Theme:
'Sustainable Water management'

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Organization: National Water Supply and Sanitation Trg. Centre
Designation: Trg. Centre Chief (SDE)
Location: CHRDU Training Center, Nagarkot, Nepal
Training Attended: WW Treatment and Reuse” and “Rainwater Harvesting
Training Dates: 12-15 Feb. 2012,
Topic of presentation: WaSH sector capacity building to achieving SDG6
1. Project description

• Program Name: HR development Program:
  • Capacity: A training complex with residential facilities with capacity to accommodate around 150 persons, WaSH labs, Auditorium Halls and Seminar rooms. Pooling of resource persons from the department, academia and the market.
  • Year of implementation: 1983 as Trg cell, 1987 as Trg. Unit, 1995 as Central Trg Unit (CHRDU), 2014 as National TC with ISO 9001 QMS certification.
  • Budget: annually allocated from GoN for HRD and inst. improvement.
  • Regulatory compliance: National laws, Training Norms and working procedures.
  • Economic benefit: Trained water user associations taking responsibilities to run WaSH systems, hence relieving operational burden on the government and WaSH coverage expanded reliably to citizens.
1. Project description ....

• Other details about the project:
  • 500+ public sector engineers & WaSH professional trained so far
  • 500+ elected reps oriented in WaSH
  • 20,000+ water service providers (tech and managerial) trained
  • 5000+ WaSH volunteers, activists, triggerers trained
1. Project description …

• Other details about the project ….

• International Cap Dev activities:
  
  • Int. MTOT on MHM 2017: participants and RPs from 5 continents

  • Cap dev support to NWSSTC from JICA through WASMIP project

  • TOT on FSM/FSTP to public sector engineers-USAID WASFIN 2021 (CDD/Tetratech/ENPHO/NWSSTC)
1. Project description …

• Other details about the project…
  • International Cap Dev activities:
    • Training support to professionals of neighboring Bhutan 2014,2017
    • WOP partnership/collaboration with Manylad waters, the Phillipines 2013-17
    • ISO 9001 QMS certification in 2014
1. Project description ….

• Other details about the project…
  • International CapDev activities:
    • Training on WWM and RWH from CSE-2012

The then Secretary inaugurating the Training

Trainers and Participants in the then CHRDU, now (NWSSTC) – Nagarkot, 2012
2. Outcome/ Impact of the HRD program

• Capacity enhancement of WaSH professionals in non-academic subject areas and skills like:
  • WaSH:
    • Sanitation awareness and campaigning:
      • Community and stakeholder Triggering
      • ODF / Total sanitation campaigns
    • Rural water supply planning, design, implementation and operation
  • Management:
    • Office management of service providers/water user associations
    • Tariff and accounting system
    • Public procurement & contract management
    • Project management tools/techniques
    • Business planning
2. Outcome/ Impact of the HRD program

• Capacity enhancement of WaSH professionals in non-academic subject matters and skills like ….
  • WaSH System operations and services delivery:
    • Technical HR of service providers:
      • plumbers, meter readers, WTP operators, pump operators
      • WQ lab technicians,
    • Tariff and accounting system
    • Public procurement & contract management
    • Project management tools/techniques
  • Water, Faecal sludge and Wastewater management:
    • WQ management: WQ monitoring, Water safety,
    • WTP/WWTP/DEWATS/FSTP design and operations
2. Outcome/ Impact of the HRD program

• Capacity enhancement of WaSH professionals in non-academic subject matters and skills like ….
  • Total people benefitted: has been indicatively presented in slide 3 above (26,000+) in different subjects and categories.
  • Ultimate Impacts of the above activities equally gets distributed from national to local/grass-roots level which can be summarised as:
    • Managerial/operational capacities of service providers enhanced
    • It has resulted in sustained system operation and service delivery
    • Handover of completed WaSH projects has become easier
    • Economic burden on the part of government is greatly reduced on WaSH services provision
    • Relationship of mutual cooperation has been developed between user groups association and the government (trust & confidence building).
3. CSE’ contribution

- CSE training contributed in knowledge building in:
  - Wastewater management:
    - Our training centre didn’t have standard curriculum and training materials till then
    - The CSE training materials were founding stone in these subject matters to conduct series of trainings that could be organised based on using them:
      - Wastewater management and Sewerage Network Design Training-2015
      - Training on WS system design including RWH and DEWATS-2017
      - Training on WS system design including RWH and DEWATS-2018
      - Training on Design of DeWATS for Engineers-2019
      - Training on Design of DeWATS for Engineers-2020
      - ToT on FSM / FSTP design, operation-2021 (USAID/CDD/Tetratech/ENPHO/NWSSTC)
  - Rainwater harvesting:
    - Guided for further policy development (we had already working policy in place developed in 2009)
    - Systematic design methodology for RWH for drinking and recharge techniques
    - RWH is less preferred in Nepal due to various reasons!
3. CSE’ contribution ....

- CSE training had another pivotal contribution in:
  - Attracting high level authority towards urgent need for:
    - Policy development in WWM and RWH to cope with pressing issues on water and WW
    - Realisation that priority is to be given for investing in water and wastewater or human waste management
    - MoWS/DWSS initiated drafting of two important policy documents- (1) Regulatory Framework for FSM, and (2) Sewerage policy in 2014 and the IRF-FSM was approved in 2017.
  - The CSE training program was jointly organised by GoN/MoPPH and the CSE, the then Secretary had inaugurated the training program and also attended the first day introductory sessions:
    - It resulted in high level commitment towards giving urgent attention to urban water and waste issues
    - Training participants were Engineers, Planners from GoN Departments, Municipal functionaries and Decision/Policy Makers who also got sensitised on the issues
3. CSE’ contribution ....

- CSE training had another pivotal contribution in:
  - Good training materials were available to our training centre which in subsequent years were widely used and further developed.
  - Increased confidence among in-country professionals in water and wastewater management issues.
  - Take-off point for embarking towards Local WaSH planning.
  - Local WaSH plan (or localisation of WaSH SDP was as recommended in the WaSH SDP)
  - MoWS has developed a web based, geo-referenced WaSH MIS system which can be used in diverse WaSH sector planning including developing Local WaSH plans.
  - NWSSTC is the responsible entity for training professionals to use NWASH software module.
3. CSE’ contribution ....

• CSE training had another pivotal contribution in ....
  • Inspired to further develop FSM/FSTP training modules, which has been recently completed with USAID’s TA.
  • CSE web pages are the unlimited source for learning and be aware/familiar with technological innovations around in the region.
  • WWM was an area within Nepal WaSH sector towards which WaSH institutions were not gathering courage to enter before the CSE-NWSSTC training in 2012.
4. Pictures, videos, website

- Links/Fotos of the documents and activities in which NWSSTC is involved:

  - NWSSTC/MoWS team for Drafting of Nepal WaSH SDP 2016-30
    (http://nwsstc.gov.np/home/download/16)
  
  - Ministry & DWSS Staff workshop Discussion on Draft SDP 2016-30

  - NWSSTC/DWSS team for Drafting of Water and Sanitation bill and review team discussing the issues in NWSSTC, 2018

  - NWSSTC Trainers and Trainee of NWASH MIS portal use training with DG of DWSSM at NWSSTC Nagarkot, 2019.
    (http://nwash.mowss.gov.np/map)
4. Pictures, videos, website

• Links/Fotos of the documents/activities in which NWSSTC is involved …..

1. The Inst. & Regulatory Framework for FSM has vested NWSSTC responsible for capacity building on FSM matters. (www.fsmtoolbox.co)

2. Municipalities now started developing and enforcing their own FSM regulatory frameworks

3. NWSSTC in technical support from WHO drafted the Handbook on Sanitation Safety Planning for stakeholders, 2020
5. Additional information

• Nepal WaSH sector has recognised capacity building as core element for functionality/sustainability of WaSH infrastructures and services delivery.

• But, water services providers are not keen on receiving trainings, why?
  • Perhaps because so far it is free (in Nepal)

• NWSSTC can take them to Training complex but cannot compel to learn.
  • But, we are determined to take our stakeholders to the Training centre and make them to learn.
6. Future plans

**Training and Knowledge management front:**
- Finalise Business Plan of NWSSTC under development and implement
- Focus on Skill/knowledge enhancement trainings giving immediate results
- Coordinate/collaborate with DPs and other Training Institutions on areas where we are weak

**Infrastructure/Facilities development front:**
- Complete the WaSH infrastructural facilities/demo units under construction at the earliest
- Expand provincial units of TC and Resource centres
- Development and Standardisation of training curricula; SOP/Manuals and Guideline documents
- Rolling out FSM/FSTP trainings to stakeholders from national to municipal levels including system operators, based on recently developed training modules
6. Future plans ....

• Nepal WaSH Sector Development Plan (SDP 2016-30) has identified need for HR in water utilities for coming 15 years (SDG) period.

• Nepal’s current wastewater treatment capacity is <3%, national plans target for 20% in current 5 yrs plan. While SDG /SDP target is for 50%. It looks a herculian task, but.....

• Meeting the capacity building of this entire numbers is the sole responsibility of NWSSTC.

• Develop e-learning/tele-learning courses to the extent possible.

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<td>Civil Engineer</td>
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Status & Target on Sanitation

- Current Status
- 5 yr periodic plan
- SDG target
More WaSH services for combat against Covid 19!

- **Active/Primary Barrier**
  - Physical distancing
  - PPE and
  - Hand hygiene behaviour

- **Passive/Secondary Barrier**
  - Physical distancing
  - PPE and
  - Hand hygiene behaviour

- **Environmental / Tertiary Barrier**
  - Decontamination
    - (Disinfection and
      - Sterilisation)

**Pathways of virus transmission**

- **Persons Vulnerable to infection**
  - (through
    - Food & / or
    - Respiration)

**Hazard**

**Decontamination**

**Popul under safety net**

- **nCov Carrier**

- **Sneezing**

- **Indirect Contact**

- **Direct Contact**

- **Coughing**
More WaSH services for combat against Covid 19!

Thank you for your patience!

Stay safe!!

Make others safe!!!