar WUSC has conducted regular monitoring and inspection of consumer's water tank to insure water quality in consumer's tap.
- > Pragatinagar WUSC has conducted regular water quality tests and displays the result in office.
- Pragatinagar WUSC has started record keeping on repair and maintenance, meter record and maintenance, rough filter maintenance, generator maintenance and pipe repair after the Basic training.
- Pragatinagar WUSC has also started to calculate production volume, consumption volume and NRW on the basis of capacity of groundwater source and gravity source and sales of water.
- Pragatinagar WUSC has started to evaluate WUSC's performance by KPIs (Key Performance Indicators) after the Basic training.
- The Chairman suggested using the internet to check the websites of government regularly to find the new project for the WUSCs. Pragatinagar WUSC has submitted a proposal and received NRs 20 million from Terai-Madhesh development programs by Federal Affair Ministry which shall be used in construction of 450 cubic meter overhead tank. WUSC found the information on internet and applied for it.
- If water supply is to be interrupted during maintenance and repair, consumers are informed by Facebook, local FM radio and so on. Consumers can register their complaints in Facebook and by phone as well.
- > Pragatinagar WUSC feels need of technical training to staffs.
- Pragatinagar WUSC has prepared their water distribution network map and displayed in their office.

- In Pragatinagar WUSC, consumers can pay their bills by internet (e-Sewa application) and billing software is adopted to issue bills.
- > Pragatinagar WUSC is planning to improve their water quality laboratory.
- > Pragatinagar WUSC has established surveillance camera in office and in WTP.
- > Pragatinagar WUSC conducts safe water related awareness program on schools and public areas.

# 2) Comments from participating WUSCs during Interaction Session:

#### a. Mangadh WUSC:

- > Pipelines in Mangadh WUSC were damaged by road constructions.
- > Mangadh WUSC has been keeping records since WASMIP-I.
- > Mangadh WUSC tries to recruit new staff from retired government staffs.

## b. Ramgram WUSC:

> Pipelines in Ramgram WUSC were damaged by road constructions.

## c. Beljhundi WUSC:

- Transmission pipeline material is cast iron (CI). So, chairperson said that it is very difficult to repair and maintain.
- Heavy vehicles of cement factory while moving around source area causes landslide and pollutes water source.
- > Pipelines destruction during road extension is a common problem.

## d. Simara WUSC:

- There are many industries around Simara WUSC. These industries have their own deep tube wells for their private use. Thus, water table in the area has dropped a lot.
- > Due to the restructuring of all the water supply entities of government body, it has affected support to the WUSC.



Simara WUSC's Treasurer Sashi Kumar Gautam

Gauradaha WUSC's Secretary Dandiraj Ghimire

#### e. Shankarnagar WUSC:

- An elevated tank under co-finance project is 90% completed as of April 2019.
- > The WUSC introduced the internet billing system.
- > There is a well-equipped water quality laboratory in Shankarnagar WUSC.

# f. Manthali WUSC:

- Manthali WUSC is located in a dry land area. There is stream water source but it supplies water only during rainy season.
- > Manthali WUSC has faced frequently problems on pump stop due to electricity fluctuation.

Manthali WUSC's main water source is groundwater with sump wells. WUSC has a very expensive tariff on new connection rate and water tariff. The new connection rate is: NRS 31,000 for private connection and NRS 45,000 for organization. The water tariff for 10 m<sup>3</sup> is NRS 600. The WUSC states that the high rate is due to high electricity cost which is around NRs 400 thousand per month.

# g. Gauradaha WUSC:

- Roles and duties of different level of water supply related government agency is unclear. Thus, Gauradaha WUSC founds difficulty in acquiring assistance and support from government bodies.
- Gauradaha WUSC needs technical assistance in developing water quality laboratory and billing system from DWSSM.
- Gauradaha WUSC thinks that collection of water tariff is not sufficient. WUSCs need some other sources (e.g. Selling of bottled water) to generate income. WUSC requested assistance from DWSSM in this subject.

# h. Karmaiya WUSC:

> Karmaiya WUSC invests its profit on a Cooperative and the interest is used to operate the WUSC.



Mr. Kabindra Bikram Karki (Chief, NWSSTC) delivering a speech.

Mr. Kabindra Bikram Karki focused WUSCs to improve their Key Performance Indicators (KPIs). He also stated that WASMIP's main focus is to improve the KPIs on all the WUSCs.

# 4. Site Visit:

- > The participants visited sedimentation tank, roughing filter, slow sand filter, chlorine dosing equipment, ground reservoirs, and deep tube well in Pragatinagar WUSC.
- Manager of Pragatinagar WUSC, Mr. Pumkant Basel accompanied the participants explaining the Operation and Maintenance procedure of each facility. He also addressed questions from participants regarding cleaning methodology of roughing filter, slow sand filter, bleaching powder amount used in chlorine dosing, pump operation etc.

#### 5. Photos



Mr. Pumkant Basel explaining O&M of slow sand filter to participants



Mr. Pumkant Basel explaining O&M of deep tube well to participants

#### Meeting with ISSAU.

Date: 2019/05/3

Time: 10:30 - 11:30

Location: DWSSM Conference room.

#### Attendants:

- 1. Mr. Kabindra Bikram Karki Chief of NWSSTC, DWSSM.
- 2. Mr. Ramdeep Shah Team Leader, ISSAU
- 3. Mr. Harka Bahadur Chhetri Financial Management Expert, ISSAU
- 4. Ms. Prativa Neupane Legal Expert, ISSAU
- 5. Mr. Ram Bikram Dahal Program Associate, ISSAU
- 6. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 7. Mr. Kozo Hayashishita Expert, WASMIP-II
- 8. Mr. Yoshio Chikamatsu Expert, WASMIP-II
- 9. Mr. Deepak Subedi National Staff, WASMIP-II

#### **Meeting conclusions:**

- 1. Mr. Ramdeep Shah (Team Leader of ISSAC) explained the schedule of training. Training on billing software and water quality management will be conducted in DWSSM conference room.
- 2. The Team Leader mentioned the followings;
  - ISSAU is conducting billing software training for 21 WUSCs in this batch. ISSAU will conduct another billing software training for 20 WUSCs in this fiscal year.
  - ISSAU will provide water quality test kit to WUSCs. Test kit can measure daily parameters.
  - Trainers are outsourced in a billing software training. Some sessions are conducted by the officers of account section in DWSSM.
  - Trainers of water quality management are outsourced. Chief of Water Quality Section of DWSSM will also be a trainer of water quality management training.
- 3. Ms. Prativa (Legal Expert) explained that periodic monitoring will be conducted through mobile application and ISSAC also visit sites.
- 4. Team Leader explained that mobile application is a new concept after a meeting with Asian Development Bank.
- 5. Ms. Prativa explained that ISSAU will develop NRW Management SOP and Governance SOP.
- 6. Mr. Harka (Financial Management Expert) explained about benchmarking process of ISSAU;
  - Data collection using questionnaire sheet.
  - Initial plan to prepare baseline data of 52 WUSCs out of 106 WUSCs.
  - Still struggling to collect information from WUSCs.
  - Expected to produce a baseline data report by the end of July, 2019.

# Water Quality Training for WUSCs by Institutional Support & Service Advisory Unit (ISSAU)

Date: 2019/05/9 Time: 10:00 – 12:00 Location: Water Quality Section Hall, DWSSM

#### Attendants:

- 1. Mr. Narayan Prasad Khanal, Chief, Water Quality Improvement and Service Regulation Section
- 2. Mr. Divakar Ghimire, Engineer, Water Quality Improvement and Service Regulation Section
- 3. Participating 27 WUSCs (27 persons)
- 4. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 5. Mr. Kozo Hayashishita, JICA Expert, WASMIP Team
- 6. Mr. Vivek Shrestha, Engineer, WASMIP Team
- 7. Mr. Deepak Subedi, Engineer, WASMIP Team
- 8. Mr. Swiss Gauchan, Engineer, WASMIP Team

ISSAU conducted the training on water quality test for WUSCs for 2 days.

Mr. Narayan Prasad Khanal, Chief of Water Quality Section lectured the followings.

## 1. Overview of Drinking Water Quality Issue in Nepal

## 2. National Drinking Water Quality Standard 2005 (NDWQS) and Water Safty Plan

This memorandum mentions key points in his lectures

- Importance and need of Water Safety plan (WSP) were explained, and by the end of 2030, 90% people shall have safe water.
- In Terai area, arsenic concentration is higher than designated value in NDWQS 2062 in groundwater. Therefore, arsenic mitigation program is set and undergoing as Terai-Madhesh Development Program in 20 different districts in Terai area.
- NGOs and INGOs (like UNICEF, WHO, JICA etc.) are also supporting water supply sectors such capacity development and new water supply systems.
- Regarding mobile water quality test van, there are 6 vans equipped with testing materials. 2 of the 6 vans are in Itahari and Dhangadi regional laboratory and 4 vans are in DWSSM which will be dispatched to other laboratories. The main purpose of the van is to conduct on-site water tests during emergency situations (like: flood, hurricane, epidemic etc.) in their respective provinces. DWSSM is also going to setup 2 more vans.
- DWSSM is going to revise and update NDWQS 2062. Currently, DWSSM has hired a consultant to revise the NDWQS 2062. The procedure of NDWQS revision is,1) the consultant will submit the draft report to DWSSM, 2) DWSSM will then send the report to MOWS, 3) The cabinet of ministries will approve the document.
- According to NDWQS, urban water supply projects have to conduct tests on all 27 parameters. While rural water supply projects have to conduct tests on 16 parameters due to factors like field necessity (no industries in rural area) and capability of WUSCs. The test frequency for each parameter was explained. (e.g. Free Residual Chlorine should be conducted daily.)
- New act which shall bind all water related utilities of government like Water supply, irrigation, hydropower etc. is under the process of development and shall be named Umbrella Act. (The new WSS act doesn't cover Irrigation, hydropower etc. and so is not called Umbrella act. This terminology 'Umbrella' is frequently used in WaSH sector because it covers water, sanitation and hygiene under it, but not other sectors using water. In fact the Water Resources Act (also under revision) takes the character of 'Umbrella').

#### Meeting with Ramechhap FWSSPO.

Date: 2019/05/13

Time: 10:00 - 11:00

Location: Ramechhap FWSSPO

#### Attendants:

- 1. Mr. Nabaraj Satyal Engineer, Ramechhap FWSSPO.
- 2. Ms. Sitaram Shah Engineer, Ramechhap FWSSPO.
- 3. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 4. Mr. Deepak Subedi National Staff , WASMIP-II
- 5. Mr. Swiss Gauchan National Staff , WASMIP-II

#### Meeting conclusions:

- 1. WASMIP team visited FWSSPO office at Ramechhap (near Manthali WUSC). There are currently 8 projects with 3 Engineers in Ramechhap FWSSPO.
- 2. Manthali WUSC is suffering from many problems in operation and maintenance of facilities. One of the problems is Manthali WUSC need to replace the deep tube well pump.
- 3. Mr. Nabaraj, Engineer in Ramechhap FWSSPO, mentioned that Manthali WUSC has informed by oral for the replacement of pump, but the request letter has not been submitted to FWSSPO from Manthali WUSC.
- 4. Mr. Nabaraj mentioned that FWSSPO cannot replace a deep tube well pump of Manthali WUSC because there is no budget for maintenance and rehabilitation works in this fiscal year.
- 5. Mr. Nabaraj mentioned that FWSSPO has a budget of NPR 1.1 million allocated for Manthali WUSC but this budget is for a new construction project in this fiscal year.
- 6. Mr. Nabaraj mentioned that there is a budget in a provincial WSSDO for maintenance and rehabilitation works to WUSCs. However, he does not know the amount of allocated budget.
- 7. Mr. Nabaraj mentioned that engineers visit to a site at least once a week. He thinks that it is useful when FWSSPO's engineers inform the WUSC's members that O&M of water supply facilities is WUSC's obligation under the construction.
- 8. FWSSPO provide O&M trainings pre and post construction. Each training is conducted only once.
- After handing over, FWSSPO does not support WUSCs regarding O & M of water supply facilities. Therefore, Mr. Nabaraj thinks that it is useful for FWSSPO Engineers when NWSSTC plans/conducts the trainings on O&M monitoring and check on WUSC's facilities. Engineers can attend the training at NWSSTC.

# Activity Report of the Second Observation and Interaction Workshop

24<sup>th</sup> May, 2019 WASMIP-II Team

- 1. Objectives
- > To observe the water supply facilities of Dhulabari WUSC as good practice.
- > To observe the operation and maintenance activities of water supply facilities such as record keeping, water quality testing and disclosure of test result, etc.
- To facilitate the interaction between DWSSM and the target WUSCs, and discuss the issues, challenges and countermeasures on water supply management.
- To recognize the gap between Dhulabari WUSC and the attended WUSCs before attending the Basic Training. (Most of the WUSCs have not attended the Basic Training.)
- > To provide the presentations for the WUSCs due to NWSSTC's request.

# 2. Schedule

The detail schedule is shown in the following tables.

Time	Events	Venue
9:00 to 10:00	Arrival and tea time	The hall prepared by Dhulabari WUSC
10:00 to 11:25	<ul><li> Opening Ceremony</li><li> Self-introduction by all the participants</li></ul>	Ditto
11:25 to 12:10	Presentation by Chairperson of Dhulabari WUSC	Ditto
12:10 to 13:20	<ul> <li>Presentation by NWSSTC;</li> <li>WASMIP II activities</li> <li>Water supply and sanitation quality improvement, water supply schemes pattern categorization, duties and responsibility of concerned person.</li> </ul>	Ditto
13:20-13:50	Lunch	Dhulabari WUSC Office
13:50:-16:30	<ul> <li>Site visit;</li> <li>Water Treatment Plant Water Source: Surface and ground water Facilities: Receiving Well, Sedimentation Tank, Roughing Filter (RF), Slow Sand Filter (SSF), Chlorination System and Reservoir, etc.</li> <li>WUSC office premises and water treatment facilities Water Source: Ground water Facilities: Deep Tube Well, Electric Panel and Generator, Aeration Tank, Pressure Filter, Elevated Tank, Billing System, etc.</li> </ul>	WTP and WUSC Office

# Table 1. Detail Schedule of the First Day (18th May, 2019)

Time	Events	Venue
16:30 to 17:30	Presentation by NWSSTC; The remaining contents of the above presentation.	The hall prepared by Dhulabari WUSC

# Table 2. Detail Schedule of the Second Day (19th May, 2019)

Time	Events	Venue
7:00 to 8:30	<ul> <li>Presentation by NWSSTC;</li> <li>Good governance of WUSC including policy and financial aspects (transparent accounts &amp; audit, balance sheet, financial performance and indicators, etc.)</li> </ul>	The hall prepared by Dhulabari WUSC
8:30 to 9:00	Breakfast	Ditto
9:00 to 10:30	<ul> <li>Presentation by NWSSTC;</li> <li>Safe water and improved sanitation</li> <li>Concept on Water Safety Plan (WSP) and its implementation procedure</li> <li>Knowledge and information management of WUSCs; Importance, problems, the past working methods and future work model based on Key Performance Indicators (KPIs) and the management model</li> <li>Service, proper operation and sustainability of water supply system</li> </ul>	Ditto
10:30 to 11:00	<ul> <li>Discussion and preparing the action plan by considering findings for improvements in technical and managerial aspects.</li> <li>Review of the program by preparing the questionnaire.</li> </ul>	Ditto
11:00 to 11:30	Closing Ceremony	Ditto

# 3. Attendances

The attendances are summarized as below;

- Host WUSC: Dhulabari WUSC
- Number of invited WUSCs: 25 WUSCs in Jhapa and Morang District
- Number of attended WUSCs: 24 WUSCs
  - \*) Garamani WUSC in Jhapa District did not attend.
- Number of attendances: 77 persons which includes Board Members and Managers.
  - \*) Two Board Members from Lakhanpur WUSC in Jhapa District (not target WUSC) were invited due to NWSSTC's request.
- NWSSTC:
  - Mr. Kabindra Bikram Karki, Chief
  - Mr. Binod Gajurel, Engineer
- WASMIP-II Team:
  - Mr. Satoru Oniki, Chief Advisor

- Mr. Kozo Hayashishita, Training Management/Curriculum Development Advisor
- Mr. Yusaku Numajiri, Water Quality and O&M of M&E Advisor
- Mr. Deepak Subedi, Engineer
- Mr. Vivek Shrestha, Engineer
- Mr. Swiss Gauchan, Engineer

# 4. Results

The second observation tour had been completed successfully at Dhulabari WUSC in accordance with the above schedule. The photos are shown in ANNEX-1 and the main points of the results are shown below;

(1) Presentation by the Chairperson of Dhulabari WUSC

The following points were highlighted during the presentation by the Chairperson of Dhulabari WUSC;

- 1) Basic Information of Dhulabari WUSC
- 2) Issues and Challenges in O&M before WASMIP-I
- 3) Learning from WASMIP-I
- Proper O&M using the SOP
- Record keeping and analysis
- Monitoring of water supply system
- Water quality management
- Complaint management
- Information disclosure

4) Good practices of proper O&M (introduced by using photos)

- Cleaning of Intake Facility
- Leakage maintenance
- Public awareness
- Training of plumbing

# 5) Learning from the Basic Training

- Importance of KPIs
- Calculating KPIs
- Presented calculation of 6 KPIs (Staff Ratio, Meter Ratio, Water Service Hour, Consumed Ratio, Operation Ratio and Tariff Collection Ratio)

# (2) Presentation by NWSSTC

Important topics related to not only the WASMIP-II activities, but also the following contents were provided by the Chief of NWSSTC to the attendances.

- Water supply and sanitation quality improvement, water supply schemes pattern categorization, duties and responsibility of concerned person.
- Good governance of WUSC including policy and financial aspects (transparent accounts & audit, balance sheet, financial performance, PDCA cycle, SWOT analysis and KPIs, etc.)
- Safe water and improved sanitation
- Concept on WSP and its implementation procedure
- Knowledge and information management of WUSCs;
   Importance, problems, the past working methods and future work model based on KPIs and the management model
- Service, proper operation and sustainability of water supply system

# (3) Site Visit

Site visit was conducted at Water Treatment Plant site and WUSC Office site separately. The attendances from WUSCs were divided into two groups and each group visited the sites alternately.

# 1) Water Treatment Plant

The Chief of NWSSTC explained about the outline, function and O&M activities of each facility including Receiving Well, Sedimentation Tank, Roughing Filter, Slow Sand Filter, Chlorination Unit, Clear Water Reservoir, Filter Sand Storage House, etc. The engineer of Dhulabari WUSC supported the above explanation and provided an additional explanation on actual O&M activities.

Regarding the O&M activities, the following points were introduced/explained as good practices.

- The record books showing daily intake / transmission water amount and water quality.
- Cleaning works, especially to remove algae at Roughing Filter.

# 2) WUSC Office Premises and Water Treatment Facilities

The Engineer of NWSSTC explained about outline and function of each facility including Deep Tube Well, Aeration Tank, Pressure Filter, Elevated Tank, Electric Panel, Generator and Billing System, etc. The operator of Dhulabari WUSC explained about actual O&M activities of the above facilities.

# (4) Review of the Program

The comments of the attendances collected by the questionnaire are summarized as follows;

# 1) Major Comments

- The time/program to share the information of each participated WUSC was not enough.
- The programs (explanation) related to water supply management and facility with ground water source are necessary for most of the participated WUSCs.
- This kind of program shall be held periodically since it is helpful and fruitful for the WUSCs.

# 2) Minor Comments

- The presentation couldn't be seen and heard clearly.
- The number of attendances shall be less than thirty (reducing attendances).
- If possible, it is better to invite local level engineers/officers to this kind of program.

# 5. Points To Be Improved

Basically, the Observation Tour shall be conducted for the attendances who had completed the Basic Training. However, this 2<sup>nd</sup> Observation Tour was planned and conducted before the Basic Training in order to observe the O&M activities of Dhulabari WUSC as a good practice and recognize the gap between Dhulabari WUSC and the attended WUSCs.

The following points shall be discussed with NWSSTC in order to improve the next Observation and Interaction Workshop.

- It is considered that the contents of presentation by NWSSTC were not matched with the objectives of Observation Tour. These presentations (sanitation quality improvement, I/S, B/S, and SWOT) shall be performed in the other training or work shop. (These are applicable for Training of Trainers)
- The time of discussion about the issues, challenges and countermeasures on water supply management including O&M activity was not enough. It shall be taken as long as possible.









# Photo-1. Opening Ceremony, 1st Day

The Second Observation Tour had been conducted from 18<sup>th</sup> May to 19<sup>th</sup> May, 2019 at Dhulabari WUSC.

#### Photo-2. Opening Ceremony, 1<sup>st</sup> Day

- < The First Day (18<sup>th</sup> May, 2019) >
- Opening ceremony
- Self-introduction by all the participants
- Presentation by Chairperson of Dhulabari WUSC
- Presentation by NWSSTC
- Site visit
- < The Second Day (19th May, 2019) >
- Presentation by NWSSTC
- Discussion, preparing the action plan
- Review of the program
- Closing ceremony

# Photo-3. Opening Ceremony, 1st Day

Total 77 persons from 24 WUSCs in Jhapa and Morang District attended the Second Observation Tour.

#### Photo-4. Presentation by the Chairperson,

#### 1<sup>st</sup> Day

- < Main Contents >
- Basic Information of Dhulabari WUSC
- Issues and Challenges in O&M before WASMIP
- Learning from WASMIP Proper O&M using the SOP, Record keeping and analysis, Monitoring of water supply system, etc.
- Good practices of proper O&M
- Learning from the Basic Training Importance of KPIs, Calculating KPIs, Presented calculation of 6 KPIs, etc.









# Photo-5. Presentation by the NWSSTC Chief,

# 1<sup>st</sup> Day

- < Main Contents >
- WASMIP II activities
- Water supply and sanitation quality improvement, water supply schemes pattern categorization, duties and responsibility of concerned person.

# Photo-6. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

- Water Source: Surface (spring) and ground water
- Facilities: Receiving Well, Sedimentation Tank, Roughing Filter, Slow Sand Filter, Chlorination Unit, Clear Water Reservoir, Filter Sand Storage House, etc.

# Photo-7. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

NWSSTC Chief explained especially about O&M activities such as keeping record and cleaning of each facility.

# Photo-8. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

Algae tends to bloom at Sedimentation Tank, RF and SSF due to strong sunlight and long retention time during dry season.









# Photo-9. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

Operators regularly clean each facility, and it is one of the good practices of Dhulabari WUSC.

# Photo-10. Site Visit at Dhulabari WUSC Office, 1<sup>st</sup> Day

The Engineer of NWSSTC explained about outline and function of each facility.

# Photo-11. Site Visit at Dhulabari WUSC Office, 1<sup>st</sup> Day

The Operator of Dhulabari WUSC explained about actual O&M activities.

#### Photo-12. Presentation by the NWSSTC

# Chief, 2<sup>nd</sup> Day

- < Main Contents >
- Good governance of WUSC
- Safe water and organized sanitation
- Concept on Water Safety Plan (WSP) and its implementation procedure
- Knowledge and information management of WUSCs
- Service, proper operation and sustainability of water supply system
- Extension of distribution network





# Photo-13. Discussion, 2<sup>nd</sup> Day

Q&A session regarding the contents of the presentation by the NWSSTC Chief was conducted.

# Photo-14. Closing Ceremony, 2<sup>nd</sup> Day

The chairperson of Urlabari WUSC explained about countermeasures for damage/destruction of distribution pipe.

# Meeting with Devchuli Municipality Mayor & Executives.

**Date:** 2019-5-31 (Friday) **Time:** 04:00 pm to 04: 45 pm Venue: Mayor's office, Devchuli Municipality building, Pragatinagar, Nawalpur District.

## Attendees:

Purna Kumar Shrestha - Mayor, Devchuli Municipality
Bishnu Bhusal - Chief Executive Officer, Devchuli Municipality
Tika Ram Basyal - Engineer, Devchuli Municipality
Khimananda Bhusal - Chairman, Pragatinagar WUSC
Rukmagad Bhusal - Vice Chairman, Pragatinagar WUSC
Indramani Bhusal - Secretary, Pragatinagar WUSC
Pum Kanta Basel - Manager, Pragatinagar WUSC
Satoru Oniki - Chief Advisor, WASMIP - II
Yusaku Numajiri – Water quality management and mechanical & electrical expert, WASMIP-II
Deepak Subedi - WASMIP-II
Swiss Gauchan - WASMIP-II

## Visiting purposes:

 To confirm supports to WUSCs from Devchuli municipality located in next Pragatinagar WUSC

#### Memo:

- 1. The Chief Executive Officer in Devchuli municipality mentioned that;
  - The workshop for 23 WUSCs covered by Devchuli Municipality will be organized within this fiscal year using municipality's budget for sharing information of WUSCs among 23 WUSCs and municipality.
  - The municipality has set high priority on water supply sector.
  - NPR 1.3 million is allocated to Pragatinagar WUSC in this fiscal year from Terai-Madhesh Project (federal level). The budget will be provided through Municipality by Terai-Madhesh Project.
  - The municipality visits the WUSCs and evaluates the situation and allocates budget based on the situation and needs of WUSCs.
  - The municipality has declared next fiscal year as the 'Year of Water' that will focus on improvement of service delivery of water supply.
  - The federal level and provincial level are more responsible for investment in the water supply sector. If the support from lead agency (DWSSM, WSSDO) are not sufficient, the municipality will fulfill the gap to enhance WUSCs.
  - One engineer is available in Municipality office but he is responsible for all related works and not only water supply.

- 2. The Mayor mentioned that;
  - Pragatinagar WUSC is an independent organization and has played a vital role in for supplying of safe water to the consumers with good management.
  - Municipality never interfere in a decision making of Pragatinagar WUSC. Municipality is always ready to provide supports for Pragatinagar WUSC as it is a leading WUSC in Devchuli area.
  - Next year is the "Year of Water" so, municipality will focus more on water supply sector and WUSCs.
  - Municipality is thankful for WASMIP team to visit Pragatinagar WUSC and providing capacity development to enhance WUSC's performance in service delivery.

Department of Water Supply and Sewerage Management (DWSSM) and Institutional Support and Service Advisory Unit (ISSAU) Workshop on Business Plan One Day Consultation Workshop on Business Plan

Organized by DWSSM and ISSAU

Date- 31 May 2019 Time- 2:45 PM to 5:45 PM

#### Attendees:

S. N	Name Designation		
1.	Sunil Kumar Das	DG	
2.	Ramkanta Duwadi	DDG	
3.	Meena Shrestha	DDG	
4.	Rajan Raj Pandey	Joint Secretary	
5.	Rajeeb Ghimire	M&E specialist	
6.	Prem Nidhi K.C	Social Development Specialist	
7.	Kabindra Bikram Karki	SDE	
8.	Bipin Kumar Thakur	SDE	
9.	Narayan Prasad Khanal	SDE	
10	Ram Chandra Devkota	Freelance	
11	Om G. Rajopadhyaya	Freelance	
12	Harka Bahadur Chhetri	ISSAC	
13	Ramdeep Sah	ISSAC	
14	Shajina Subedi	WASMIP II	
15	Hari Prasad Sharma	Coordinator,	
16	Purna Prasad Upadhyaya	SDE	
17	Ram Kumar Shrestha	ha DPD, Small Town	
18	Bidya Nath Bhattarai	DPD, Small Town	
19	Narayan Prasad Acharya	DPD, Small Town	
20	Keshav Raj Bista	Consultant ADB	
21	Bikesh Wadhanthachhya	DPD, VWSSP	
22	Madhu Timilsina	Engineer, FWSSP	
23	Pradip Kumar Mudvari	Project Chief of Financing	
24	Devendra K. Jha	Chief SWFFS	
25	Rajendra Sapkota	SDE	
26	Rajit Ojha SDE		
27	Kamal raj Shrestha	SDE	
28	Ramesh Subedi	SDE	
29	Krishna Prasad Bashyal	Administrative Assistant	
30	Muna Shrestha	ISSAC	

31	Yam Prasad Bhushal	Chief Financial officer
32	Tika Bahadur Chaudhary	SDE
33.	Chhabindra Belbase	A.Officer
34	Ratna Prasad Lamichhane	SDE
35.	Ashutosh Kumar Thakur	Engineer

#### **Objective of the workshop:**

- Consensus of DWSSM scope of work
- Formation of a committee to provide guidance and support in the following areas
  - -Statics and data
  - -Process Approval
  - -Update recent Ministerial instructions and information
- Feedback on Table of Contents and Process of the Business Plan Preparation
- > Welcome Speech by Mr. Rajit Ojha, SDE of ISSAC.
- > Introduction by all the participants.

# Presentation by Mr. Ramdeep Shah (Team Leader of ISSAC)

- Team Leader started his presentation by discussing the role to implement the policies and programs for Government to provide safe drinking water and sanitation.
- Team Leader also discussed the business plan for DWSSM. He mentioned the operational goal will be updated in every 5 years to meet the strategic goal. The sustainable development goals are targeted to achieve before 2030.
- Team Leader pointed out the scopes of DWSSM. They are as follows
  - 1) O&M survey
  - 2) Central & Provincial regulatory role
  - 3) Financial resource gathering
  - 4) Capacity building and Human Resources
  - 5) Strategic plan for Waste Management
  - 6) River and pond protection program
  - 7) Water Quality Development
- Team Leader discussed the 15 year plan approach paper. In this paper, there is the sector strategic goal of DWSSM to implement the business plan. The approaches are followings;
  - > To upgrade the water supply service from 95.8% to 99% in the end of 15-year plan.
  - > To upgrade the water quality from 20% to 40% in the end of 15-year plan.
- Team Leader mentioned that to meet the goal of SDG Status and Roadmap Report (2017) major intervention and annual investment is required for water and sanitation, and the Ministry has developed a costing report to achieve the SDG goal within 2030.
- Team Leader also mentioned another target goal of DWSSM which is to achieve the clarity on the vision of WASH sector's goal and outcomes. It will be a quick reference for the employee and stakeholders to confirm the progress of the government.

- Team Leader discussed the documents that are essential to guide WASH sector goals objective and priority. They are National Planning Commission goal and SDG.
- Team Leader mentioned that DWSSM should also take care of the institutional arrangement, human resource management policy, major programs conducted by the department and implementation of the future program to help achieve the objectives.
- Team Leader pointed out that DWSSM should analyze its Strength, Weakness, Opportunities and Threats as well.
- Team Leader stated the importance of assessment of scope, strategy and policy guidelines of DWSSM for the development of business plan. As the objectives, outcomes of DWSSM are essential to achieve the sector goal. The department can add strategy, change policies and develop action plan to achieve the Business plan.
- The Business plan contains are
  - 1) Operational Plan
  - 2) Financial Plan
  - 3) Monitoring and Evaluation
  - 4) Continuous Plan
- Team Leader highlighted the limitations for the business plan. These are 1) Legal and constitutional policy framework, 2) this document is based on secondary data.
- Team Leader mentioned some of the documents used for the development of business plan. These are as follows
  - 1) Nepal Water Supply Sanitation and Hygiene Sector Development Plan.
  - 2) O&M Survey Report
  - 3) Approach Paper (15<sup>th</sup> Year Plan of NTC)
  - 4) SDG Status and Roadmap Report (2017)
  - 5) Need Assessment Costing and Financing Strategy for SDG (NTC)
  - 6) Draft Drinking Water Supply and Sanitation
- Team Leader concluded the presentation by asking the participants to analyze the table of content prepared and give their feedback to upgrade the document.



Mr. Ramdeep Shah delivering his presentation

## Presentation by Mr. Ramkant Duwadi, DDG

- > DDG thanked ISSAU team for inviting him in this program and everyone for participating.
- DDG mentioned that the role of Federal, Provincial and Local government should be clear and should not overlap the goals of other bodies.
- DDG discussed the potential market for business plan which included -National level large projects; National and International Environment Project, Multipurpose of water bodies.
- DDG also discussed on the updated the organizational structure of DWSSM and showed composition of each department.
- DDG listed out a few points on the comprehensive planning for WASH. These are as follows:
   1) MIS
  - 2) WASH Plan GIS based
  - 3) Inclusive City Sanitation Project
  - 4) Water Use Master Plan
  - 5) Sector wise Approach/ Program
- > DDG discussed the roles of Federal, Provincial and local bodies and their respective responsibilities.
- > DDG discussed on the running projects of DWSSM. These are the followings;
  - 1) Small Town Water Supply and sanitation department of water supply and Sewerage Project
  - 2) Drinking Water and Sanitation Co- Financing Project
  - 3) Water Quality Improvement Project
  - 4) Sewerage Construction and Treatment project
  - 5) Environment Favorable Large-Scale Water Supply project
- DDG also discussed on achieving the targeted Basic Sanitation within the completion of 15year Plan.
- > DDG stated that to achieve the long-term SDG the following target must meet
  - 1) Safe and affordable drinking water
  - 2) Adequate and equitable drinking water
  - 3) Untreated Water treatment
  - 4) Water Use Efficiency
  - 5) Integrated Water Resource Management
  - 6) Reestablishment of Ecosystem
- DDG also mentioned the need of conducting SWOT analysis of the business plan and take necessary steps to achieve the goal.
- > DDG discussed to focus on urban water supply along with high quality service delivery.
- > DDG told it is necessary to develop a MIS for achieving WASH plan.
- DDG mentioned Pre construction, construction and post construction of the projects should be monitored.
- DDG mentioned to maintain the functionality and sustainability the projects should be planned and formulated properly.
- > DDG mentioned it is important to identify the hurdles and threats to minimize it.
- > DDG requested everyone to contribute from their sides for the completion of the business plan.

#### Suggestions and discussion by Participants

- Participants discussed on the roles and responsibilities of Federal, Provincial and local bodies and how to collaborate with sub national Government.
- Participants discussed the formation of a group and the formulation of business plan. The group should monitor the following tasks

Design Monitoring Framework Strategic Action Plan Evidence for Data Focus on water Quality Improvement.

- Participants discussed on the duration of the business plan and the strategic goals. Participants suggested to focus on the wastewater treatment, baseline data and onsite sanitation for achieving the end goal.
- Participants requested to differentiate between the strategic plan and business plan as they are not the same and suggested to take them both side by side for achieving the end result.
- Participants discussed on the advancement of the new projects and mentioned some points to be considered for the development of business plan. These are; Defining the service level, Water stress, Increase in service level.
- Participants mentioned that there is no specific business plan for NWSSTC. The participants also discussed if there should be separate Business plan for each section for DWSSM.
- Participants mentioned some points to be considered for the development of Business plan. These are; Vision and Mission of each Bodies, Implemented entity followed or developed, defined target and objective.
- Participants stated that it is very important to develop master plan of sanitation and sewerage projects. Participants also highlighted the importance to include the system insurance for disaster and maintenance in the business plan.
- Participants mentioned that the policies should be linked to the target. Some of the policies to be considered are; Financial Plan, Wastewater Development, Human Resource Development.

# Presentation by Mr. Om D. Rajopadhayaya, Business Plan Expert (Freelance)

- Mr. Rajopadhayaya discussed the Business Plan and explained to give importance on target, responsibility and goals while developing the document.
- Mr. Rajopadhayaya also highlighted the importance of the Sectional Master Plan.
- Mr. Rajopadhayaya told to develop a strategic plan for the fulfillment of existing vision and mission and implement them as plans and programs.
- Mr. Rajopadhayaya cleared that this business plan should not focus on financial analysis as it is a non-profit-making organization. It should only focus on the economic viability.
- Mr. Rajopadhayaya stated it is important to identify the activities and analyze the guidelines for the fulfillment of gaps to develop the business plan.

- Mr. Rajopadhayaya explained it is important to fix the time period for the end goal because within that time frame the strategies can be reviewed and updated in order to achieve the target. That is one way to achieve dynamic business plan.
- Mr. Rajopadhayaya also suggested to utilize the existing human resource or to add as per the requirement of capacity development.
- Mr. Rajopadhayaya suggested to add new strategies if it is required to achieve the target.

There was a volunteer team developed during the end of the meeting who will contribute in the development of the business plan. The team consists of 4 people and they are as follows:

- Mr. Kabindra Bikram Karki, SDE, DWSSM
- Mr. Narayan Prasad Khanal, SDE, DWSSM
- Mr. Bikesh Wadhanthachhya, DPD, VWSSP
- Mr. Rajit Ojha, SDE, ISSAC

## Closing Ceremony by Mr. Sunil Kumar Das, DG of DWSSM

- DG thanked everyone for participating in the program and contributing on the agendas.
- DG told that the suggestions will be considered, and the research and development will start soon.
- DG mentioned that the team has planned to complete the Business Plan within 3 to 4 months and implement right after.
- DG asked everyone to contribute responsibly from their departments for developing the business plan.
- DG asked the volunteer team to prepare a draft business plan based on the discussions to analyze and upgrade in the next meeting.

**Date:** 2019/06/06 and 2019/06/07 **Time:** 13:00 – 17:00 and 9:00 – 17:00 **Location:** Tulsipur, Dang

#### Attendants:

- 1. Ms. Bina Magar -Honorable Minister, Ministry of Water Supply, Government of Nepal
- 2. Ms. Komal Oli Member of National Assembly.
- 3. Ms. Shanta Chaudhary Member of Parliament.
- 4. Mr. Amar Bahadur Dangi Member of Parliament, Province No 5.
- 5. Mr. Ghanshyam Pandey Mayor, Tulsipur Sub-Metropolitan City.
- 6. Mr. Gobinda Rijal Chief District Officer, Dang.
- 7. Mr. Shalikram Poudel Chief of FWSSPO, Butwal.
- 8. Mr. Chok Prasad Dhital Senior Divisional Engineer, Ministry of Water Supply.
- 9. Mr. Gunanidhi Pokharel Chief of Dang WSSDO.
- 10. Mr. Tilak Neupane Engineer, Rupandehi WSSDO. (Technical Advisor of Dang District WUSC's Network).
- 11. Mr. Khem Raj Oli Chairman, Tulsipur WUSC and Dang WUSC's Network
- 12. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 13. Mr. Deepak Subedi, Engineer, WASMIP Team
- 14. Mr. Vivek Shrestha, Engineer, WASMIP Team
- 15. Representatives (Board Members) of 74 WUSC's.

Purpose of Visit: To observe conference of Dang district WUSCs' Network.

#### Memorandum:

#### 1. Mr. Gunanidhi Pokharel's (Chief of Dang WSSDO) presentation:

Focused on following subject matters in his presentation:

Water supply coverage in Dang district = 75%

- Total WUSCs :133
- Types of systems: Gravity, Pumping, Deep tube well with Overheat Tank
- Types of projects: New projects and ongoing projects
- Challenges and Problems:
  - Difficult to finish projects in estimated time due to limited budget
  - Insufficient water source
  - Insufficient technical manpower in WUSCs
- Solution to problems:
  - Using Madi Gwar river as source of water supply in Dang district
  - Pumping water from the Babai river to meet the water demand of Dang district
- Request to Minister:
  - Subsidy in Electricity Demand charge to reduce operational cost of WUSCs
  - Priority to allocate more budget in ongoing projects than adding new projects
  - Control of non-revenue water. Establish new section in DWSSM for Non-revenue Water.

# 2. Remarks by Honorable Minister Ms. Bina Magar:

Ms. Bina Magar mentioned that;

- This kind of program is a good platform to identify water supply related problems in Dang district and helpful for local, federal and central government to prepare plans and policies to mitigate problems.
- Presently, Government is working to meet SDGs by 2030. To meet the goals, basic data of all the WUSCs in Nepal is being collected to identify and mitigate problems in WUSCs.
- Contribution of WUSCs' board members is very important to implement programs of government and meet SDGs.
- Monitoring and evaluation of activities of Board members is also essential to ensure good management of WUSCs.
- Essential plans should be discussed, formulated, and implemented to eliminate problems in water supply sector of Dang district.

# 3. Remarks by Mr. Khem Raj Oli, Chairman, Tulsipur WUSC and Dang WUSCs Network:

- Due to excavation of limes by Cement industries in Dang valley, water supply sources are contaminated.
- Mr. Khem Raj Oli requested Minister to take necessary action to solve issues between cement industries and WSUCs.

# 4. Remarks by WUSCs representatives:

Basically, Good Practices in most WUSCs are:

- Account auditing is done every year.
- Most WUSCs have water meters in consumers' taps.
- Formation of WUSC network has increased cooperation among WUSCs.
- WUSCs were able to identify needed facilities to improve water supply.
- No case of diarrhea in Dang valley this year.

Challenges in most WUSCs are:

- Depletion of water production in source
- Scaling of pipe inside
- Pipelines cutoff due to road extension
- Old facilities
- Need of Water Treatment Plant
- Lack of trained staffs in WUSCs
- Irregular electricity supply, high electricity bills

# 5. Presentation by Mr. Tilak Neupane on Water Safety Plan:

- Mr. Tilak Neupane explained importance and method of application of Water Safety Plan.
- 6. Presentation on WASMIP-II activities and objectives by Mr. Satoru Oniki, Chief Advisor, WASMP-II:
  - Mr. Oniki explained target areas, contents of Management model, training activities, types of Water Supply facilities and Good practices of target WUSCs in WASMIP-II.

# 7. Suggestions by Mr. Tilak Neupane to WUSCs:

- Implementation of Water Safety Plan
- Regular maintenance and repair of facilities
- Regular tariff collection
- Conduct general assembly every year
- Need to make plans to add new connections
- Optimum use of old facilities
- Make a business plan for repair and construction of new facilities.
- Update and keep basic information of WUSCs.

# Meeting with ISSAU

Date: 2019/06/17 Time: 10:30 – 11:30 Location: DWSS Building, Panipokhari

# Attendants:

## ISSAU

- 1. Mr. Rajit Ojha Chief, Institutional Support and Service Advisory Unit (ISSAU), DWSSM
- 2. Mr. Ramdeep Shah Team Leader, Institutional Support and Service Advisory Consultant (ISSAC)
- 3. Mr. Harka Bahadur Chhetri Institutional Development & Financial Expert, ISSAC
- 4. Ms. Muna Shrestha Engineer, ISSAU

#### WASMIP

- 1. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 2. Mr. Yusaku Numajiri Expert, WASMIP-II
- 3. Mr. Kozo Hayashishita Expert, WASMIP-II
- 4. Mr. Deepak Subedi- WASMIP-II

WASMIP team explained activities/achievements and schedule after the 5<sup>th</sup> JPCM to ISSAU.

#### Meeting:

- 1. The ISSAU Team Leader mentioned that;
  - ISSAU will conduct billing software training for 26 WUSCs after July (next fiscal year).
  - Billing Software Supplier was selected by ISSAU based on the Nepal Accounting Standard and easy payment system (e-sewa, khalti, ime pay etc.)
  - ISSAU has facilitated to provide information about billing software supplier to WUSCs. WUSCs can decide and make a contract with a billing software supplier.
  - ISSAU plans to provide water quality test kits (Wagtech and Palintest) based on the status of availability. Some WUSCs will receive both test kits and some WUSCs already have test kits.
  - The budget for ISSAU activities is shared between Asian Development Bank (ADB) and Department of Water Supply and Sewerage Management (DWSSM).
  - ISSAU will prepare the first draft Business Plan of DWSSM by the end of August, 2019.

# Memo of Supplemental ToT

Date: 2019-6-17 (Sunday) Time: 13:00 am -15:00 pm Venue: Water Quality Conference Hall, DWSSM

## Attendants:

#### Counterpart side:

- 1. Mr. Kabindra Bikram Karki Chief, NWSSTC
- 2. Mr. Chok Prasad Dhital Senior Divisional Engineer, Mows
- 3. Mr. Narayan Prasad Khanal Chief, Water Quality Section
- 4. Mr. Diwakar Ghimire Engineer, Water Quality Section, DWSSM
- 5. Mr. Binod Prasad Gajurel -Engineer, NWSSTC, DWSSM
- 6. Mr. Chet Narayan Shrestha Engineer, NWSSTC, DWSSM
- 7. Ms. Sujata Joshi, Engineer- Engineer, Water Quality Section, DWSSM
- 8. Mr. Pradip Kumar Shah Engineer, DWSSM
- 9. Mr. Sudhir Kumar Sah -Engineer, Mows
- 10. Mr. Kamal Adhikari -Sociologist, NWSSTC, DWSSM
- 11. Mr. Bhojendra Aryal Sociologist, DWSSM
- 12. Mr. Jiblal Bashyal Account Officer, NWSSTC, DWSSM

#### WASMIP side:

- 1. Mr. Satoru Oniki Chief Advisor, WASMIP-II
- 2. Mr. Kozo Hayashishita -Expert, WASMIP-II
- 3. Mr. Yusaku Numajiri Expert, WASMIP-II
- 4. Mr. Deepak Subedi-National Staff, WASMIP-II
- 5. Mr. Swiss Gauchan National Staff, WASMIP-II
- 6. Mr. Vivek Shrestha- National Staff, WASMIP-II

#### Memo:

#### 1<sup>st</sup> Session: Practical Skills for Trainers

In this session, Mr. Kozo Hayashishita, JICA Expert explained:

(1) Methodology to identify the current situation (managerially, technically and financially) of WUSCs:

- Identifying 11 KPIs, benchmarking data (data from other WUSCs, national standard or target).
- Identifying problems after comparing KPIs with benchmarking data.
- Prioritizing problems on basis of Impacts and Feasibility.
- (2) Methodology to formulate action plan:
  - Analyzing current situation
  - Setting goals
  - Identifying necessary actions
  - Evaluation of the result
- (3) Support action from trainers to WUSCs
  - As a facilitator to achieve goal
  - Help WUSC to formulate action plan with the help of KIPs and checklists
  - Inform WUSCs in importance of record keeping.

• Get feedbacks from WUSCs.

After the presentation, participants were asked to prepare an action plan which included:

- 1) Analyzing current situation
- 2) Setting goal
- 3) Identifying necessary actions
- 4) Methodology to implement necessary actions
- 5) Identifying necessary resources, how to secure such resources and who is responsible to secure such resources.

#### 2<sup>nd</sup> Session: Supplemental ToT on a Technical Aspect

The following topics were explained and discussed in this session.

(1) Importance of keeping records related with calculation of Operation KPIs

Two operation KPIs out of eight, "Service Hours" and "Production Ratio", were selected since these indicators are related with the daily O&M records. The following points were explained to the attendances.

- The relationship between these KPIs and its required data
- Detail procedure to calculate these KPIs

#### (2) Problems/Issues among the target WUSCs

Based on the results of site survey for the target WUSCs and twice Observation and Interaction Workshops, the following five points were identified as major problems/issues among the target WUSCs.

- 1) Damage/destruction of distribution pipe by road construction work
- 2) Pipe clogging due to calcium scale
- 3) Consumer's complain about smell/taste of chlorine of treated water
- 4) Clogging of Roughing Filter (RF) and/or Slow Sand Filter (SSF) due to high turbidity of raw water
- 5) Lack of water source (intake water amount) due to increasing water demand

The 12 attendances in ToT were divided into 4 groups. Each group chose the one issue and discussed its root cause, short-term and permanent measures. After that, short presentation were conducted. The outline of each presentation is as follows;

<u>Group 1: (Kabindra Bikram Karki, Narayan Prasad Khanal, Chok Prasad Dhital)</u> Issue: 4) Clogging of Roughing Filter (RF) and/or Slow Sand Filter (SSF) due to high turbidity of raw water

- Clogging of RF and SSF is the major problem in many WUSCs.
- During rainy season, in the raw water, high turbidity sometimes disturbs the operation of WTP.
- Skilled human resources are required.

Short-term measures:

- In case of high turbidity in raw water, the turbid water shall be bypassed or drained.
- We can use different types of coagulant in rainy season to reduce the load.
- We can wash out the turbid water in the RF and scrape the sand surface of SSF.
- Training for the technicians/operators and preparation of SOPs including the proper O&M procedure are required.

Permanent measures:

- It is necessary to review the design parameters. To construct a pre-sedimentation tank and/or additional RF will improve the clogging of RF and SSF.
- Selection of filter media is a very important factor. It is necessary to instruct the operator and technician in WUSCs in selecting the proper filter media of RF & SSF.
- Cleaning/washing the filter media of RF shall be done.
- Checking the head loss and sand scraping of SSF shall be done at proper timing depending on the condition.
- RF is not a conventional unit for water treatment system.

# <u>Group 2 (Sujata Joshi, Chet Narayan Shrestha, Binod Prasad Gajurel)</u>

Issue: 3) Consumer's complain about smell/taste of chlorine of treated water

Short-term measures:

- To use the treated water after leaving it for a while.
- To add some squeeze of lemon into the treated water for immediate usage.

Permanent measures:

- To instruct the operators in calculation of the required amount of bleaching powder and its dosing.
- To instruct the operators to maintain the required contact time before distribution of the treated water.

Mr. Narayan explained that the standard value of FRC will be increased to 0.2 -0.3 mg/L in the NDWQS.

#### Group3 (Pradip Kumar Shah, Sudhir Kumar Sah, Jiblal Bashyal)

Issue: 1) Damage/destruction of distribution pipe by road construction work

Short-term measures:

- To allocate the operators for maintenance or replacement of damage pipelines.
- To store spare pipes for emergency purpose

Permanent measures:

- To make a national plan and policy in order to protect WUSCs and their properties during a road construction work.
- To hold a meeting among WUSCs, Department of Roads and Road Users Committees.
- To prepare the emergency action plan.
- To advocate the importance of water supply facilities including pipelines to the related persons and parties.

<u>Group 4 (Dibakar Ghimire, Kamal Adhikari and Bhojendra Aryal)</u> Issue: 5) Lack of water source (intake water amount) due to increasing water demand

Short-term measures:

- Protection of water source such as construction of gabion wall etc.
- To stop water leakage from water source by constructing intake facility.
- Capacity development of WUSCs.

Permanent measures:

- To formulate a business plan in order to reduce NRW.
- To seek new water source.
- To construct a recharge pit in individual or community part.
- To advocate the value of water to consumers.
- Systematic city planning.
- To seek/secure alternative source of water such as rain harvesting.

# The 3<sup>rd</sup> Observation and Interaction Workshop at Amlekhgunj, Bara.

# 1 Date: 2019-06-27 & 2019-06-28

#### Duration: 2 days

**Venue:** Elephant Village Resort, Amlekhgunj, Bara **Organizer:** National Water Supply and Sanitation Training Centre, Nagarkot

# 2 Objectives

- To observe the system flow, operation and maintenance activities of water supply facilities such as record keeping, water quality testing and disclosure of test result etc. in WUSCs.
- To facilitate the interaction between DWSSM and WUSCs, discuss the issues, challenges and countermeasures on water supply management.
- To provide presentations on existing sectoral policies on water supply sector.

## **3** Attendants:

The attendances are summarized as below;

20 WUSCs from different districts attended the program. 14 WUSCs are WASMIP-II target WUSCs. 73 participants which includes board members and managers attended the program.

## • Chief Guest and Organizers

_			
	S.N.	Name and Position	Office
	1	Mr. Nanda Kishore Banjade, Chief	FWSSPO, Hetauda, Province -3
	2	Mr. Kabindra Bikram Karki, Chief	NWSSTC
	3	Dr. Rajit Ojha, Chief	ISSAU
	4	Mr. Binod Gajurel, Engineer	NWSSTC

# • Participating WUSCs:

# Province No: 2

S.N.	WUSCs	Districtss
1	Amlekhgunj WUSC	Bara
2	Simara WUSC	Bara
3	Nijgadh WUSC	Bara
4	Dumbarwana WUSC	Bara
5	Kolhabi WUSC	Bara
6	Bharatgunj WUSC	Bara
7	Karmaiya WUSC	Sarlahi
8	Ishorpur WUSC	Sarlahi
9	Barathawa WUSC	Sarlahi
10	Haripur WUSC	Sarlahi
11	Dhalkebar WUSC	Sarlahi

# Province No: 3

S.N.	WUSCs	Districts
1	Makwanpur WUSC	Makwanpur
2	Simkhola WUSC	Bhaktapur
3	Subarnashwor WUSC	Bhaktapur
4	Katunje WUSC	Bhaktapur
5	Tinthana WUSC	Kathmandu

# Gandaki Province

1 11 1 111100	
darkhola WUSC	Lamjung
inekhola WUSC	Lamjung
oteodar WUSC	Lamjung
sisahar WUSC	Lamjung
sisalial wose	Lanijung
ι	unekhola WUSC oteodar WUSC esisahar WUSC

S.N.	Name	Designation
1	Mr, Deepak Subedi	WASMIP-II
2	Mr. Swiss Gauchan	WASMIP-II
3	Mr. Vivek Shrestha	WASMIP-II

# 4 Schedule

The detail schedule is shown in the following table;

Time	Events	Venue
09:00- 09:30	Arrive in program venue. (Tea Time)	Amlekhgunj, Bara
10:00- 11:00	<ol> <li>Opening Remarks (NWSSTC; Board member of Simara WUSC, etc.) (10 min)</li> <li>Introduction by participants (20 min)</li> <li>Presentation by Chairperson of Simara WUSC about their profile, facilities, recent activities, etc.) (20 min)</li> </ol>	Meeting Space of Amlekhgunj.
11:00- 11:45	<ul> <li>4. Presentation from NWSSTC:</li> <li>&gt; Information about WASMIP II and its' activities.</li> <li>&gt; Discussion</li> </ul>	Meeting Space of Amlekhgunj.
11:45- 12:30	<ul> <li>5. Good governance in WUSC:</li> <li>&gt; Elements of good governance in WaSH</li> <li>&gt; Policy and Financial aspects (Transparent Accounts &amp; Audits, Balance Sheet, Financial performance and indicators);</li> <li>&gt; Discussion</li> </ul>	Meeting Space of Amlekhgunj.
12:30: - 13:15	<ul> <li>6. Improved Water and Sanitation:</li> <li>Service level classification</li> <li>Safe Water and water safety plan</li> <li>Water supply and Sanitation system classification, System conformity, Duties and responsibilities of different stakeholders.</li> <li>Discussion</li> </ul>	Meeting Space of Amlekhgunj.
13:15- 14:00	Lunch	Hall
14:00 – 15:30	Site Visit         Simara WUSC and Amlekhgunj WUSC. (Ground Water and Surface Water)         • Surface water supply system with reservoir.         • Deep Boring         • Electric Panel and Generator         • Daily water Quality testing and procedure         • Record keeping and report         • Elevated Tank         • Office Management         • Billing procedure	Field study at Simara and Amlekhgunj WUSC
15:30 – 17:00	Discussion and Q&A related to site visit	Meeting Space of Amlekhgunj.

# Day 2 (28th June, 2019)

7:30- 9:00	<ul> <li>Information about WUSC's based on provided format by Board Members (5 mins for each WUSCs).</li> <li>Discussion</li> </ul>
9:00- 10:30	• Knowledge and Information management of WUSCs: Importance, problems and Past working methods and future work model (Based on KPIs and system performance improvement of WUSCs-of WASMIP TOT)
10:30- 11:15	<ul> <li>Service and water supply system's good operation and its's sustainability, inclusion of household not under service area, etc.</li> </ul>
11:15- 12:00	Concept of cost sharing/recovery, Demand creation and controlling through Tariff fixation
12:00- 13:00	• LUNCH
13:00- 14:00	Business Plan of WUSC: Basic understanding and essential components of BP
14:00- 15:00	<ul> <li>Findings for improvements in technical and managerial aspects. (Action Plan)</li> <li>Review of the program.</li> <li>Closing Remarks</li> </ul>

# Day 1 (27<sup>th</sup> June, 2019)

## 5 **Presentations (Day 1)**

## 5.1 Welcome speech by Chairman of Amlekhgunj WUSC:

- The Chairman welcomed the distinguished trainers and participants from all WUSCs.
- The Chairman expressed that the Observation and Interaction Workshop will be a benchmark for all the participated WUSCs to talk about the existing problems and discuss solutions.

# 5.2 Statement from Kabindra Bikram Karki, Chief, NWSSTC

- Mr. Kabindra welcomed all the chief guest and participants.
- Mr. Kabindra explained the necessity to conduct this workshop in Province number 2.
- Mr. Kabindra highlighted the objectives of this workshop which is to see the good practices done by Simara WUSC and conduct an interaction workshop among WUSCs.

# 5.3 Statement from Nanda Lal Banjade, Chief, FWSSPO:

Mr. Nanda Lal Banjade mentioned the following in his speech;

- Heartily welcomed all participants.
- Nepal is the only country where WUSC members are solely working voluntarily to operate and maintain the WUSC which is very uncommon in the entire world.
- The Government used to construct all the facilities and operate the system in the beginning. Later, because of high demand and a smaller number of government staffs, the concept of handing the water supply project to the Users committee came into practice.
- WUSCs also actively participated in a cost sharing approach where government and WUSC shares 50 -50 percentage of total project cost.
- It is difficult to support O&M in WUSCs with a limited technical skill and manpower but this kind of interaction workshop will help WUSCs to discuss and solve common issues.
- Water Law will be endorsed very soon and it is mentioned in water law that private organisation can also invest and operate water supply system or can operate water supply which are constructed by governments. Water supply as a business is on the process.

- In constitution safe water is a fundamental right of the citizens. WUSCs have a liability to supply safe water to consumers otherwise WUSCs can be legally punished as per the law.
- **\*** Presentation Slides on various topic by Kabindra Bikram Karki & Rajit Ojha:
- **5.4 Topic A brief Introduction presentation of Simara WUSC** Presented by the secretary of Simara WUSC.
- **5.5 Topic Brief Introduction of WASMIP** Presented by the Chief of NWSSTC.
- **5.6 Topic-Concept of WaSH and its improvisation** Presented by the Chief of NWSSTC.
- **5.7 Topic -Water Governance** Presented by the Chief of ISSAU.
- **5.8 Topic -Management of Information & Knowledge** Presented by the Chief of ISSAU.
- **5.9** Topic-Water supply and sanitation quality improvement, Water supply schemes pattern categorization, duties and responsibility of concerned ones. Presented by the Chief of NWSSTC
- 5.10 Topic- Service and water supply system's good operation and its's sustainability, inclusion of household not under service area, etc. Presented by the Chief of ISSAU
- 5.11 Topic- Concept of Water Safety plan by Chief of NWSSTC. Information and importance of Business plan for WUSC Presented by the Chief of NWSSTC.
- 5.12 Site visit:
  - 2 groups were divided from the participants. The participants from province No. 3 and 4 observed Amlekhgunj WUSC, and the WUSCs from province No. 2 were taken to the Simara WUSC.
  - WUSCs observed and discussed O&M of deep tube well pump and electric panel. NWSSTC's engineer explained the importance of pressure gauge to the participants. The importance of flowmeter and how to read the flowmeter correctly was explained to the participants.
  - Chlorine dosing unit O&M was also explained during the site visit of Simara WUSC. Proper wash out method was explained to the participants of the deep tube well for maintaining clean water in an elevated tank. O&M of elevated tank was discussed with the participants.
  - Participants observed the billing software system and the water quality test laboratory of Simara WUSC.
  - Participants observed the surface source water supply system at Amlekhgunj WUSC.

#### 6 5 mins Presentation from each WUSC:

Using local FM radio to disseminate informations and public awareness to

Taking suggestions from intellectuals,

16

17

consumers.

teachers, journalists etc.

Each participating WUSC was allowed 5 minutes to make a speech to share good practices and challenges.

S.N **Good Practices of WUSCs Challenges of WUSCs** 1 Regular meter reading Pipes destruction during road construction Accumulation of budget for pipe line extension and valves maintenance 2 Repair of pipelines as soon as possible Discount to Dalit community in tariff 3 Unable to identify chlorine dosing amount Difficult to meet demand of increasing 4 Spare parts population Generator in office High turbidity in source during rain fall 5 Frequent pipe leakage due to age 6 Regular chlorination deterioration Regular inspection and monitoring of 7 facilities Leakage in transmission line Electricity bill is high to operate deep tube 8 Water quality check well Customer complain management Scaling problem in Bharatgunj WUSC 9 10 Regular meeting of board members Need of alternative water sources Preparation of Annual audit report 11 Regular communication with consumers 12 13 Public awareness programs conducted 14 Regular water quality testing Karmaiya WUSC has established a 15 cooperative finance system

Following good practices and challenges are shared by the participating WUSCs;

## 7 Photos: Photos from the presentation Session:



Participants attending the program

Sudarshan Prasad Paudel, Chairman, Nijgadh WUSC during 5 minutes spee



Barahathawa WUSC during 5 minutes speech session.



Chief of ISSAU giving presentation.



Binod Gajurel hosting the two days program at Amlekhgunj, Bara.



Mr. Kabindra Bikram Karki during his presentation.

#### Participants in site visit





Group photo of Participants



#### 1. ToT (Training of Trainers)

- 1) Date: August 27 28 (2 days)
- 2) Trainer's Number: 27 (refer to the attendance lists: ANNEX-1)
- 3) Venue: NWSSTC (Nagarkot)
- 4) Syllabus:

Class	Day-1	Day-2
1	Module-1: Introduction	Module-5: Water Quality Management
2	Module-2: Management of Water Supply	Module-6: Water Distribution Facility,
	Facilities (1) –Outline-	House Connections and Water Meters
3	Module-3: Management of Water Supply	Module-7: Analysis of Water Supply
	Facilities (2) –Daily Inspection and	Management
	Keeping Records-	
4	Module-4: Management of Water Supply	Module-8: Planning of Water Supply
	Facilities (3) –Periodic Inspection-	Management

- 5) Training methods:
  - > Japanese Experts instructed the trainer candidates with Power Point slides with practices.
  - > Lecture contents: instruction of key points in the slides and how to implement the practices.
- 6) Lecture scene



Photo-1 Trainer Candidates



Photo-2 ToT conducted by Experts



Photo-3 Practice on Electrical Devices



Photo-4 Practice on Water Quality Test

2. Comments on ToT

ANNEX-1









#### Photo-1. Opening Ceremony, 1st Day

The Second Observation Tour had been conducted from 18<sup>th</sup> May to 19<sup>th</sup> May, 2019 at Dhulabari WUSC.

#### Photo-2. Opening Ceremony, 1<sup>st</sup> Day

- < The First Day (18<sup>th</sup> May, 2019) >
- Opening ceremony
- Self-introduction by all the participants
- Presentation by Chairperson of Dhulabari WUSC
- Presentation by NWSSTC
- Site visit
- < The Second Day (19th May, 2019) >
- Presentation by NWSSTC
- Discussion, preparing the action plan
- Review of the program
- Closing ceremony

#### Photo-3. Opening Ceremony, 1st Day

Total 77 persons from 24 WUSCs in Jhapa and Morang District attended the Second Observation Tour.

#### Photo-4. Presentation by the Chairperson,

#### 1<sup>st</sup> Day

- < Main Contents >
- Basic Information of Dhulabari WUSC
- Issues and Challenges in O&M before WASMIP
- Learning from WASMIP Proper O&M using the SOP, Record keeping and analysis, Monitoring of water supply system, etc.
- Good practices of proper O&M
- Learning from the Basic Training Importance of KPIs, Calculating KPIs, Presented calculation of 6 KPIs, etc.









## Photo-5. Presentation by the NWSSTC Chief,

## 1<sup>st</sup> Day

- < Main Contents >
- WASMIP II activities
- Water supply and sanitation quality improvement, water supply schemes pattern categorization, duties and responsibility of concerned person.

## Photo-6. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

- Water Source: Surface (spring) and ground water
- Facilities: Receiving Well, Sedimentation Tank, Roughing Filter, Slow Sand Filter, Chlorination Unit, Clear Water Reservoir, Filter Sand Storage House, etc.

## Photo-7. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

NWSSTC Chief explained especially about O&M activities such as keeping record and cleaning of each facility.

## Photo-8. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

Algae tends to bloom at Sedimentation Tank, RF and SSF due to strong sunlight and long retention time during dry season.









## Photo-9. Site Visit at WTP, Dhulabari WUSC, 1<sup>st</sup> Day

Operators regularly clean each facility, and it is one of the good practices of Dhulabari WUSC.

# Photo-10. Site Visit at Dhulabari WUSC Office, 1<sup>st</sup> Day

The Engineer of NWSSTC explained about outline and function of each facility.

# Photo-11. Site Visit at Dhulabari WUSC Office, 1<sup>st</sup> Day

The Operator of Dhulabari WUSC explained about actual O&M activities.

#### Photo-12. Presentation by the NWSSTC

#### Chief, 2<sup>nd</sup> Day

- < Main Contents >
- Good governance of WUSC
- Safe water and organized sanitation
- Concept on Water Safety Plan (WSP) and its implementation procedure
- Knowledge and information management of WUSCs
- Service, proper operation and sustainability of water supply system
- Extension of distribution network





## Photo-13. Discussion, 2<sup>nd</sup> Day

Q&A session regarding the contents of the presentation by the NWSSTC Chief was conducted.

## Photo-14. Closing Ceremony, 2<sup>nd</sup> Day

The chairperson of Urlabari WUSC explained about countermeasures for damage/destruction of distribution pipe.

## 2<sup>nd</sup> Basic Training September 2019

- **1. Date:** 24<sup>th</sup> -28<sup>th</sup> September 2019
- 2. Duration: 5 days Venue: NWSSTC, Nagarkot

## 3. Attendees:

	List of Trainer				
S N	Name	Designation	SN	Name	Designation
1	Kashi Kant Thakur	Sanitation Trainer /NGO	7	Rajit Ojha	ISSAU/ Chief
2	Aashutosh Kumar Thakur	DWSSM/Engineer	8	Rishi Prasad Rimal	DWSSM /Engineer
3	Sujit Mahato	FWSSMP Biratnagar/Engineer	9	Chet Narayan Shrestha	DWSSM /Engineer
4	Bidur Jha	DWSSM/ Engineer	10	Bedraj Regmi	DWSSM /Engineer
5	Sunam Thapa	FWSSMP Pokhara/ Engineer	11	Mahesh Neupane	FWSSMO Jumla /Engineer
6	Maheshi Mahato	FWSSMP Lamjung/ Engineer	12	Kabindra Bikram Karki	NWSSTC/ Chief

## List of Participants

SN	Name	Designation	SN	Name	Designation
1	Rajan Adhikari	Manager, Bhotewodar WUSC	18	Kamal Prasad Acharya	Secretary, Madhumalla WUSC
2	Chandra Bahadur Gurung	Manager, Lasunekhola WUSC	19	Ashesh Baral	Manager, Pichara WUSC
3	Kedar Prasad Gautam	Manager, Nijgadh WUSC	20	Pushpa Lata Shrestha	Manager, Karsiya WUSC
4	Sashi Kumar Gautam	Manager, Simara WUSC	21	Kedar Poudyal	Manager, Bayerban WUSC
5	Lalita Banset	Manager, Dumarbana WUSC	22	Kiran Kumar Rajbanshi	Manager, Katahari WUSC
6	Min Bahadur Moktan	Manager, Dhalkebar WUSC	23	Bhola Nath Neupane	Manager, Jhorahat WUSC
7	Bidur Subedi	Manager,Hariyon WUSC	24	Dukhi Mahato	Chairman, Barhathwa WUSC
8	Raju Budhathoki	Manager, Urlabari WUSC	25	Thakan Mahato	Technician, Barhathwa WUSC
9	Seban Singh Karki	Manager, Pathari Sanischare WUSC	26	Surendra Gole	Secretary, Ishworpur WUSC
10	Rajendra Kumar Khadka	Manager, Shivasatachhi WUSC	27	Suk Bahadur Kusuwar	Technician, Ishworpur WUSC

11	Chandra Kumar Pokharel	Manager, Topgachhi I WUSC	28	Dhal Bikram Karki	Secretary, Ramechhap WUSC
12	Dilip Bhandari	Manager, Topgachhi II WUSC	29	Gyan Bahadur Ale	Technician, Ramechhap WUSC
13	Mitra lal Pokharel	Manager, Topgachhi III WUSC	30	Surya Bahadur Shrestha	Board Member, Pakarwas Scheme I WUSC
14	Bishal Adhikari	Manager, Chandragadhi I WUSC	31	Chhatra Bahadur Karki	Technician, Pakarwas Scheme I WUSC
15	Nar Bahadur Magar	Manager, Chandragadhi II WUSC	32	Shankar Bahadur Poudel	Board Member, Pakarwas Scheme II WUSC
16	Bishnu Bahadur Adhikari	Manager, Besisahar WUSC	33	Nawaraj Shrestha	Technician, Pakarwas Scheme II WUSC
17	Shib Raj Dahal	Manager, Rangeli WUSC	34	Bal Bahadur Tamang	Secretary, Juropani WUSC
			35	Deepak Wosti	Technician, Juropani WUSC

## 4. Discussions and Q & A

Day 1

Module 1 (Introduction)

Trainer- Bedraj Regmi and Mahesh Neupane

- A participant confirmed that water resource regulations are applicable for ground water or surface water source.
  - Mr. Bedraj Regmi answered the regulations are for surface water source as well as ground water source.
- A participant asked the population criteria for a construction of project by federal and provincial levels.
  - Mr. Bedraj Regmi informed participants that population criteria are described in the Red Book published by the Ministry.
- Simara WUSC mentioned that there are many industries around the Simara WUSC. Industries have their own deep well pump and they draw much water from the underground. This has affected the water table of Simara WUSC and they cannot get enough water from the ground.
  - Mr. Kabindra Bikram Karki suggested to discuss the problem with a related industry and other stakeholders in an annual general assemble meeting of WUSC.

Module 2 (Water Supply Facilities) Trainer- Sunam Thapa

- The participants questioned what kind of sand is applicable for a slow sand filter.
  - Ms. Sunam explained that there is a specific sand found in Bara district, and Hetauda which are used to purify water. The sample of the sand shall be tested for checking sizes in a laboratory before using it in the slow sand filter.
- The participant asked that unavailability of reagents is a problem in a daily water quality test.
  - Ms. Sunam suggested the participants to contact to the supplier or the nearest Regional Laboratory for the reagents.

## Day 2

Module 3 (Daily O&M) Trainer- Sujit Mahato

- Beshisahar WUSC mentioned that there is a problem of E-coli in the Roughing Filter but not in Intake.
  - Mr. Sujit recommended the WUSC to timely clean the facilities. He also advised to check the turbidity of all facilities daily. He also suggested WUSCs to conduct water quality tests in the laboratory if they don't have the equipment.

Trainer - Ashutosh Kumar Thakur

- Urlabari WUSC mentioned that they have used 2 set of aeration and pressure filter tanks to provide clean water because of high content of iron in raw water. Urlabari WUSC suggested other WUSC to do the same process if the content of iron is very high in their raw water.
- Mr. Ashutosh discussed on the lifeline of pipes with the participants and he advised to use stainless steel pipe for a longer lifetime.
- A participant requested that if there were videos for operation and maintenance of the water supply facilities in YouTube, it will be easier to watch it and follow the instructions.

Trainer- Rishi Prasad Rimal

- Mr. Rishi discussed on the garbage, oil or other abnormalities shall be checked at an intake facility.
- In case that oil or other abnormalities related to water quality is found at the intake site, proper measure shall be described in the SOP.
- He also briefly explained the daily inspection points in groundwater source, well pump, aeration facility, pressure filter, chlorination facility and clear water reservoir.
- Mr. Rajit requested all the WUSC to measure the chlorine at an end point of tap. It should be 0.1 0.2 mg/L.

Module 4 (Periodical O&M) Trainer- Chet Narayan Shrestha

- The participant mentioned that leakage in a distribution pipe network is the main problem in WUSCs. Many WUSCs also have the problem of landslide in intake sites.
  - Mr. Chetnarayan explained that regular monitoring and repair works can help to decrease number of leakages. Conservation of intake area is necessary to prevent landslides.
- Mr. Chetnarayan explained crack or leakage on the body of civil structure shall be checked yearly.
- He discussed the procedures of using an electrical equipment. He conducted a practice session of electrical equipment.

Day 3

Review Speech by Participants:

- 1) Raju Budathoki (Urlabari WUSC)
  - Mr. Raju mentioned that session on electrical equipment in a deep tube well is very important for WUSCs with groundwater source. He mentioned that more explanatory training on electrical equipment will be helpful for WUSCs for proper O&M of electrical facilities (pump, motor and so on).
- 2) Dhal Bikram Karki (Ramechhap WUSC)
  - Mr. Dhal mentioned the importance of O&M, and explained all WUSCs need to follow the SOP for sound operation and management of water supply facilities.

Module 5 (Water Quality Management)

- Trainer- Bidur Jha
  - A participant questioned if all 27 parameters in Nepali water quality standard can be measured by the ENPHO test kit.
    - ➢ Mr. Bidur explained 10 parameters can be measured by the ENPHO test kit but the remaining parameters can be measured in a laboratory.
  - Mr. Bidur also gave the contact information of ENPHO to the participants and suggested them to replace the reagents before it expires.
  - He also suggested to check the turbidity daily.
  - A participant suggested that every district should have a laboratory as it will be easier and accessible for WUSCs.
  - A participant requested if the mobile laboratory van can conduct monthly test.

- Mr. Bidur answered that the mobile laboratory van is for emergency situation but it can conduct the test when it is near to your WUSC.
- A participant asked the method to know if the water source is poisoned/polluted.
  - Mr. Bidur confirmed to close the supply immediately and use the fish method or conduct the water test to ensure the water is not hazardous. If fish or other aquatic animals are dead, it is suggested to conduct a water quality test of a water source.

Module 6 (Distribution pipeline and Water Meter) Trainer – Ashutosh Kumar Thakur

- Mr. Kabindra explained if there are no fire hydrants it is suggested to find the points where the hydrants can be installed.
- Mr. Kabindra explained the measures for water safety in a few slides where he discussed the following topics-Sodis Method, Clean Water, Water Safety Plan Formation, Water Management for Water Safety Plan and Assurance for Water.

Trainer – Bidur Jha

- Mr. Rajit ojha surveyed the WUSC who calculate the loss of water and the result was very low.
- Mr. Bidur explained that documentation is important to calculate leakage volume/ratio.
- Mr. Bidur requested all WUSCs to measure the chlorine concentration at the end point (tap).

Day 4

Module 7 (Analysis of Water Supply Management) Trainer- Kashi Kant Thakur

- Participant asked if they have to calculate the depreciation about a land in a financial statement or not.
  - > Mr. Kashi Kant explained that there is no depreciation on land, it is an assets.
- Mr. Kashikant explained the KPI one by one and helped the participants to calculate the KPI of their own WUSC. He also explained the KPI and its importance.
- Mr. Rajit discussed the importance of measurement of pH, Turbidity, FRC and Color.

Module 8 (Planning of Water Supply Management) Trainer- Rajit Ojha

- A participant asked if the WUSC can operate a mineral water company for business. Mr. Rajit explained that there is a different government institution to register a company for business.
- Mr. Rajit discussed the SWOT analysis of each WUSC.
- Mr. Rajit explained the importance of the Social Security Fund and requested the Participants to add it in their WUSC if possible.
- Mr. Rajit recommended to specify the business plan in an annual report.
- He advised to identify the priority problems of WUSC and describe how the problems will be solved.

#### Re: Coordination meeting among WASH sectors organized by WaterAid and JICA Nepal

Date: 2019/11/06 Time: 15:00 – 17:00 Location: Shangri-La Hotel, Lazimpat

#### Attendants:

- 1. Ms. Rubica Shrestha, World Bank
- 2. Ms. Bidhya Pokhrel, JICA Nepal
- 3. Mr. Kedar Prasad Paneru, Joint Secretary, Ministry of Foreign Affairs and General Administration (MoFAGA)
- 4. Mr. Laxman Bahadur Bam, Chairman, Palata Rural Municipality, Kalikot district
- 5. Mr. Kabir Das Rajbhandari, Water Aid
- 6. Representatives from ADB, World Bank

#### WASMIP side:

- 1. Mr. Satoru Oniki, Chief Advisor, WASMIP Team
- 2. Mr. Deepak Subedi, Engineer, WASMIP Team
- 3. Mr. Vivek shrestha, Engineer, WASMIP Team

#### Ms. Rubica Shrestha's Opening Remarks:

The main objective of the meeting is to establish coordination among various national and international non-government agencies working on WASH sector in Nepal.

#### Mr. Kedar Prasad Paneru's presentation:

Presentation on "Current Direction and Issues after Federal Restructure".

#### Mr. Laxman Bahadur Bam's Presentation:

> Presentation on "Opportunities and Challenges at Local Level in Changed Federal Context".

#### Mr. Kabir Das Rajbhandari's Presentation:

Presentation on "Progress, Issues and Challenges on Beacon Project of Water Aid Implementing on WASH sector of Lahan Municipality".

#### Ms. Bidhya Pokhrel and Mr. Satoru Oniki's Presentation:

Presentation on "Issues and Challenges on Sustainability of the Water Supply System Particularly from Functionality Aspect of Semi Urban WUSCs".

#### **Question and Answer Session:**

- 1) During implementing WASMIP II, were there any challenges in communication with other WASH agencies?
- There are definitely some challenges in communication between different stakeholders (MoWS, DWSSM/NWSSTC, FWSSMP, MoPID, WSSDO, WUSC etc) of WASMIP-II.
- 2) What is the role of MOFAGA and other government entities? (For Mr. Kedar Prasad Paneru)
- > The main role of MOFAGA is to act as a bridge connecting local bodies and FWSSPOs.
- 3) What are the main challenges in Palata Rural Municipality after restructuring? (For Mr.Laxman Bahadur Bam)
- > The main issue is lack of sufficient budget and skilled manpower.

Ms. Bidhya made the closing remarks by giving thanks to all the participants for attending and sharing their experiences.

## Interaction on World Toilet Day 2019

#### Theme: "Leaving No One Behind"

Date: 17<sup>th</sup> November 2019, Sunday Venue: Yellow Pagoda Hotel Time: 2:00 PM - 5:00 PM

#### Attendees:

- 1) Er. Ram Deep Shah; Chairman, SWS
- 2) Er. Sunil Kumar Das; DG, DWSSM
- 3) Mr. Ganesh Shah; Former Minister & Advisor, SWS
- 4) Mr. Suman Prasad Sharma; Former Secretary of GoN & Advisor, SWS
- 5) Er. Hari Prasad Sharma, CEO, SWS
- 6) Ms. Rima Lamichhane; Green Building Technologies Pvt.Ltd. (A Venture of CMS Group)
- 7) Dr. Chirinjibi Bhattarai; Nepal Water Conservation Foundation.
- 8) Mr. Harka Bahadur Chhetri; Finance Director, SWS
- 9) Ar. Girija Dahal; Director, SWS
- 10) Er. Krishna Ram Yendo; Member, SWS
- 11) Shajina Subedi, WASMIP II

Approximately 28 members attended the program.

#### Purpose of the program:

- This program was organized to celebrate the World Toilet Day, 2019 and also to spread awareness on sanitation and hygiene.
- To review the achievements so far and discuss on how to move forward to achieve Total Sanitation.

#### **Inauguration Program**

- a) Ramdeep Sah; Chairman, Smart Water Solutions (SWS)
  - Mr. Ramdeep Sah welcomed and thanked everyone for attending the program on World Toilet Day 2019.
  - Thanked everyone for making ODF (Open Defecation Free) declaration possible.
  - Highlighted the problem of Fecal Sludge management and public toilet management and confirmed SWS has planned to conduct different programs to improve the condition of public toilet.
  - Nepal Tourism Board (Nepal Tourism Board is a national tourism organization of Nepal established in 1998 by an Act of Parliament in the form of partnership between the Government of Nepal and private sector tourism industry to develop and market Nepal as an attractive tourist destination.) has actively been improving the condition of public toilets for Visit Nepal Year 2020.

## b) Suman Kumar Sharma; Former Secretary of Government of Nepal and Advisor, SWS

- Mr. Suman welcomed everyone to the program and shared his first experience of celebrating World Toilet Day, 2001.
- Highlighted that sanitation is not consider as one of the important issues in Nepal.
- People only consider infrastructure development as progress whereas sanitation is the most important part of development as well.
- Requested everyone to contribute as much as they can to uplift the status of sanitation in Nepal.

## c) Ganesh Shah; Former Minister and Advisor, SWS

- Mr. Ganesh highlighted post ODF activities that should be done to achieve total sanitation.
- Establishing public toilet with proper management, accessibility, operation and maintenance is important.
- Proper fecal management (dumping and treatment of waste) is important for sanitation.
- Sanitation is one of the basic needs of every human being and the media should help WASH sector by spreading awareness and importance of sanitation in public level.

## d) Sunil Kumar Das, DG, DWSSM

- Mr. Sunil thanked everyone for attending the World Toilet Day, 2019.
- Highlighted the ODF movement and expressed his gratefulness for everyone's contribution towards it.
- Confirmed Ministry of Water Supply has approved Total Sanitation Directives and indicators as next step of ODF.
- The Federal Government has greater role in managing sanitation in their respective Municipalities.
- The challenges are ensuring clean drinking water and environmental sanitation.
- He confirmed the ultimate goal is total sanitation.

## 2) Technical Presentations

## a) Overview of Fecal Sludge Management Er. Hari Prasad Sharma, Smart WASH Solutions

- Mr. Hari confirmed one of the major problems of Nepal was Open defecation (due to lack of toilets and awareness) which led to various diseases and even death in most cases.
- All the concerning bodies (All the members of the National Sanitation and Hygiene Steering Committee (NSHSC), and regional, district, VDC and municipal level WASH coordination committees, local government bodies, schools, child clubs, users committees, any other agencies that have roles in water and sanitation promotion ) implemented the Sanitation Masterplan (as of Ashwin 12, 2068 BS) to eliminate the open defecation problems.

- He confirmed there are 3 wastewater treatment plant under construction to manage the Wastewater. The treatment plan are as follows Sallaghari (Province 3, Bhaktapur) – 14 MLD Dhobighat (Province 3, Lalitpur) – 37 MLD Guweshwori (Province 3, Kathmandu) – 32 MLD
- There are currently 2 Fecal sludge management located at Kakkarvitta and Charali (Province 1, Jhapa District). Because of the population difference the per household costs are Rs 3122 in Kakarvitta and Rs. 2281 in Charali.
- Smart Wash Solution has conducted a Fecal Sludge Management training in all 7 provinces.
- Smart Water Solution (SWS) is considered as the next step after ODF.
- b) Anaerobic Sewerage Treatment Plant and its use in Domestic and Public Areas; Rima Lamichhane, Green Building Technologies Pvt.Ltd. (A venture of CMS Group)
- Ms. Rima thanked everyone for participating in the program.
- She gave a brief description of her organization.
- It is involved in construction management material solution for Wastewater treatment.
- Green Building technologies represents various international brands exclusively for Nepal.
- She supplies eco friendly products for design, implementation and maintenance support for construction company.
- Wastewater pollution is one of the major causes for various diseases for children under 5 yrs.
- The survey mentions that a child dies in every 20 seconds due to wastewater treatment borne diseases in Nepal.
- Sewerage treatment is very important to decrease pollution and removing contamination. It not only affects health and hampers the ecosystem but adversely affects the agriculture and tourism as well.
- It is necessary to prepare a standard norm to manage sludges from public area.

## c) Public Toilets Use and Management related Issues Dr. Chiranjibi Bhattarai, Nepal Water Conservation Foundation

- Mr. Chiranjibi highlighted the problems of urban and rural settlement regarding sanitation.
- In urban areas there are less toilet, not adequate water supply facilities and unacceptable sanitation whereas in the rural areas there is no awareness of hygiene no public toilets and scarcity of water.
- There are safety issues for women as the doors don't lock at public toilets and there is lack of sanitation for menstrual hygiene.
- There are very few toilets that are suitable for disabled person.
- Sanitation is the fundamental right.
- Proper laws should be made to manage public toilets and sanitation in each municipalities and wards.
- As sanitation is directly proportional to health, taking care of sanitation is important to manage and eliminate diseases for long run.

#### **Ending Ceremony**

• Mr. Suman Prasad Sharma thanked all the presenters for giving an insight on the status of sanitation and public toilet in Nepal. He also thanked all the participants for making this program successful and ended the ceremony.

#### Agenda of the program:

**Program Schedule** 

Interaction On World Toilet Day 2019 Theme: "Leaving No One Behind"

Date: 17<sup>th</sup> November 2019, Sunday Venue: Yellow Pagoda Hotel, Kantipath, Kathmandu

Time	Programs
1:00-2:00 PM	Registration
2:00-3:00 PM	Inauguration Program
	Chair - Er. Ram Deep Sah; Chairman, SWS
	Chief Guest - Er. Sunil Kumar Das; DG, DWSSM
	Special Guest - Mr. Ganesh Shah; Former Minister & Advisor, Sw5
	Special Guest - Mr. Suman Prasad Sharm; Former Secretary of GoN &
	Advisor, SWS Guest - Er. Hari Prasad Sharma; CEO, SWS
	Welcome & Brief Introduction of Program - Er. Ram Deep Sah;
	Chairman, SWS
	Opening Remarks - Representative of Nepatop Organization - Mr. Suman Prasad Sharma; Advisor, SWS
	<ul> <li>Mr. Suman Frasad Shanna, Advisor, SWS</li> <li>Mr.Ganesh Shah; Advisor, SWS</li> </ul>
	<ul> <li>Er. Sunil Kumar Das; DG, DWSSM</li> </ul>
	- Er. Sunii Kuinai Das, DO, D Woom
	Opening session closed by Chairman, SWS
3:00-3:30 PM	High Tea
	Technical Presentations
3:30-3:45 PM	<ol> <li>Overview of Faecal Sludge Management in Nepal: Issues and Challenges; Er. Hari Prasad Sharma, Smart WASH Solutions</li> </ol>
3:45-4:00 PM	2 Anaerobic Sewerage Treatment Plant and its use in Domestic and
5.45-4.001111	Public Areas; Rima Lamichhane, Green Building Technologies
	Pvt. Ltd. (A venture of CMS Group)
4:00-4:15 PM	3. Water Saving & Hygiene Apparatus; Nepatop Organization
4:15-4:30 PM	4. Public Toilets Use & Management related Issues (Provisions and
	enforcement); Dr. Chiranjibi Bhattarai, Nepal Water Conservation Foundation
4:30-4:50 PM	Floor discussion
4:50-5:00 PM	Summary of Technical Sessions - Mr. Suman Prasad Sharma
4:50-5:00 PW	Closing Remarks – Mr. Ganesh Shah Vote of thanks – Er. Hari Prasad Sharma

## USAID WASH-FIN (FINANCE) Nepal Dissemination Workshop: Business Plan of Surkhet Valley Water Supply User's Organization (SVWSUO)

## Date: January 21 & 22,2020 Venue: Hotel Yak and Yeti, Kathmandu

#### Agenda:

Time	AGENDA Session	Presenter	
Day I:	Session		
8:15 -9:00	Arrival and Registration		
9:00-9:20	Introductions and workshop objectives	Mr. Ganga D. Nepal, USAID WASH-FIN	
9:20 - 9:30	Welcome Remarks and Nepal WASH Country Perspective	Mr. Anil Bhadra Khanal, DDG, DWSSM	
9:30-9:45	Short overview of implication of business plan	Mr. Kulmani Devkota, SVWUSO Chairperson	
9:45-10:00	The need for and importance of business planning for water utilities	Mr. Sunil Kumar Das, DG, DWSSM	
10:00-10:15	Business planning and the Journey to Self- Reliance: USAID Perspective	Ms. Carrie Rasmussen, USAID, Director of Health Office	
10:15-10:25	Inauguration of the Workshop	Mr. Madhav Belbase, Secretary, MoWSS,	
10:25-10:30	Workshop agenda and setting the stage for the workshop	Mr. Nepal D. Ganga, USAID WASH-FIN, Nepal	
10:30-11:00		eak and a second second second second	
11:00-11:15	WASH-FIN Perspective: What is the rationale for business planning for a water utility?	Mr. Steve Sena, USAID WASH-FIN, DCOP	
11:15-11:45	Using "Effective Utility Management" to lay a foundation for business planning	Mr. Jay Madigan, USAID WASH-FIN	
11:45-12:15	The business plan process: an example from Surkhet	Mr. KC. Deepak and Mr. Anil Shrestha, USAID WASH-FIN	
12:15-12:30	Questions and	Discussion	
12:30-13.30	Lunch B	Ireak	
13:30-14:00	Moving from priority projects to capital investment projects for the business plan	Mr. Jay Madigan, USAID WASH-FIN	
14:00-14:30	Cost and Tariff Study of Surkhet: The purpose and process of assessing and setting cost reflective tariff	Mr. Anil Shrestha, USAID WASH-FIN	
14:30-14:45	Incorporating Climate Change considerations into a water utility business plan	Mr. Steve Sena, USAID WASH-FIN	
4:45-15:00	Watershed impact on water utilities in the region	Mr. Bhaskar Bhattarai, USAID PAANI	
5:00-15:15	Tea Break		
5:15-15:45	Plenary discussion on the value of business planning	Dr. Barbara Kazimbaya-Senkwe, USAID WASH-FIN	
5:45-16:00	Conclusion of Day 1: Setting the Stage for Day 2	Mr. Nepal D. Ganga, USAID WASH-FIN	
6:00-16:15	Closing Remarks on DWSSM plans for business planning in Nepal	Mr. Anil Bhadra Khanal, DDG, DWSSM	

Time	Session	Presenter
Day 2		
8:15-9:00	Arrival and Registration	
9:00 - 9:15	Recap of Day I	Mr. KC. Deepak, USAID WASH-FIN
9:15 - 9:30	Importance of WASH business plans for Nepal	Mr. Anil Bhadra Khanal, DWSSM
9:30-10:00	An overview of business plan initiatives in Nepal from ISSAU	Mr. Ramdeep Sah, ISSAU Unit, DWSSM
10:00-10:30	Business planning experience from other WASH-FIN countries: Kenya	Dr. Barbara Kazimbaya-Senkwe, USAID WASH-FIN
10:30-11:00	Tea Bro	eak
11:00 - 11:30	Business planning experience from other WASH-FIN countries: Philippines	Mr. Nathanial Santos, USAID WASH- FIN
11:30-12:00	Plenary discussion of business plan experience from other countries	Mr. Steve Sena, USAID WASH-FIN
12:00-12:30	Moving from business planning to implementation	Mr. Jay Madigan, USAID WASH-FIN
12:30-13:00	Business Planning sustains service delivery in water utilities	Mr. Jay Madigan, USAID WASH-FIN
13:00 -13:30	Conclusion and way forward	Representative from - MOWS/ DWSSM and USAID WASH-FIN

Participants – Around 35 people from different organization.

## Day 1

## Master of Ceremonies - Mr. Ganga D. Nepal, USAID WASH- FINANCE

Program Inaugurated by

- Mr. Madhav Belabase, Secretary, MoWS

## Welcome Remarks Mr. Anil Bhadra Khanal, DDG, DWSSM

Mr. Anil mentioned the WASH SDG goals and described the current situation of WASH sector in Nepal.

- The need of proper operation and maintenance for long-term use of water supply facilities.
- WASMIP-II (JICA project) is providing continuously support to 68 WUSC in semi urban towns for the capacity development.
- ISSAU is working on developing the draft guideline for a Business Plan and has drafted a sample business plan of Ratnanagar WUSC.

## Short Overview of Implication of Business plan Mr. Kulmani Devkota, SVWSUO, Chairperson

Mr. Devkota thanked everyone for attending the program.

- Confirmed that Surkhet Valley WSUO serves 200,000 people and the population is rapidly growing after Surkhet was announced the capital of Karnali Province (Province 6)
- Currently the percentage of NRW in Surkhet is approximately 40%.
- One of the major technical challenge of Surkhet Valley is replacement of 42 km pipeline.
- Currently Surkhet Valley produces 13,300 m<sup>3</sup>/d of water per second
- The consumer has requested additional 5,000 new connections.
- There are around 8,000 household connections in Surkhet Valley.
- Climate change and rapid population growth are the main reason for depletion of source of water in Surkhet Valley.
- Consumers can pay their bills through online transactions like Esewa (e-payment).
- Surkhet Valley has planned to revise and increase the water tariff by 23% in near future.

## **Short Remarks**

## Mr. Marcos Senior Advisor, USAID

Mr. Marcos mentioned that

- The role of WASH- FINANCE is to reduce financial gaps to achieve universal access to water and sanitation services.
- Strategic support is required to provide WASH services throughout the country and it can be achieved through the business plan.
- The vision and capability of Surkhet Valley Water Supply User's Organization is appreciable.
- In sector development, cost recovery plan is the most effective, reliable and sustainable source for achieving the target and requested the Government of Nepal to reinforce it in WASH sector.

## Remarks

## Mr. Madhav Belbase, Secretary, MoWS

Mr. Madhav pointed out that the water supply service is not adequate even in Kathmandu.

- WASH projects are under construction and Provincial Governments are looking after their respective provincial projects.
- The population of Surkhet is rapidly increasing after it was declared the capital of province 6 (Karnali Province)
- NRW and pipe replacement are the main problems faced by Surkhet Valley WSUO.

- Appreciated the efforts of USAID WASH-FINANCE and mentioned every municipality should have a business plan.
- There are altogether 753 municipalities in Nepal and all of them should coordinate and prepare the WASH Plan.
- Mr. Madhav mentioned that Province 1 Government has released a MOU (Memorandum of Understanding) to jointly prepare the WASH Plan. The roles of the municipalities will be defined in that MOU.

# The need for and importance of Business Planning for Water Utilities Mr. Sunil Kumar Das

Mr. Sunil Kumar Das thanked USAID WASH-FINANCE Project for helping Surket Valley WSUO for providing better service to the consumer.

- This dissemination workshop is useful for the analysis and improvement of a business plan for future reference.
- Confirmed DWSSM is currently supporting ISSAU for preparation of a business plan.

## WASH- FINANCE perspective: What is the rationale for business planning for Water Utility? Mr. Steve Sena

Mr. Steve addressed the objective of WASH-FIN is to reduce the financial gaps for water and sanitation to meet Sustainable Development Goals (SDGs)

- One of the main challenge of business plans is the ability to access the funds.
- One of the benefits of preparing a business plan is that it motivates effective management.

## The Business plan Process Mr. Deepak KC

Mr. Deepak highlighted the status of Surkhet Valley WSUO.

They are as follows;

- Total Population served by Surkhet 180,000 people
- Total tap connection 18,147 household connection
- 10 Schemes on 13 Wards of Birendranagar municipality
- Water Production 154 Liter Per Second
- Treatment Capacity (90 Liter per Second x3 Units) = (23,300m<sup>3</sup>/d)
- Valve Chamber 601
- Bulk Meter 29
- Reservoir (20 400 m<sup>3</sup>) 29
- Treatment Plants 3

- Transmission Main 68km
- Distribution Network 323km

## Using Effective Utility Management to lay a foundation for business planning Mr. Jay Madigan

Mr. Jay highlighted some of the major steps taken by Surkhet valley WSUO.

They are as follows;

- Teamwork
- Effective Utility Management
- Functional SWOT Analysis
- Identify Business Plans and Capital Projects
- Achieving International Accounting Standard

## Business Plan Overview of Surkhet Valley WSUO Mr. Anil Shrestha

Mr. Anil gave a brief description of the Surkhet Valley Water Supply User's Committee. They are as follows-

- Introduced the overview of preparing a business plan.
  - 1. Baseline Survey
  - 2. Business plan project goals and activities
  - 3. Financial Projection
  - 4. Potential Risk and Mitigating Measures
- Highlighted the Goals and Activities of Surkhet Valley WSUO
  - 1. Construct urgently needed infrastructures
  - 2. Enhance organization wide skills
  - 3. Accelerate household connection
  - 4. Develop and asset management capability
  - 5. Reduce Non Revenue Water (NRW)
  - 6. Prepare complaint tracking system and conduct consumer survey.

## Cost and Tariff Study of Surkhet

Mr. Anil Shrestha

Mr. Anil described the tariff structure of Surkhet Valley WSUO.

• Surkhet Valley uses increasing block tariff (the rate per unit of water increases as the volume of consumption increases) and minimum charge tariff system.

- The process of identifying tariff structure in Surkhet Valley is as follows
  - 1. Policy Option
  - 2. Revenue Requirement
  - 3. Structure of Tariff
  - 4. Impact on customer
  - 5. Recommend the structure to the Board of Members.
  - 6. Analysis of Revenue requirement
  - 7. Implement

## Climate Change Considerations into Water Utility Business Plan Mr. Steve Sena

Mr. Steve highlighted some of the issues in Surkhet Valley WSUO of Climate Change.

- According to the SWOT Analysis, the problems are diminished water sources, accelerated asset degradation and revenue losses.
- Landslide and flood are also some problems faced by Surkhet Valley WSUO during the rainy season.
- During this type of problems, the organization should coordinate with Government bodies (Local, Provincial and Federal Government) for help.
- One of the solution is to raise awareness to the consumer about the risks of climate change.
- Climate proofing business plan (plans to minimizing the risk of disaster) is recommended to tackle such problems in Surkhet Valley.

## Watershed Impact on Water Utilities in the region Mr. Bhaskar Bhattarai

Mr. Bhaskar highlighted that Paani project is associated with Aquatic Bio Diversity Conservation.

- Helping in Preparing policy, laws for the aquatic bio diversity.
- There are 79 watershed areas in 3 rivers.
- The main objective of Paani project is to protect the sources of water and biodiversity.

## Day 2

## An overview of business plan initiatives in Nepal from ISSAU

#### Mr. Ramdeep Shah / Harka Chhetri

Mr. Ramdeep Shah confirmed that ISSAU has been developing the draft Business Plan for Ratnanagar WUSC as a Pilot. (There are plans for developing the business plans for three pilot WUSCs)

- 6 Business plans are currently drafted under DWSSM.
   (4 from Town Development Fund (TDF), 1 ISSAU and 1 Surkhet)
- ISSAU is using 11 KPIs for SWOT analysis and has developed the work plans (O&M, Service area expansion, Water tariff, NRW reduction, Collection of revenues, Maintaining Quality, Management of human resources, Revise and update, Cash Flow, Asset management, Investments and Monitoring of financial resources)
- The work plans are listed according to the urgency and priority.
- Future goal is 26,000 additional household connections in next 5 years.
- Plans to decrease NRW to 12% in next 5 years. ( The current NRW was not mentioned )

## Q & A

• Do the staffs of Surkhet have necessary skills and knowledge to update the business plan every year?

Mr. Deepak KC -There are 63 staffs in Surkhet WSUO. Staffs of Surkhet Valley WSUO were given 40 hour training in their respective field. The staffs of Surkhet WSUO developed the business plan and strategic plan. They have necessary knowledge and skills to update the plans yearly.

- How difficult is it to keep the record of 29 bulk meters in Surkhet WSUO? How frequently is the data collected in Surkhet?
   Mr. Balram Daily record keeping is done in an interval of 24 hours. The data is analyzed monthly. The data gives the total amount of production and consumption water. The problem is identifying the leakage to reduce the NRW.
- Why the government has not motivated to prepare Business Plans?
   Dr. Barbara As the water supply service in Kenya is Municipal owned it took time to behave like a private company.
   Kenya has developed economically in past few years and because of same reason, they do not accept grants.

The system is evolving and Kenya will soon make it mandatory to have a Business Plan.

Mr. Nathanial – Philippines is currently encouraging to develop business plans. The municipalities are also encouraged to have regulatory business plans.

ISSAU – Business plan is in initial state here in WUSCs so the guidelines are being developed.

With various trainings and technical support the business plans will be included in every WUSC in near future.

• After preparation and dissemination of business plan does ISSAU and WASH- FIN project conduct yearly gap analysis to monitor performance of WUSC to achieve the goals set by the business plan?

Mr. Anil Bhadra Khanal – Recommended ISSAU to include the gap analysis in their guideline.

#### • Remarks

Mr. Ramdeep Shah, ISSAU Revise the business plan yearly Include SMART water management and NRW in the business plan. Focus on providing qualitative water by improving infrastructure. Provide frequent trainings and conduct survey.

Mr. Anil Bhadra Khanal, DWSSMIntroduce new technology for sustainable operationFocus on reducing NRWInclude the provision to conduct gap analysis of business plan every year.Update business plan and strategic plan yearly.

## Department of Water Supply and Sewerage Management Institutional Support and Service Advisory Unite

## Presentation of Draft Business Plan of NWSSTC (January 30, 2020)

## Agenda:

Dep	artment of Water Supply and Sewerage Management
	Institutional Support and Service Advisory Unite
	Presentation of Draft Business Plan of NWSSTC
Time	
1Pm-1.30	Registration of Participants and Lunch
1.30- 1.40	Welcome and programme highlight - ISSAU Chief
1.40-2.10	Presentation On NWSSTC Scenario– NWSSTC Chief
2.10-2.50	Presentation On NWSSTC Business Plan- Team Leader, ISSAC
2.50-3.40	Floor discussion and feedback by participants
3.40-4.00	Feedback from : Former Secretory- Mr. Suman Sharma : Representation from Ministry of Water Supply
4.00-4.30	Final Remarks and Vote of Thanks – DG Mr. Sunil Das
4.00-4.30	Tea, Coffee / Cookies

## Attendees: 20 from DWSSM, ISSAU

Opening remarks Mr. Harka Bahadur Chhetri Institutional and Financial Expert, ISSAC

## Mr. Tika Chaudhary Chief of ISSAC

Mr. Tika Chaudhary mentioned that this program is organized to improve the business plan of NWSSTC with the discussion and feedbacks gathered today.

## Kabindra Bikram Karki Chief, NWSSTC

Mr. Kabindra gave a short presentation on NWSSTC.

- He highlighted the need to improve the infrastructures such as buildings, training halls, meeting rooms, library, accommodation, lab, etc. of NWSSTC.
- Mentioned the problem of access road for commuting to NWSSTC.
- NWSSTC has planned to establish WaSH museum to preserve important information regarding WaSH sector.
- NWSSTC is installing a chlorine dosing system in the premises which will be used to demonstrate and give an idea to the trainees about how the purification actually works.

## Ramdeep Shah Chief, ISSAC

Mr. Ramdeep Shah gave a short presentation on the proposed business plan of NWSSTC prepared by ISSAU. He showed the Mandate of the business plan. The mandate to be followed by NWSSTC are as follows.

NWSSTC has to;

- Perform the activities related to technology development, promotion of innovation and capacity development.
- Prepare master plan, manual, online courses and training information management systems required for regional training activities.
- Conduct study related to identification of various trainings, and effectiveness of trainings.
- Develop a capacity of Provincial, federal and local human resources.
- Work as regional sectoral knowledge and learning hub.
- Standard settings training and institutions.

He mentioned the objective of preparing a Business Plan of NWSSTC. They are as follows;

- Provide training of trainers on various topics.
- Update training materials.
- Expand and promote research.
- Standardization of trainings and the training institution (NWSSTC)
- Reformation of NWSSTC facilities and Improve resources (trainers, training materials )

He confirmed the table of content of the proposed business plan of NWSSTC. They are as follows;

- Background
- Existing legal and institutional framework
- Methodology
- SWOT analysis of NWSSTC

- Vision, Mission, Mandates
- Goals, Objectives and Scope of work
- Strategies and Action Plan
- Organizational structure
- Financial and human resources plan
- Monitoring and evaluation

#### Feedback

- Invite college students to observe the WaSH trainings and programs so that they can learn the current situation of the WaSH sector.
- Consider NWSSTC to upscale as WaSH academy as it provides all type of WaSH trainings.
- It is required to conduct trainings of Water Quality more as it is high in demand.
- Outsourcing national /international experts can be one of the counter measures for the lack of trainers.
- It is important to provide the training to the appropriate person so that the objective of the training can be achieved after the training.
- It is necessary to update financial norms of NWSSTC (raise allowance and other items related to training).
- It is recommended to prepare an official website for NWSSTC to display the trainings that they can provide. E- Library is also a good option as all training materials will be uploaded so that anybody can use it anytime and anywhere.
- Update and prepare a roster of trainings and trainers.
- Currently the Budget allocated for NWSSTC is NPR 9 million and ISSAU mentioned the required budget of NPR 60 million each year in the draft business plan of NWSSTC. Realistic budget needs to be allocated.
- The vision, mission, goals and objectives need to be simplified.

## Closing Mr. Anil Bhadra Khanal DDG, DWSSM

- Mr. Anil encouraged conducting trainings to develop the capacity of three levels of Government (Federal, Provincial and Local)
- The main goal is capacity development according to the need of assessment.

END

## **NWASH-MIS Training**

Day 1

Date – August 2, 2021 Venue – <u>Online Zoom Meeting</u> Time – 10:30 AM – 4:00 PM

#### Small Town WUSCs

- 1. Parsa Water User and Sanitation Committee, Chitwan
- 2. Ratnanagar Water User and Sanitation Committee, Chitwan
- 3. Sukhet Water User and Sanitation Committee, Sukhet
- 4. Attaria Water User and Sanitation Committee, Kailali
- 5. Badayaghat Water User and Sanitation Committee, Nawalparasi
- 6. Birtamod Drinking Water User and Sanitation Committee, ,Jhapa
- 7. Kankadbhitta Water User and Sanitation Committee, Jhapa
- 8. Mukundpur Water User and Sanitation Committee, Nawalpur
- 9. Damak Water User and Sanitation Committee, Jhapa
- 10. Indrapur Water User and Sanitation Committee, Morang
- 11. Adarshanagar (Bhasin) Water User and Sanitation Committee, Kanchanpur
- 12. Musikot Water User and Sanitation Committee, Rukum
- 13. Tikapur Water User and Sanitation Committee, Kailali
- 14. Charali Water User and Sanitation Committee, Jhapa
- 15. Lalbandi Water User and Sanitation Committee, Salaihi
- 16. Chhap Nahala (Dumre) Water User and Sanitation Committee, Tanahu
- 17. Amargadhi Water User and Sanitation Committee, Dadeldhura

#### WASMIP WUSCs

- 1. Chanragadhi Water User and Sanitation Committee, Jhapa
- 2. Dhulabari Water User and Sanitation Committee, Jhapa
- 3. Gauradaha Water User and Sanitation Committee, Jhapa
- 4. Urlabari Water User and Sanitation Committee, Morang
- 5. Mangarh Water User and Sanitation Committee, Morang
- 6. Bharatpur Water User and Sanitation Committee, Dang
- 7. Narayanpur Water User and Sanitation Committee, Dang
- 8. Sainamina Water User and Sanitation Committee, Rupandehi
- 9. Shankarnagar Water User and Sanitation Committee, Rupandehi
- 10. Nijgadh Water User and Sanitation Committee, Bara
- 11. Kamaiya Water User and Sanitation Committee, Salaihi
- 12. Gaindakot Water User and Sanitation Committee, Nawalpur
- 13. Pragatinagar Water User and Sanitation Committee, Nawalpur
- 14. Manthali Water User and Sanitation Committee, Ramechhap

#### **Reasons for selecting WASMIP WUSCs:**

- These 14 WUSC are the biggest and smooth running WUSCs.
- These WUSCs have been actively participating in many trainings and are implementing the skills provided to them.
- They were chosen based on their capability as a WUSC and their team.
- They are capable to use the NWaSH application smoothly and help provide the necessary database.

#### Participants

- 1. Anil Bhadra Khanal , Deputy Director General , DWSSM
- 2. Phatta Chhetri , ISSAU
- 3. Aditi Neupane, ISSAU
- 4. Deepak Puri, ISSAU
- 5. Harka Chhetri, ISSAU
- 6. Rajit Ojha, ISSAU
- 7. Rajeeb Ghimire, ISSAU
- 8. Sudharshan Koirala
- 9. Adarshanagar WUSC
- 10. Bharatpur WUSC
- 11. Charali WUSC
- 12. Damak WUSC
- 13. Devi Bastola
- 14. Dhulabari WUSC
- 15. Er. Balram Tiwari
- 16. Hari Shrestha, Mangadh WUSC
- 17. Hari Prasad Paneru, Mukundapur
- 18. Hemanta Kandel
- 19. Jagdish Subedi, Ramechhap
- 20. Kakkadvitta WUSC
- 21. Khimlal Devkota, Surkhet
- 22. Krishna Basnet Ramechhap
- 23. Kulanand Paneru
- 24. Kulmani Devkota
- 25. Mahendra KC
- 26. Mahendra KC rukum west
- 27. Musikot WUSC
- 28. Nawraj Neupane , Anandawan WUSC
- 29. Pankaj Acharya
- 30. Parsa WUSC
- 31. Prabin pant , Surkhet

- 32. Purna banadur Thapa
- 33. Raju Budathoki Urlabari WUSC
- 34. Ram Ghimire Mangadh WUSC
- 35. Sainamaina WUSC
- 36. Sheshkanta Devkota, Mukundapur WUSC
- 37. Shovakar Rimal
- 38. Raj Ghimire
- 39. Smriti Subedi
- 40. Sundarharaicha WUSC
- 41. Thalbir Bhatta, Amargadhi WUSC
- 42. Dambar BK, Tikapur WUSC
- 43. Tikadutta Joshi , Attariya
- 44. Bhairav Rawal, Tikaour WUSc
- 45. Manoj Bakhrel, Lalbandi WUSC
- 46. Lekhbahadur Karki, Ramechhap WUSc
- 47. Khagda Raj Giri
- 48. Unknown
- 49. Unknown
- 50. Unknown
- 51. Unknown
- 52. Unknown
- 53. Shajina Subedi, WASMIP II

#### **Opening Remarks**

Mr. Rajit Ojha Chief of ISSAU

- He described that NWASH was generated by Ministry of Water Supply and Sanitation almost 4 years ago for the purpose of monitoring and evaluation. Now, the Ministry is dedicated to provide this application throughout the country.
- He confirmed the WUSCs that participate today are selected on the basis of their capability to use the application and provide the necessary data base. They are referred to as ISSAU Phase 1 WUSCs.
- He emphasized that the main function of this application is collecting the data to reach the Sustainable Development Goals and to make the overall system of WUSC easier and precise by putting all the data in one place.
- He further clarified that the data will be accessible to WUSCs, Local Governments, Provincial Governments and Federal Governments. Those Governments are leaning towards using the data as a reference allocating the budget for water sector in the future.

Mr. Anil Bhadra Khanal

- Mr. Anil welcomed everyone to the training and thanked all the WUSC for participation.
- He stated that the data used in the application would be useful for the actual representation of status of the WUSCs. It will also be used to identify the changes made in the WUSCs.
- The main purpose is to achieve the Sustainable Development Goals and identification of the works that needs to be done to achieve the SDGs.
- He concluded he expects the NWASH application will be used throughout the country in the coming years.

#### Session 1 – Phatta Bahadur Chhetri (M& E Specialist, ISSAU) Topic – NWASH M&E System

- Mr Phatta Chettri started his presentation by defining the NWASH application. The application is currently available for android device version 4.03 and above.
- There are three main applications for data collection inside the NWASH Application NWASH Inventory – For collection of data of source and taps NWASH Project Sustainability- For description of WUSCs NWASH Map – For data application
- He stated that there are 3 indicators for measuring the Functionality of the schemes and 13 for measuring the Sustainability of the schemes.
- The application contains questionnaires that helps in determining the functionality of the scheme. There tap should meet following criteria for determination functionality of the scheme 1. Tap should have sufficient water quantity.
  - 2. Tap should have acceptable water quality and
  - 3. Tap should have adequate supply hours.
- The consumer can register their complaint through the application and it will be addressed by the controller of the application.
- The data collected and uploaded in the internet will be accessible all around the world.
- There are various aspects of the scheme that can be checked via the application. They are as follows:
  - The facilities that are not operating.
  - The tap that provides water and the taps that are currently not providing.
  - The projects that are under maintenance and in which phase of maintenance.

The steps that needs to be taken to resolve the problems in the scheme.

The estimated amount required.

• Some steps to consider while collecting the WASH Data

#### With Internet

All the applications should be installed, login, Sync the data, turn on location, Select district and municipality. After putting all the required information, the application will show the name and code of all WUSCs in that area.

#### Without Internet

The field data can also be collected without internet.

The data should be saved and then uploaded to the dashboard once internet is available.

• All the details on WUSC can be viewed from the website **nwash.mowss.gov.np** after uploading the data. It also includes the map of the WUSC that consists detailed information on source, structure with pictures, private and public taps etc.

• The functionality can be also viewed form the website. The WUSCs scoring 60 and below are under threat whereas WUSCs securing 70 and above is considered good and well-functioning.

# Discussion:

- The main discussion was held on the process of viewing the projects from the website. Mr. Phatta explained the process in details with examples.
- There was incurring problem of registering the user access created by the host. Many of the participants were unable to register correctly in the first attempt.
- Some of the participants could not use the application even with latest version android. The host then clarified that the application has some problem while functioning in Xiaomi Model phones. Many people with that brand of phone have the same problem.

# Second Session

# Ms Aditi Neupane

# **Topic – Detailed Process of using the application**

- Ms Aditi started her presentation by guiding the participants to download the NWASH application and installing the map, inventory and project sustainability application.
- The process:

All three applications can be accessed by same email and password. Do not forget to sync before adding data to the application.

Log in by using correct email and password

Fill the correct location and details

Prepare and sketch a layout plan of the WUSC with the name and number of the surveyor Click Record feature and fill the questionnaire from the dialogue box one by one. Attach the pictures. Track the coordinates and record in the application. Export the project and save.

All the files that are saved in the application are stored in My Files of the phone.

 The detailed video can be found on You tube ( ctrl + click to follow the link ) BEGINNERS GUIDE: NWASH APPLICATIONS INSTALLATION <u>https://www.youtube.com/watch?v=f2TiMGh\_kFl</u> NWASH INVENTORY: APPLICATION TUTORIAL PART 1 <u>https://www.youtube.com/watch?v=RFuO\_I0xZnk</u> NWASH PROJECT SUSTAINABILITY: APPLICATION TUTORIAL PART-2 <u>https://www.youtube.com/watch?v=Ckc-NZ4aVtl</u>

# Discussion:

- One of the main concern of the participants is that the entire team specially the technical team should be trained in order to use the application for data collection and updating.
- It takes time to collect and update the data on the application.
- The participants had minor issues while updating the data which was cleared by Ms. Neupane.

Note - The participants were assigned 1 week to collect and update the data of their respective WUSCs in the application and join the training on August 9, 2021 at 11am for the detailed discussion. They were instructed to reach out to ISSAU for any assistance they required during the data collection and updating.

# Day 2

Date – August 9, 2021 Venue – Online Zoom Meeting Time – 11.00 AM – 4:00 PM

# Participants

- 1. Phatta Chhetri , ISSAU
- 2. Aditi Neupane, ISSAU
- 3. Harka Chhetri , ISSAU
- 4. Rajeeb Ghimire, ISSAU
- 5. Damak WUSC
- 6. Devi Bastola
- 7. Dhulabari WUSC
- 8. Er. Krishna Thapa, Damak WUSC
- 9. Hari Prasad Paneru, Mukhundapur
- 10. Jagdish Subedi, Ramechhap
- 11. Krishna Basnet, Ramechhap
- 12. Lalita DC, Narayanpur WUSC
- 13. Madhusudhan Niraula, Charali WUSC
- 14. Bishal Limbu, Charali WUSc
- 15. Prabin Paudel, Charali WUSC
- 16. Krishna, Musikot WUSC
- 17. Purna Bahadur Thapa, Bardaghat WUSC
- 18. Raju Budathoki, Urlabari WUSC
- 19. Ram Ghimire, Mangadh
- 20. Ramesh Rajchami
- 21. Ravindra Raj Ghimire
- 22. Thakur Prasad Bakhrel
- 23. Thalbir Bhatta, Amaggadhi Wusc
- 24. Tikapur WUSC
- 25. Utsab Nepal
- 26. Parsa Small Town WUSC
- 27. Bhairav Rawal, Tikapur
- 28. Lekhbahadur Karki, Ramechhap
- 29. Unknown

30. Shajina Subedi , WASMIP II

# Opening Remarks Harka Chhetri, ISSAU

- Mr. Harka Chhetri welcomed all the participants to the final day of the training.
- He stated that ISSAU was actively engaged in helping the participants with various problems during the data collection period.
- He informed that <u>out of 36 WUSCs only 6WUSCs were able to submit the report</u> <u>correctly</u>.
- Many WUSCs from Jhapa were unable to collect data due to lockdown while others were still confused about the operation of the application.
- He requested the M&E expert team of Mr. Phatta Chettri and Ms. Aditi Neupane to briefly conduct the last session again. He also requested the participants to coordinate and discuss their problems with the experts.

# Session 1

# Mr. Phatta Bahadur Chhetri – ISSAU

- Mr. Phatta briefly conducted the **NWASH M&E System** session again, so that the participants could revise the topics and steps correctly.
- He clarified that if there is pipeline assessment in the WUSCs it can be recorded through condition assessment application or also through the inventory application.
- He stated that the data should be updated often as it is recorded for every fiscal year.

# Session 2

# Ms. Aditi Neupane – ISSAU

- Ms. Aditi conducted the second session by discussing with the participants and solving the problems faced by them.
- She explained to Mangadh WUSC that single data from online meter reading can also be added to the inventory but suggested to add the data in bulk as it will be easier and less time consuming.
- Xiomi Mobile phones were still unable to launch the application. She assured to look into it and the team will be fixing the problem soon.
- Tikapur WUSC was having trouble locating the pipeline in the map. She explained the process briefly and also showed the steps to identify the coordinates if google could not identify their current location.
- She also clarified how the pipes are to be categorized in the inventory report according to their type and diameter.

- Lalbandi WUSC was facing trouble in sketching and mapping. She explained the process from the beginning with examples.
- Damak WUSC had questions on how to identify the layout of the pipeline. She further explained the process and described them the process of using the maps for clear view.
- Damak and Ramechhap WUSC had saved the file in wrong format and were unable to submit the report. Ms. Aditi requested everyone to always extract the final file to sums format.
- Many WUSCs had confusion on mapping and pipeline layout.
- Ms. Aditi revised all the important content and stated that everyone needs practice to use all the function of the application correctly.
- Many participants were lenient towards physical training as it would be more effective and helpful but due to current situation, it is not possible.
- Apart from that other common problems were unable to login and filling data on the inventory application.

# **Closing Ceremony**

# Mr. Harka Chhteri – ISSAU

- Mr. Harka thanked the participants for a good start toward the NWASH application training.
- He advised the participants to actively use the application for practice and data storage.
- He also requested everyone to update their progress.

# Mr. Rajeeb Ghimire – ISSAU

- Mr. Rajeeb highlighted that it is a very important training and thanked all the participants for their active involvement.
- He stated that it is useful for data collection and storage which can be viewed from anywhere around the world.
- The outcome of this project would be a very remarkable impression towards the donor countries as they will be able to analyze the progress and growth of each WUSC over the years.
- Use of this application will also benefit the WUSCs as it will help them in management.
- He also implied how the analysis of budget and planning will be so efficient through this application

# Appendix 2.56.5

# Memorandums of Discussion With WSSDO

# Re: WASMIP model explanation to the Division chief WSSDO, Morang and feedback

Date: 2016/7/4 Time: 16:00 – 17:00 Location: WSSDO, Morang Attendants:

# ttendants:

- 1. Mr. Rajendra Prasad Neupane, Division Chief, WSSDO, Morang
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team

- The Chief does not know about WASMIP model because he was transferred to Morang WSSDO 8 months ago.
- He feels the need of appropriate training to understand and instruct other WUSCs about WASMIP.
- An annual conference is going to be held in Kathmandu in this July. Mr. Rajiv Ghimire of DWSS has agreed to provide information to the WASMIP Team to the attendants in the conference.
- The chief feels the model's difficulty in implementation due to personnel change in authority every 2 year.
- > WSSDO has been providing support to their respective WUSC as per their request.
- Many big projects are undergoing in other WUSCs like Urlabari and Indrapur. Most common problems in other WUSCs are related to backwash system. The WUSCs are also requesting construction of vertical treatment plant instead of horizontal one.
- The chief feels Mangadh WUSC is capable of handling their own problem and WSSDO has been supporting them in difficulties like flood.
- The WSSDO chief agrees to go through the WASMIP model book to understand its guidelines and help WASMIP team.

# Re: WASMIP model explanation to the engineer WSSDO, Jhapa and feedback

Date: 2016/7/5 Time: 16:20 – 17:30 Location: WSSDO Jhapa Attendants:

- 1. Mr. Pramod Kumar Dutta, Engineer, WSSDO Jhapa
- 2. Mr. Maya Nath Poudel, Accountant, WSSDO Jhapa
- 3. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 4. Mr. Mikita Amano, Team Member, WASMIP Team
- 5. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 6. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 7. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- > Attendants from WSSDO Jhapa doesnot know about WASMIP model.
- > No training are conducted by inviting WUSCs due to budge limitations.
- > DDC normally gives training to WUSCs on sanitation.
- > ERMSO conducts district committee meeting once a year.
- > There is a good relationship and communication between ERMSO and WSSDO Jhapa.

# Re: WASMIP model explanation to the Division chief WSSDO, Jhapa and feedback

Date: 2016/7/7 Time: 14:10 – 15:00 Location: WSSDO, Jhapa Attendants:

- 1. Mr. Chok Prasad Dhital, Division Chief, WSSDO Jhapa
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Mikita Amano, Team Member, WASMIP Team
- 4. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 5. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 6. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- > The Chief attended all workshops and seminars of WASMIP during his stay in ERMSO, Dhankuta.
- > No training, seminars and workshop is carried out by WSSDO for WUSCs due to lack of budget.
- WSSDO attend general assembly and review the annual report of the WUSCs. The WSSDO gives comments on business planning.
- > The WSSDO supports WUSCs in finance monitoring and new constructions.
- > No special meeting is arranged between WUSCs and WSSDO.
- The new recruits and transferred members are provided a written job description by the WSSDO chief to help and train them to understand the current situations and work procedure.
- > There is constant communication with DDC regarding policy and planning.
- The chief feels the Gaurada WUSC has less manpower and due to formation of new committee member; they are unable to perform as per WASMIP rules. The chairman of the Gaurada WUSC knows about the WASMIP model.

# Re: WASMIP model explanation to the Division chief WSSDO, Sindhupalchok and feedback

Date: 2016/7/10 Time: 09:15 – 10:30 Location: WSSDO, Sindhupalchok Attendants:

- 1. Mr. Him Nath Lamichane, Acting Division Chief, WSSDO
- 2. Mr. Sambhu Raj Khanal, Engineer, WSSDO
- 3. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 4. Mr. Mikita Amano, Team Member, WASMIP Team
- 5. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 6. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 7. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- > The attendants from WSSDO doesnot know about WASMIP model.
- According to the chief, there are more than 1000 WUSCs in sindhupalchowk. Most of the WUSCs are not functioning because of damage caused by recent earthquake and landslides. Many WUSCs were formed under the support of different NGOs and INGOs. So, there is no actual data about functioning WUSCs in the area. But, Barabise, Melamchi and Chautara WUSCs are the large WUSCs with highest service areas.
- > Presently, no monitoring and evaluation plan is developed to support the WUSCs.
- Due to the lack of manpower, the WSSDO is only able to mobilize their manpower in new projects. There are 4 engineers including the chief himself. The technical staff had to monitor about 58 projects last year and are planning to add 46 new projects in coming fiscal year. They are unable to inspect and monitor old projects.
- > The recent earthquake and landslides has damaged WTP and intake of Chautara WUSC.
- > WSSDO now is trying to discover a new source for the WUSCs.
- The WSSDO representative defines the transmission and distribution system of the local WUSCs to be simple system. So, he feels the implementation of WASMIP model specially SOPs to the system will be much easier.
- The representative of WSSDO attends the General Assembly organized by WUSCs if requested. The WUSC doesnot submit annual report to the WSSDO as there is no such obligations.
- The WSSDO receives complains from WUSCs in a form of written applications. About 1200 applications are received every year. Most of the applications are about request for new constructions and new facilities. There are very few applications about operation and maintenance issues.
- The WSSDO feels need of manpower due to current work load. They also feel the need of a mechanical engineer as they are going to introduce pumps in their facilities.
- The members in WSSDO are eligible to transfer after 2 years. But normally staffs transfer after 4 years of service. The WSSDO works as per the job description fixed by DWSS. When the old staff dispatches to other WSSDO, he informs the new transfer about the current projects. The chief may also inform the new transfer about his duties. The information is normally relayed orally.
- The WSSDO sends the staffs to training in NWSSTC facility if informed by RMSO or DWSS.
- There are computers and internet facility in WSSDO. The computers are used in estimation, billing, letters writing etc. Communication with DWSS and RMSO is done normally by telephone.
- The WSSDO shares there progress report with RMSO every year via email. The WSSDO also shares the annual report orally with DWSS and RMSO during a regional conference organized every year normally in August. Besides annual report a report on progress of ongoing constructions is prepared every 4 months.

# Re: WASMIP model explanation to the Division chief WSSDO, Lamjung and feedback

Date: 2016/7/12 Time: 04:15 – 17:00 Location: WSSDO, Lamjung Attendants:

- 1. Mr. Jagannath Das, Division Chief, WSSDO
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Mikita Amano, Team Member, WASMIP Team
- 4. Mr. Yoshio Chikamatsu, Team Member, WASMIP Team
- 5. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 6. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- The besishahar WUSC collects and distributes water from 5 intake sources. The sources are mainly river and spring. A deep tube well is also constructed by the besishahar WUSC to meet the increasing water demand.
- The beshishahar WUSC has a rough sand filter, slow sand filter, plain sedimentation and a chlorination unit in their water treatment facility. The treated water is collected at two reservoirs with capacity of 300 m<sup>3</sup> each. The water is then distributed by gravity flow system.
- Due to the insufficiency of quantity of distributed water, WSSDO lamjung is planning to add a new source and a new treatment plant. The new project is a co-financing project between Nepal government and WSSDO lamjung. Presently, preparation of a detailed project report on the new project is undergoing after the end of survey conducted a week ago. The new water source is estimated to have a discharge of 20 liter per sec.
- > The division chief of WSSDO lamjung knows about the WASMIP model.
- > There are 5 computers with internet access in WSSDO lamjung.
- > The WSSDO lamjung communicates with WUSCs by telephone or by visiting them.
- The chief from WSSDO lamjung attends very few general meetings organized by WUSCs. There are about 714 WUSCs in Lamjung.
- The WSSDO lamjung organizes mainly 2 types of training programs for WUSCs. The pre-construction training is carried out to train the trainee into a productive construction craft laborer. Whereas Post construction training is carried out to train trainee in effective operation and maintenance of the facility.
- Other trainings are conducted by DWSS. Two weeks back DWSS instructed WSSDO lamjung to select 9 WUSCs from which 9 representatives were selected by the WUSC themselves. The selected people were given management training in NWSSTC. Besides, every year DWSS also provides Village maintenance worker training (VMWT) which mostly focusses on enabling participants to repair, maintain, operate small-scale community base gravity fed water supply scheme in rural areas. The VMWT is carried out every year for 7 days.
- WSSDO lamjung attends regional gathering organized by WRMSO in Pokhara. The program is organized normally in October every year.
- WSSDO lamjung also attends the progress review meeting in DWSS which is organized every year in first week of August.
- There is also a conference on sanitation. But it is irregular and very few WSSDO participates in the conference.
- Presently 28 projects are running under WSSDO lamjung. The WSSDO is going to add 63 new construction projects and 2 projects on water quality in coming fiscal year.

- Normally, the new projects are suggested by the local village development councils of each district. The council then submits its suggestions to district council which further propose the recommendation to WSSDO. The DWSS then gathers all the proposals from WSSDOs and takes decision. The local village development is comprised of political leaders and board members of WUSCs.
- > Other projects are finalized directly from Ministry and DWSS.
- > There were no damage to besishahar WUSC facilities by recent earthquake.
- Nepal Government has allocated NRS 20 million for reconstruction and rehabilitation of facilities destroyed by earthquake.
- The WSSDO lamjung visits WUSCs to inspect the facilities after handing over the project under water safety plan.
- The Nepal government selects 3 WUSCs from each district each year to implement Water Safety Plan (WSP). The WSP is revised every year. The final report on WSP is done in August.
- The DWSS has provided water quality test kit to WSSDO lamjung and WUSCs recommended by WSSDO lamjung.
- About 15 kits are distributed to selected WUSCs in 75 districts by DWSS. The program is supported by WHO.
- The WSSDO lamjung normally conducts quality test on pH, turbidity, E-coli, Temperature and Residual Chlorine.

# Re: WASMIP model explanation to the Engineer WSSDO, Kaski and feedback

Date: 2016/7/14 Time: 10:00 – 12:00 Location: WRMSO and WSSDO, Kaski Attendants:

- 1. Ms. Sunam Thapa, Engineer, WSSDO Kaski
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Mikita Amano, Team Member, WASMIP Team
- 4. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 5. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team

- > The WRMSO and Kaski WSSDO shares the same building as their workplace.
- When a staff transfers to a new place; he/she must prepare a document with all the information regarding their duties and data regarding present and past projects to the new transfer. If the staff is unable to give such information directly to the new transfer, the information should be given by the division chief. But, there is no system of punishing those who don't follow this rule.
- > All the staff in WRMSO and Kaski WSSDO works together for each other's unit.
- > The main task embarked by WRMSO is preparing new plans.
- > The WRMSO communicates with other WSSDOs by telephone, email and fax.
- The WRMSO after handing over of project to WUSCs don't visit and inspect the facilities. The WRMSO sometimes gets information on problems ongoing in WUSCs. The WRMSO categorizes problems according to their severity and solve them.
- The Kaski WSSDO joins a review meeting organized by WRMSO in October every year. The meeting is normally conducted for 5 days.
- The Western RMSO provides training on pre-construction and post construction training to WSSDO and WUSCs. They also provide plumbing training to WUSCs.
- > There is written manuals about training procedure. The trainer is either WRMSO staff or hired.
- > The main problem in WRMSO is lack of budget and manpower.
- Ms. Sunam Thapa suggests WASMIP team to revise the WASMIP model and make it short and easy to understand. She further adds that the model should be appropriate for all Himalayan, Hilly and Terai region.
- WUSCs under Kaski WSSDO normally contacts WRMSO to conduct water quality test. The WRMSO charge certain amount to conduct the tests. The charge is taken according to the parameters. Presently, tests on 13 parameters is conducted by laboratory in WRMSO.
- > The WRMSO tries to upgrade its lab each year.
- There are presently 2 chemists in WRMSO laboratory. The chemists also goes to the water facilities of different WUSCs under Kaski WSSDO and collects water quality data.
- There is a rule in Nepal Drinking Water Quality Standards (NDQS) which obligates all the water supplier to perform water quality tests. This directive was prepared 10 years ago.
- Presently, 17% of the population is able to drink clean water but as per the scope of NDQS the percentage is planned to increase to 27%.

# Re: WASMIP model explanation to the Director CRMSO, Kathmandu and feedback

Date: 2016/7/17 Time: 15:00 – 16:00 Location: CRMSO, Kathmandu Attendants:

- 1. Ms. Sudarshan Bhandari, Director, CRMSO Kathmandu
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Mikita Amano, Team Member, WASMIP Team
- 4. Mr.Yoshio Chikamatsu, Team Member, WASMIP Team
- 5. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team

- The CRMSO also does the duty of WSSDO Kathmandu. The WSSDO Kathmandu and CRMSO shares same building as workplace.
- > The main duty of CRMSO is monitoring all WSSDOs in the region and implementing new plans.
- > The regional chief monitors all programs and mobilize engineers under CRMSO.
- There are 66 staffs in CRMSO. There are 32 permanent staffs, 16 temporary staffs and 18 staffs on contract.
- > The CRMSO has progress review meeting in Nagarkot in November.
- > The CRMSO prepares a yearly report on running projects, operation and maintenance.
- > There are no manuals regarding operation and maintenance.
- Monitoring of WUSCs by WSSDO Kathmandu under supervision of CRMSO is done by following two method:
  - By visiting WUSCs and carrying out supervision and inspection of official files (financial, administrative and technical).
  - $\circ$   $\;$  By visiting construction sites and advising according to the specifications.
- The CRMSO is unable to carryout monitoring work for handover projects due to lack of skilled manpower. In fact, they are also unable to oversee all new projects. Most of the times CRMSO recruit consultants to conduct new projects.
- There were 907 ongoing projects in last year. Now around 1600 new projects is going to be carried out.
- The CRMSO cannot outsource agencies to carry out monitoring work because there are no agencies that specializes in monitoring work.
- The CRMSO is planning to implement a new rule of monitoring at least two handover projects every year.
- Some WUSCs invites CRMSO to attend the general meeting. When invited representative of CRMSO goes to attend the meeting.
- Some WUSCs provides annual report to CRMSO. The CRMSO evaluates the report and provide suggestions to those WUSCs.
- The WRMSO has a quality test kit which can examine 5 parameters. The parameters are turbidity, pH, temperature, e-coli and total chloroform. The test is normally carried out in laboratory in Chitwan.
- The Director of CRMSO can transfer every year. The engineers and division chief may transfer after 2 year of service.
- > During transfer of the Director, the information are shared to the new transfer orally.
- The WSP (Water Safety Plan) is carried out every year. The budget allocated for WSP is around NRS 100 thousand (NRs 40000 for Software and NRs 60000 for Hardware).

# Re: WASMIP model explanation to the Division Engineer WSSDO, Ramechaap and feedback

Date: 2016/7/21 Time: 12:00 – 13:00 Location: WSSDO, Ramechaap Attendants:

- 1. Mr. Navraj Satyal, Engineer, WSSDO
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Akira Hasebe, Team Member, WASMIP Team
- 4. Mr. Yusaku Numajiri, Team Member, WASMIP Team
- 5. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 6. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

- > There are around 1100 WUSCs under the supervision of Ramechaap WSSDO.
- There were around 42 running projects running under Ramechaap WSSDO last year. This year about 42 new projects are going to be added.
- Mr. Navraj Satyal points out the lack of manpower and budget as main problem in WSSDO, Ramechaap.
- > The WSSDO ramechaap attends General Assembly organized by manthali WUSC every year.
- The ramechaap WSSDO also conducts Sanitation awareness program. The program is conducted via radio transmission and meeting with general public. Awareness by radio is done by conducting a radio program almost every day. Other programs are organized in schools and public areas where publics are taught to live a hygienic life.
- Lately, Ramechaap WSSDO has not attended any training program in NWSSTC Nagarkot. The WSSDO attends training only after invitation.
- > There are 5 computers with internet connections in Ramechaap WSSDO.
- The Ramechhap WSSDO usually contact other WUSCs by telephone and letter. The WSSDO contacts DWSS by e-mail, letter and telephone.
- > The Ramechaap WSSDO also has a test kit which carries out tests on Turbidity, pH and E-coli.
- > The Ramechaap WSSDO also prepares an annual report every year.

# Re: WASMIP model explanation to the Divisional Chief, WSSDO Dang and feedback

Date: 2016/7/26 Time: 17:00 – 18:00 Location: WSSDO, Dang Attendants:

- 1. Mr. Jagannath Purbe, Division Engineer, WSSDO
- 2. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 3. Mr. Akira Hasebe, Team Member, WASMIP Team
- 4. Mr. Yusaku Numajiri, Team Member, WASMIP Team
- 5. Mr. Deepak Subedi, Mechanical Engineer, WASMIP Team
- 6. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team

- > There are around 250 WUSCs small and bigger in size under the supervision of Dang WSSDO.
- There were around 45 running projects running under Dang WSSDO last year. This year about 55 new projects has been added.
- Mr. Jagannath Purbe points out the lack of manpower and budget as main problem in WSSDO, Dang and adds that there is 3 Engineer and 1 sub engineer in WSSDO.
- There are total 30 staffs in WSSDO.
- The WSSDO Dang is not able to attend all the General Assembly only attends the general assembly organized by the bigger WUSCs.
- The Dang WSSDO conducted an interaction program this year on improvement & sustainability of the projects for WUSCs that has more than 50 connections (either public or private).
- Around 50 WUSCs participated in that program and at the end of the day they form a forum among the participants to exchange ideas and information about their projects.
- > There are 4 laptops and 5 computers with internet connections in Dang WSSDO.
- The Dang WSSDO usually contact other WUSCs by telephone and letter. The WSSDO contacts DWSS by e-mail, letter and telephone.
- Mr. Purbe adds that no manuals are given to the WUSC after the handing of the projects by the WSSDO.
- The Dang WSSDO does not test water quality parameters but visits the WUSC and check the report on Turbidity, pH and E-coli.
- There is one lab in lamahi WUSC made by small Town Water Project and other small lab in Beljhungi WUSC and regional lab in Nepalgunj.
- There is scarcity of bleaching powder in Dang and Nepalgunj and has to brought in bulk which is very difficult for the WUSC.
- The Beljhungi WUSC is 35 years old and the common problem is presence of calcium in raw water which blocks the transmission pipe.
- Mr. Purbe says that the budget allocated for the maintenance is just 1.5 million NRS which is not sufficient for the 250 WUSCs.
- Construction project for WSSDO is usually selected by the District Development Committee (DDC) and the DWSS.
- WSSDO has no schedule for follow-up to WUSCs. They visit the WUSC only if WUSC makes any complaint about certain problems and issues.
- He informed that all the WUSC does not submit their annual report but the WUSCs that are close in area to WSSDO submits the report every year and also invite them to their General Assembly Meeting.
- > WSSDO does not impose WUSCs to submit their annual report.

> The complaint from WUSCs to WSSDO is mainly on construction maintenance and improvement of their projects. No complaints about the management of WUSCs.

# Re: Reporting about the present situation of the Regional water Laboratory Office

**Date**: 2016/7/28

**Time**: 16:00 – 17:00

Location: Regional Water Testing Laboratory Office, Nepalgunj

# Attendants:

- 1. Mr. Ravi kiran Acharya, Assistant Chemist, Regional office.
- 2. Mr. Satoru Oniki, Team Leader. WASMIP-2
- 3. Mr. Yusaku Namujiri, Team Member.WASMIP-2
- 4. Mr. Akira Hasebe, Team Member.WASMIP-2
- 5. Mr. Deepak Thapa, National Staff, WASMIP 2
- 6. Mr. Swiss Gauchan, National Staff, WASMIP 2.

# **Findings:**

- Presently 6 nos. of Physical parameters, 5 nos. of chemical parameters and 2 biological parameters are checked in this laboratory.
- > Physical parameter includes Turbidity, Color, Ph., Turbidity, E.C and T.D.C.
- > Chemical parameter includes Total Hardness, Calcium, Ammonia, Iron, and Arsenic.
- > Biological parameter includes Total Coliform and E-coli.
- > Sometimes reagents are prepared by themselves and buy from the other agencies too.
- > After they are appointed to the office as a chemist they are trained by the DWSS for 1 week.
- > The main problem found in the most water sample in that area is arsenic said by Mr. Acharya.
- > There is S.O.P provided to the chemist, provided by the DWSS.
- ➤ Lack of manpower in the office.
- ➤ Lab receives very less number of water samples from the WUSCs.
- > No presence of Chemist in the office. Assistant Chemist is subjected to the quality tests.
- 27 nos. of parameters is trained in DWSS. But the lab has no facility to carry out the tests for all the 27 parameters.
- Calibration of testing equipment is not done regularly. Assistant chemist asks the seniors staffs sometimes to calibrate the equipment.
- Lab receives 4 number of water samples in average per month.

# Re: About the present situation of the Regional Monitoring and Supervision Office, Surkhet.

Date: 2016/7/29

Time: 11:00 - 14:00

Location: Regional Monitoring and Supervision Office, Surkhet.

# Attendants:

- 1. Mr. Chandra Bahadur K.C, Regional Director. R.M.S.O, Surkhet.
- 2. Division Chief, WSSDO, Surkhet.
- 3. Mr. Satoru Oniki, Team Leader.WASMIP-2
- 4. Mr. Yusaku Namujiri, Team Member.WASMIP-2
- 5. Mr. Akira Hasebe, Team Member.WASMIP-2
- 6. Mr. Deepak Subedi, National Staff, WASMIP 2
- 7. Mr. Swiss Gauchan, National Staff, WASMIP 2.

- R.M.S.O is responsible for the 15 districts. RMSO chief assigns and grant authority to a Senior Division Engineer as a divisional chief of the district where RMSO is located.
- > Mr. KC also attends the general assembly of the WUSC.
- > The regional conference is held on December-January for all the 15 districts chief.
- > Division chief and the Account Chief from each WSSDO attend the conference.
- > Agenda of the conference is technical and financial issues.
- > Mr. KC said that WSSDO is responsible for the WUSC capacity development.
- > Mr. KC sometimes attends the board meeting of the WUSC too.
- > There are in total 32 nos. of staff in R.M.S.O.
- > Mr. KC has been to Japan invited by JICA for 35 days training.
- Mr. KC is positive to replicate the WASMIP model to other WUSCs except that of only pilot WUSCs.
- Mr. Kc admits that the WUSC has a lack of skilled manpower. Management of the existing facilities is the main problem for WUSCs.
- > Mr. KC feels that Pre and post construction training manual has to be revised and updated
- WSSDO submits bi-monthly reports to RMSO regularly about the projects that finish the same fiscal year. WSSDO also submits regularly report once a four month about the progress of the projects under construction.
- Mr. Kc explains that the WUSCs are an independent organization with their own constitution so they have no obligations to support the annual report to WSSDO and RMSO.
- > Lack of budget and manpower are the main problems to support WUSCs.
- > There is a regional store at Nepalgunj of the stocks remaining from the ADB projects.
- The Regional Director often visits the WSSDO and monitors and supervise the Financial and Technical issues.

# Re: Presentation of WASMIP-2 at the progress review meeting of DWSS

Date: 2016/07/31 Time: 11:00 – 12:00 Location: DWSS Building, Kathmandu. Attendants: Counterpart side: Divisional Chief of Eastern Regions and Officials from DWSS and Ministry. WASMIP-2 side:

1. Satoru Oniki (Team Leader). 2. Deepak Subedi (National Staff)

# Meeting conclusions:

- 1. WASMIP-2 team was allocated 30 minutes time for the presentation of WASMIP model. 20 minutes for power point presentation and 10 minutes for discussion and Q&A.
- 2. Sunil Kumar Das, Project Director from the counterpart side expresses that the DWSS and WSSDO needs to sit together to find the best idea to disseminate WASMIP model.
- 3. WSSDO chief as made the following questions;
  - How the 67 WUSC's are selected?
  - Sunil Kumar Das answered that WUSCs are selected by DWSS that has 5000 plus population and has water facility systems.
  - WUSC that are not operating and existing is also in the list. Please explain?
  - WASMIP-2 team leader answered that may be when the list was prepared it was under construction and will be ready when the WASMIP-2 commences. Sunil Kumar Das assures the questioning person that he will discuss on the selection criteria and will consider in revising the list.

4. WSSDO suggests DWSS to implement WASMIP model at least one pilot WUSC in one district.

5. DWSS will instituonalised WASMIP model and tries to replicate.

# Re: About the present condition of ERMSO, Dhankuta.

Date: 2016/08/19 Time: 10:30 – 12:30 Location: ERMSO Building, Dhankuta. Attendants:

Counterpart side:

- 1. Shankar Prasad Jaiswal- Regional Director.
- 2. Kuseshwor Chaudhary- Engineer.
- 3. Durga Ghimire- Account Officer.

# WASMIP-2 Side:

- 1. Satoru Oniki Chief Advisor.
- 2. Kozo Hayashishita- Team Member.
- 3. Deepak Subedi- National Staff.

- 1. ERMSO is organizing the regional conference in a Dhankuta hotel or in Biratnagar.
- 2. The conference date has not been fixed yet.
- 3. WSSDO chiefs, DWSS section chiefs, Ministry officials, District Development Committee officers and Local Development Officer will be the main participants in the conference.
- 4. The conference is mainly focused on sanitation issues.
- 5. It will be for 3 days (2 days for sanitation and 1 day for water supply issues).
- 6. ERMSO is positive to allocate 1 hour of time for the WASMIP team to make presentation.
- 7. Regional Director explains that the WUSC's management skill is very poor that is why most of the WUSCs are not functioning properly.
- 8. ERMSO has not conducts need assessments to WUSCs.
- 9. Design and construction of projects are according to the DWSS design criteria.
- 10. ERMSO communicates by phone, fax, visits, and letters and sometimes with emails only with WSSDOs.
- 11. According to Regional Director, lack of manpower in WSSDOs is the major problem for assisting WUSCs. DWSS used to have around 2000 staffs which has now reduced to around 1000 staffs because of retirement.
- 12. WSSDOs assist WUSCs by visiting and oral explanation. They don't use any manuals or SOPs.
- 13. Handover and Takeover of job when the staff is transferred are usually by verbal explanations and sometimes in written documents.
- 14. ERMSO does not provide any kind of trainings because the office has no capacity and facilities.
- 15. Sometimes interaction program on sanitation is conducted but no any trainings on technical aspects.
- 16. ERMSO needs trainings to all the RMSOs in the NWSSTC.
- 17. ERMSO agreed the idea of picking up the superior WUSC and ask them to instruct other WUSCs.
- 18. No understating of DWSS directives is the major problem in implementation. WSSDO staffs are always busy in achieving annual target so they don't have any understanding about the directives clauses.
- 19. RD thinks that penalty and incentive provision both necessary in DWSS directives.
- 20. Penalty is usually taken as an insult and the issue of disrespect among society members .So, incentives provision will be effective and better.

# Re: About the present condition of Far Western Regional Laboratory, Dhangadhi.

Date: 2016/09/06 Time: 10:00 – 11:30 Location: FWRMSO Building, Dipayal. Attendants:

Counterpart side:

1. Krishna Prasad Poudel- Chemist.

WASMIP-2 Side:

- 1. Satoru Oniki Chief Advisor.
- 2. Deepak Subedi- National Staff.

- 1. The laboratory has the facility to test 13 parameters out of 16 parameters.
- 2. The tests for fluoride, chromium and manganese are not available in the laboratory.
- 3. The laboratory received 40 samples from the external source for the last fiscal year.
- 4. The laboratory conducted 64 tests for the WSSDOs projects.
- 5. The laboratory staffs visits the field for collecting the sample and for testing also.
- 6. The laboratory pays revenue for tests from their budget for the samples of WUSCs they have collected from visiting the sites.
- 7. Awareness of water quality is the major issue for WUSCs.
- 8. The regional laboratory broadcasts awareness advertisement on the local radio to aware people about water quality tests.
- 9. The chemist at the laboratory has received training once at DWSS from the JICA Expert in WASMIP-I.
- 10. The chemist feels the need of advanced level training and refreshment training.
- 11. The regional laboratory purchase the reagents from Kathmandu.

# <u>Re: About the Workshop on WASMIP Model and Questionnaire survey in Sindhupalchok</u> <u>district.</u>

Date: 2016/09/29 Time: 11:00 – 13:00 Location: Sindhupalchok WSSDO. Attendants: Counterpart side:

- 1. Shambhu Raj Khanal- Engineer, Sindhupalchok WSSDO.
- 2. Subash Karmacharya- Chairman, Chautara WUSC.
- 3. Shyam Krishna Shrestha- Secretary, Chautara WUSC.
- 4. Narendra Shakya- Treasurer, Barhabise WUSC.
- 5. Bhakta Bahadur Bhandari- Secretary, Chautara WUSC.
- 6. Madhav Upreti Manager, Chautara WUSC.
- 7. Narayan Giri- WSST, Sindhupalchok WSSDO.

#### WASMIP-2 Side:

- 1. Deepak Subedi.
- 2. Bibek Shrestha.
- 3. Swiss Gauchan.

#### Meeting conclusions:

#### Activities from the WASMIP-II side:

- 1. Presentation and Introduction of WASMIP model using PC. No space for using projector.
- 2. Explanation on use of management model.
- 3. Explanation of using SOPs.
- 4. Purpose of questionnaire.
- 5. Explanation on filling up the questionnaire form.
- 6. Dissemination of questionnaire sheets.
- 7. Discussion.

Counterpart Side:

- 1. Both the target WUSCs (Melamchi and Barhabise) are still under construction and has not started to supply the water.
- 2. WSSDO Chief explains that the target WUSCs are likely to start functioning form this year.
- 3. Chautara Chairman has not gone through the WASMIP model yet. He assures he will read the model thoroughly and provide the feedback and comment to the WASMIP team.
- 4. Chautara Chairman asked the manager to follow the SOP as he found it useful after the workshop.
- 5. Barhabise WUSC assures that they will fill up the PI, Check Sheet and awareness survey with the most possible accurate data and send to WASMIP team through WSSDO after Dasain.







# Re: About the Workshop on WASMIP model and Questionnaire Survey at Ramechhap district.

Date: 2016/10/02 Time: 13:00 – 15:30 Location: Ramechhap WSSDO. Attendants:

Counterpart side:

- 1. Tilak Ram Shrestha- Engineer, Ramechhap WSSDO.
- 2. Netra Bahadur Karki- Chairman, Pakarwas WUSC.
- 3. Shankar Bahadur Poudel- Secretary, Pakarwas WUSC.
- 4. Dhal Bikram Karki- Secretary, Ramechhap WUSC.
- 5. Bhakta Bahadur Shrestha- Pakarwas WUSC.
- 6. Ram Krishna Dhungel- Chairman, Scheme II WUSC.
- 7. Jhanak Shrestha- User, Scheme II
- 8. Bakhat Bahadur Thapa- WSST, Ramechhap WUSC.

# WASMIP-2 Side:

- 1. Deepak Subedi.
- 2. Bibek Shrestha.
- 3. Swiss Gauchan.

# Meeting conclusions:

# Activities from the WASMIP-II side:

- 1. Presentation and Introduction of WASMIP model using PC.
- 2. Explanation on use of management model.
- 3. Explanation of using SOPs.
- 4. Purpose of questionnaire.
- 5. Explanation on filling up the questionnaire form (PIs, Check sheet of the facility, Awareness).
- 6. Dissemination of questionnaire sheets.
- 7. Discussion.

Counterpart Side:

- 1. All three target WUSC's (Ramechhap, Pakarwas and Scheme II) are under construction and has not started to function yet.
- 2. Pakarwas WUSC is a surface water pumping system.
- 3. WUSC asked to include SOPs on this pattern of water supply system as well.
- 4. Since the WUSCs are still under construction, only the limited datas will be provided.
- 5. As the WUSCs are new and likely to function in near future, WASMIP model will be useful for them.







# Re: About the Workshop on WASMIP Model and Questionnaire Survey

Date: 2016/10/23 Time: 12:00 – 15:00 Location: Bardiya WSSDO Attendants:

Counterpart side:

- 1. Dilip Kumar- Chief, BardiyaWSSDO.
- 2. Mahendra Singh Tharu- Sub-Engineer, Bardiya WSSDO.
- 3. Santosh Kumar Yadav- Sub-Engineer, Bardiya WSSDO.
- 4. Koshraj Niraula- Chairman, Gulariya WUSC.
- 5. Lal Bahadur Chaudhary- Pump Operator, Gulariya WUSC.
- 6. Prakash Singh Thakuri Plumber, Gulariya WUSC.
- 7. Binod Kumar Yadav- Meter Reader, Gulariya WUSC.
- 8. Nar Bahadur Khadka- Chairman, Kusumba WUSC.
- 9. Nar Bahadur Magar- Manager, Kusumba WUSC.
- 10. Maniraj Jaisi- Chairman, Bhurigaun WUSC.
- 11. Chandramani Poudel- Secretary, Bhurigaun WUSC.
- 12. Bishnu Hari Khanal- Staff, Gulariya-II WUSC.
- 13. Prem Prasad Adhikari- Secretary, Gulariya-II WUSC.
- 14. Indra Bahadur Sen- Chairperson, Rajapur.
- 15. Gopal Prasad Regmi- Treasurer, Rajapur.

#### WASMIP-II Side:

- 1. Satoru Oniki Chief Advisor
- 2. Deepak Subedi- National Staff, WASMIP-II
- 3. Vivek Shrestha- National Staff, WASMIP-II
- 4. Swiss Gauchan- National Staff, WASMIP-II

#### Meeting conclusions:

#### Activities from the WASMIP-II side:

- 1. WASMIP-II Chief Advisor made an opening remarks.
- 2. Presentation and Introduction on the outline of WASMIP and its Model
- 3. Presentation on the contents and utilities of SOPs.
- 4. Presentation on Business plan
- 5. Dissemination of questionnaire sheets.
- 6. Discussion.

#### **Counterpart Side:**

- 1. WSSDO Chief facilitated the workshop.
- 2. Participants made different opinions and comments on the WASMIP presentation as follows :

#### **Rajapur WUSC**

- No distribution map
- No flow meter
- SOP is useful.
- Frequent pump problem

- Conflict-effected area (The served people evacuated from the service area due to the civil war in the area.)
- > The Maoist imposes the WUSC NOT to pay the electricity bills to the Government.
- > High electricity dues, so electricity is cut off
- Pump O&M and Accounting training are needed.

#### Kusumba WUSC

- Low water production (fail to meet the water demand because of increasing population in the service area)
- > No training (lack of skilled technicians)
- Frequent pump problem
- > No flow meter
- > No new connections provided to the people in the service area.
- > Need of a training on Business plan and other technical trainings.

# **Bhurigau WUSC**

- Pipe leakage problems occurs.
- > Valves and chambers are damaged due to their deterioration
- High turbidity in tube well
- Hopes the WASMIP Model helps to improve the management once they implement in their WUSC.
- Need of new intake (tube well)
- > Compartment of water tank is damaged due to deterioration

# Gulariya II WUSC

- > Need of training for technicians
- > No training from WSSDO after handing over
- > WASMIP model might be difficult to use because of lack of manpower.
- > Need of flowmeter
- Low staffs (3)
- Arsenic found in source
- > Awareness Campaign needed for people to encourage to take new connection.

# Gulariya WUSC

- Started to keep the flow meter records daily after the WASMIP-II advice.
- > Need of computerized system for record
- Trying to start a co-financing project
- Need of district level quality lab

# Bardiya WSSDO Chief

- > Daily allowance for participants will be managed by WSSDO in next workshop.
- > On further workshops, WSSDO will also make a presentation on the WASMIP
- > The regional conference shall be held either inn Nepalgunj or Surkhet.

# Re: About the Workshop on WASMIP Model and Questionnaire Survey.

Date: 2016/10/24 Time: 12:00 – 15:00 Location: Dang WSSDO Attendants:

Counterpart side:

- 1. Tilak Neupane- Acting Chief, Dang WSSDO.
- 2. Bed Prasad Acharya- Engineer, Dang WSSDO.
- 3. Til Bahadur KC- WSST, Dang WSSDO.
- 4. Pradip Gautam- Chairman, Beljhundi WUSC.
- 5. Binay Kumar Pokhrel- Secretary, Beljhundi WUSC.
- 6. Madanmani Pokhrel Manager, Beljhundi WUSC.
- 7. Junga Bahadur GC- Vice-Chairman, Bharatpur WUSC.
- 8. Ekendra Bahadur Rana- Secretary, Bharatpur WUSC.
- 9. Domakant Adhikari- Treasurer, Bharatpur WUSC.
- 10. Binod Shrestha- Meter Reader, Bharatpur WUSC.
- 11. Chandrakant Kharel- Chairman, Amritpur WUSC.
- 12. Sushil Kumar Kafle- Manager, Amritpur WUSC.
- 13. Ashok Sharma-Secretary, Narayanpur WUSC.
- 14. Mahesh lamsal- Treasurer, Narayanpur WUSC.
- 15. Dhurba Yogi- Chairman, Chaughera WUSC.
- 16. Romkanta Acharya- Secretary, Chaughera WUSC.
- 17. Krishna Bahadur Dangi- Manager, Chaughera WUSC.

# WASMIP-2 Side:

- 1. Satoru Oniki Chief Advisor
- 2. Deepak Subedi- National Staff, WASMIP-II
- 3. Vivek Shrestha- National Staff, WASMIP-II
- 4. Swiss Gauchan- National Staff, WASMIP-II
- 5.

# Meeting conclusions:

# Activities from the WASMIP-II side:

- 1. WASMIP-II team leader explained the purpose of workshop.
- 2. Presentation and Introduction on the outline of the WASMIP model.
- 3. Presentation on the contents and utilities of SOPs.
- 4. Presentation on the Business plan
- 5. Dissemination of questionnaire sheets.
- 6. Discussion.

#### **Counterpart Side:**

- 1. WSSDO Engineer facilitated the workshop.
- 2. Participants expressed their opinions on updating the SOP.
- 3. Participating WUSCs understand the importance of record keeping.
- 4. WUSCs expect the technical support from WSSDO to install water flow meters in their water supply system.

5. WUSCs have many problems as follows :

# Beljungdi WUSC

- > Complaint record system has been maintained after the WASMIP-II team suggestion.
- > Chlorine dosing system is going to be installed
- > Need of flowmeter
- Need of training for technicians

#### **Chaughera WUSC**

- Manually chlorination
- High turbidity in deep tube well
- > WSSDO has provided a flow meter but need technical support to install.

#### **Bharatpur WUSC**

- Need of a business plan
- New water source needed
- High electrical expense

#### **Tripur WUSC**

- > Need of new software for billing and recording data
- Training needed for technicians

#### Jhakredhunga WUSC

- > Bulk meter for distribution is out of order
- Need of training for technicians
- > Need of a district level water quality laboratory

# Dang WSSDO chief Mr. Chok Prasad Dhital 2016/10/25

- WASMIP Model training needed for WSSDO technicians
- Different demands from WUSCs in oral and written form to WSSDO regarding pipe extension, pipe replacement, new pumps and maintenance works
- > Priority for maintenance and rehabilitation is given according to urgency and available budget.









# Re: WASMIP Model explanation to the target WUSCs, Morang and feedback

Date: 2016/10/27 Time: 12:00 – 15:00 Location: WSSDO, Morang

## Attendants:

Counterpart side:

- 1. Rajendra Prasad Neupane, WSSDO Morang Chief.
- 2. Mahesh Mahaseth, Engineer.
- 3. Rajiv Poddar, Engineer
- 4. 46 numbers of other participants including Chairman, Secretary, and Manager of the target WUSCs and WSSDO's staff.

# WASMIP-II Side:

- 1. Satoru Oniki, Chief Advisor
- 2. Deepak Subedi, National Staff
- 3. Vivek Shrestha, National Staff
- 4. Swiss Gauchan, National Staff

# Activities from the WASMIP-II side:

- 1. Presentation and Introduction on the outline of WASMIP mode
- 2. Presentation on the contents and utilities of the SOPs.
- 3. Presentation on the Business plan
- 4. Presentation on outcome of the WASMIP-I.
- 5. Explanation on filling up the questionnaire form.
- 6. Dissemination of questionnaire sheets.
- 7. Discussion.

#### **Counterpart Side:**

- 1. WSSDO Engineer facilitated the workshop.
- 2. WASMIP-II Chief Advisor made an opening and closing remarks.
- 3. WSSDO Chief made a welcome speech and explained the purpose of workshop
- 4. Urlabari WUSC Manager explained the importance of business plan. Urlabari WUSC was the target in the WASMIP-I.
- 5. Participants made different opinions and comments on the WASMIP presentations as follows :

#### WUSCs problems:

#### **Urlabari WUSC**

- > The WUSC has the 15 years' term business plan.
- The business plan is planned on the basis of estimated population increment, household increment, daily distribution volume, revenue collection, non-revenue water volume etc.
- > Tariff revision is done every 3 years.
- > The WUSC has also prepared distribution map.
- > The WUSC has started a co-financing project.
- The staffs and board members of the WUSC also go to different WUSCs of Nepal to grasp and exchange information, ideas and knowledge.

# **Jhoraghat WUSC**

> The WUSC requires technical training for technicians.

# Itahara WUSC

- > The WUSC has just started operating.
- > The WUSC feels the lack of support from WSSDO in operation of their facilities.

# WSSDO chief Mr. Rajendra Prasad Neupane 2016/10/27

- > Training needed for WSSDO technicians and engineers on the WASMIP Model.
- > There are 6 technicians and 3 engineers in WSSDO, Morang.
- > The chief suggests that the training to be conducted in the respective districts to save time.

# Re: WASMIP Model explanation to the target WUSCs, Jhapa and feedback

Date: 2016/10/28 Time: 11:30 – 14:00 Location: WSSDO, Jhapa Attendants:

# Counterpart Side:

- 1. Mr. Kari Mahato, Engineer Jhapa WSSDO
- 2. Chairman, Secretary and Manager of target WUSCs.

#### WASMIP-II SIde

- 1. Mr. Satoru Oniki, Chief Advisor
- 2. Mr. Vivek Shrestha, National Staff
- 3. Mr. Swiss Gauchan, National Staff
- 4. Mr. Dipak Subedi, National Staff

#### Activities from the WASMIP-II side:

- 1. Presentation and Introduction on the outline of the WASMIP Model
- 2. Presentation on the contents and utilities of SOPs.
- 3. Presentation on the Business plan
- 4. Presentation on outcome of the WASMIP-I.
- 5. Explanation on filling up the questionnaire form.
- 6. Dissemination of questionnaire sheets.
- 7. Discussion.

## **Counterpart Side:**

- 1. WSSDO Technician facilitated the workshop.
- 2. WASMIP-II Chief Advisor made opening remarks.
- 3. Participants made different opinions and comments on the WASMIP presentations as follows :

# WUSCs problems:

# **Chandragadi-II WUSC**

- > There is lack of awareness among consumers about clean drinking water.
- > The WUSC feels the facility designs are insufficient for future.
- > There is lack of supervision and help from WSSDO after handling over.
- > The WUSC requests further workshops to understand and grasp the WASMIP Model.
- > No disaster risk management topic included in the business plan.
- Filtration and chlorine equipment are necessary in all the projects.

# Re: WASMIP Model explanation to the target WUSCs, Bara and feedback

Date: 2016/11/08 Time: 12:00 – 15:00 Location: WSSDO, Bara Attendants:

- 1. Mr. Shailendra Kumar Jha, Engineer, WSSDO
- 2. Gopiram Bhagat, Engineer, WSSDO
- 3. Kishori Prasad Yadav, Engineer WSSDO.
- 4. Birendra Pandit, WSST. WASMIP side:
- 1. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 2. Mr. Vivek Shrestha, Civil Engineer, WASMIP Team
- 3. Mr. Swiss Gauchan, Civil Engineer, WASMIP Team
- Mr. Dipak Subedi, Mechanical Engineer, WASMIP Team

# Activities from the WASMIP-II side:

- 1. Presentation and Introduction and outline of WASMIP model.
- 2. Presentation on use and utilities of SOPs.
- 3. Presentation on Business plan
- 4. Explanation and implementation of questionnaire surveys
- 5. Discussion.

#### **Counterpart Side:**

- 1. WSSDO Engineer facilitated the workshop.
- 2. WASMIP-II team leader explained the purpose of workshop.
- 3. Participants expressed their opinions on updating the SOP.
- 4. Participating WUSCs understand the importance of record keeping.
- 5. WUSCs expects technical support from WSSDO to install water flow meter in their water supply system.
- 6. WUSCs have some problems as follows :

#### **Dumarbana WUSC:**

> The WUSC does not know how to conduct quality tests.

#### Nijgadh WUSC:

- There is need of training for technical staffs on electro mechanical, meter reading and maintenance.
- > More workshops and training programs are requested to understand the WASMIP Model.

# WSSDO engineer:

- > There are currently 4 engineers and 10 technicians in WSSDO.
- > Presently there are 66 new and 45 existing projects running.
- The acting chief (WSSDO) promised to cooperate with the WASMIP to train engineers and technicians at NWSSTC.

# Re: WASMIP Model explanation to the target WUSCs, Sarlahi and feedback

Date: 2016/11/09 Time: 12:00 – 15:00 Location: WSSDO, Sarlahi Attendants:

- 1. Mr. Jagannath Purbey, Chief, WSSDO
- 2. Mr. Shiva Shankar Rauniyar, Engineer, WSSDO
- 3. Mr. Ramnath Shah, Engineer, WSSDO
- 4. Mr. Dhurba Khatri, Accountant, WSSDO WASMIP-II side:
- 1. Mr. Satoru Oniki, Team Leader, WASMIP Team
- 2. Mr. Vivek Shrestha, National Staff, WASMIP Team
- 3. Mr. Swiss Gauchan, National Staff, WASMIP Team
- 4. Mr. Dipak Subedi, National Staff, WASMIP Team

#### Activities from the WASMIP-II side:

- 1. Presentation and Introduction and outline of WASMIP model.
- 2. Presentation on use and utilities of SOPs.
- 3. Presentation on Business plan
- 4. Explanation and implementation of questionnaire surveys
- 5. Discussion.

#### **Counterpart Side:**

- 1. WSSDO Engineer facilitated the workshop.
- 2. WASMIP-II team leader explained the purpose of workshop.
- 3. Participants expressed their opinions on updating the SOP.
- 4. Participating WUSCs understand the importance of record keeping.
- 5. WUSCs expects technical support from WSSDO to install water flow meter in their water supply system.
- 6. WUSCs have some problems as follows :

#### Karmaiya WUSC:

- > The WUSC has been facing high NRW and is concerned about controlling it.
- The WUSC also emphasizes on need of flowmeter and requests the division office to provide required flowmeter to all WUSCs.
- > The WUSC also welcomes WASMIP to use their hall to conduct further trainings.

#### Hariyon WUSC:

- > The WUSC commences water supply this fiscal year.
- > They will use the WASMIP Model in the water supply system.

#### **Isworpur WUSC:**

> There are leakage problems from valves and pipes, and many other technical problems.

Requests valves operation and maintenance training.

## Barathawa WUSC:

- > There is high expenditure and low income.
- There are the low number of connections and most of the consumers use the water from their own shallow tube wells.
- > They also pointed out that electric expense is the major reason for high expense.
- > There is 28.5 km distribution pipeline but only 325 house connections.
- > WUSC requests to provide a water quality test kit.
- WUSC requests for awareness campaign about water quality to encourage people to take new connections.

# Dhalkebar WUSC:

- Learned about data keeping and its importance in planning.
- Happy to be part of the WASMIP project.

#### Division Chief WSSDO Sarlahi:

- There is a need of test kit to check the water quality of consumer's household and also the WUSCs intake.
- Record keeping and preventive maintenance are very important for water supply O&M.
- > Previously, arsenic and bacterial problems were identified in public water source.
- There are 4 engineers and 12 technical staffs in WSSDO.
- There are 46 under construction and 25 new projects.
- A written document shall be made to request replacement of Murtiya WUSC by Netragunj (Nawalpur) WUSC. Neragunj WUSC has a water supply system funded by DWSS (Neapl Government) Not ADB fund. There is NO problem between WASMIP and ADB in case of the replacement from Murtiya WUSC to Netragunj (Nawalpur) WUSC
- > The WSSDO chief agrees on training engineers and technicians at N WSSTC.

# Re: About the workshop on WASMIP Model and Questionnaire Survey

Date: 2016/11/15 Time: 11:00 – 13:00 Location: Lamjung WSSDO Attendants:

Counterpart side:

- 1. Jagarnath Das- Chief, Lamjung WSSDO
- 2. Kamal Aryal- Engineer, Lamjung WSSDO
- 3. Mina Sharma-Engineer, Lamjung WSSDO
- 4. Bhuwan Bahadur Thapa- WSST, Lamjung WSSDO
- 5. Chairpersons, Secretary and Manager from 3 WUSCs

#### WASMIP-2 Side:

- 1. Satoru Oniki Chief Advisor.
- 2. Deepak Subedi- National Staff
- 3. Swiss Gauchan- National Staff

#### Meeting conclusions:

## Activities from the WASMIP-II side:

- 1. Presentation and Introduction on the outline of the WASMIP Model
- 2. Presentation on contents and utilities of SOPs.
- 3. Presentation on the Business plan
- 4. Explanation on filling up the questionnaire form.
- 5. Dissemination of questionnaire sheets.
- 6. Discussion.

#### **Counterpart Side:**

- 1. WSSDO Engineer facilitated the workshop.
- 2. WASMIP-II team advisor explained the purpose of workshop.
- 3. 3 Engineers and 6 WSST are now available in Lamjung WSSDO.
- 4. No problem to dispatch engineers and WSST for training at Nagarkot.
- 5. WSST (Water Supply and Sanitation Technician) are involved in many projects of WSSDO so they have a lots of experience.
- 6. Lamjung WSSDO conducts 7 days training once a year for 20 persons from different WUSCs.
- 7. HDPE pipes are widely used than GI material.
- 8. WUSCs has many problems as follows :

#### Lasunekhola WUSC:

- Serves 570 households.
- 3 intakes, 2 reservoirs.
- Supplies 5 hours daily.
- Very happy when see valves SOP. Finds SOP helpful for O and M of their facilities.

# Bhotewodar WUSC:

- WTP is under construction. Starts operation within a month.
- Problems in river crossing. Problems of landslide in a source.
- 428 connections. 24 hours supply.
- Strict policy in tariff collection i.e. one month delay to pay is 20% fine, Two months is 30%, Three months is disconnection.
- Software billing system is adopted.
- 2 hours workshop is not enough. Requests for on-site survey of their water supply system.

#### Sundarbazar WUSC:

- 1050 connections.
- 2 spring 1 deep tube well. 4 reservoirs (each 100 m3)
- High demand of water. Need to find new source.
- Software billing system is adopted.

# Re: WASMIP Model explanation to the target WUSCs, Rupandehi and feedback

Date: 2016/11/20 Time: 12:00 – 15:00 Location: WSSDO, Rupandehi Attendants:

- 1. Mr. Shankar Mani Gyawali, Chief, WSSDO Rupandehi
- 2. Mr. Gunanidhi Koirala, Engineer, WSSDO
- 3. Mr. Ishwori Prasad Acharya, WSST, WSSDO Rupandehi
- 4. Chairman, Secretary and Managers of 3 target WUSCs **WASMIP-II Side:**
- 1. Mr. Satoru Oniki, Chief Advisor
- 2. Mr. Vivek Shrestha, National Staff
- 3. Mr. Deepak Subedi, , National Staff

# WUSCs problems:

#### Anandaban WUSC:

- > Need of training for staffs on technical and administrative aspects.
- > There is problem of low voltage because generators are used and thus cost is high.
- Meter Reader collects the population data including family size, tenants and also in schools and other public connections.

#### Sainamaina WUSC:

- Technical training is required.
- Meter Reader training is requested.

## Debdaha WUSC:

- > After handing over of the water supply facility, source water was found of high turbidity.
- > Need of a distribution map to manage repair and extension works.

#### Sauraha-farsa WUSC:

- Start operating the water supply facility fully within this fiscal year (June 2017).
- Requests training on technical aspects.

# Chief WSSDO Rupandehi:

- > There are 5 engineers and 8 WSST in WSSDO Rupandehi.
- ➢ WSSDO chief can dispatch engineers and WSSTs to the training at NWSSTC.
- > There are 32 under construction and more than 42 new projects in this fiscal year.
- > The WSSDO provides pre-construction and post-construction trainings to the WUSCs.
- For other technical trainings, WSSDO selects candidates from different WUSCs and send them to NWSSTC at Nagarkot.

# Re: WASMIP model explanation to the target WUSCs, Nawalparasi and feedback

Date: 2016/11/21 Time: 11:00 – 13:00 Location: WSSDO, Nawalparasi Attendants:

- 1. Mr. Purna Jwarhan, Chief, WSSDO Nawalparasi
- 2. Mr. Seshkanta Pandey, Engineer, WSSDO
- 3. Administrative Officer, WSSDO Nawalparasi
- 4. Account chief, WSSDO Nawalparasi
- 5. 6 WSSTs, WSSDO Nawalparasi
- 6. Chairman, Secretary and Managers of 3 Target WUSCs.

WASMIP-II Side:

- 1. Mr. Satoru Oniki, Chief Advisor
- 2. Mr. Vivek Shrestha, National Staff
- 3. Mr. Deepak Subedi, National Staff

#### WUSCs problems:

#### **Rajahar WUSC:**

- Requests for water quality test kit.
- > Feels that capacity of water treatment plant is low.
- > Received the Meter Reading, Plumbing and Accounting training.
- Requests for more trainings.

#### Gaidakot WUSC:

- High population and low water supply.
- > No maintenance valves installed in a distribution pipelines.
- > No distribution network diagram.
- > The WUSC has asked help from the WSSDO to make a distribution map.
- Need of electrical and mechanical training.

#### Aghyauli WUSC:

- > No (maintenance) valves installed in a distribution pipeline so difficult to repair leakage.
- > A plumber and manager has received training in NWSSTC.

#### **Engineer WSSDO Nawalparasi:**

- > There are 3 engineers and 9 technical staffs in WSSDO.
- > There are 52 under construction and more than 72 new projects.

# Meeting Memo with Rupandehi WSSDO Engineer.

Date: 2019/11/29.

Time: 10:30-11:30

Venue: WASMIP Office

#### Attendants:

- 1. Mr. Tilak Neupane Engineer, WSSDO Rupandehi, Province No. 5
- 2. Mr. Satoru Oniki- Chief Advisor, WASMIP-II
- 3. Mr. Deepak Subedi-National Staff, WASMIP-II

- 1. Mr. Tilak Neupane visited WASMIP office and he explained the following;
  - Nawalparasi West, Rupandehi and Kapilbastu (3 districts) are under the jurisdiction of Rupandehi WSSDO. Rupandehi WSSDO is under the Ministry of Physical Infrastructure Development (MoPID) of Province Number 5.
  - Kapilbastu district has 45 ongoing projects (Survey, Design and, Construction). There is only 1 Engineer (Mr. Tilak) and 4 Technicians in Kapilbastu district to implement 45 projects.
  - WUSCs in Kapilbastu district are not functioning well because of low revenue. People use shallow tube well for water supply. Awareness of water quality is necessary to encourage people to use piped water supplied by WUSCs.
  - Construction budget for FY 2076/77 in Kapilbastu district is NPR 190 million. Maintenance budget is NPR 4 million (approximately 2.1% of total budget). However, when WUSCs request for support, WSSDO can provide equipment (pipe materials, valve etc.) using the construction budget. However, he cannot explain how much percentage of construction budget can be used in providing equipment to WUSCs.