ENPHO’s Efforts towards Cholera Prevention

ENPHO carried out various activities, under ENPHO’s own initiatives as well as via prolific collaborative efforts between various stakeholders for combatting Cholera. Last year, ENPHO participated in multiple consultative meetings between stakeholder for knowledge sharing and planning for efficient prevention, preparedness and mitigation of cholera incidences in Nepal.

This year, altogether, 97 clinically confirmed cases of Cholera were reported from Nuwakot, Dhading, Kathmandu and Lalitpur with zero casualties. In this context, ENPHO has undertaken a series of efforts on preventing and controlling the cholera incidences. With the support of UNICEF under “Cholera/AWD preparedness in DRR Approach for Urban WASH” project, various activities have been carried out to combat cholera.

After the ‘Community Led Total Cholera/AWD Emergency Preparedness Campaign’, the presence of *E. coli* found to be significantly lower. With the dissemination of the coliform presence/absence results and continuous efforts on sensitizing the people on appropriate use of PoU options, the drinking water samples collected after the interventions was found to be lower.
In an attempt to assess the status of ‘ready-to-drink’ water quality used by food vendors, a survey was undertaken to assess the status and practice of drinking water quality. According to the field based analysis through P/A vial test, the figure below depicts that ‘ready-to-drink’ of food vendors in Kathmandu Valley are found to be contaminated with coliform during monsoon season. The actual situation on quality of ‘ready-to-drink’ water, continuous efforts on appropriate use of PoU options and WASH practices, and the presence of coliform on ‘ready-to-drink’ water were provided to the food vendors. After the continuous efforts on sensitizing the people, the presence of coliform was found to be lower in post monsoon season.

<table>
<thead>
<tr>
<th>Coliform P/A during monsoon (n=187)</th>
<th>Coliform P/A post-monsoon (n=184)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar 100%</td>
<td>100%</td>
</tr>
<tr>
<td>Absent 47%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Except 47% of samples of tap water drinking water sources, all the drinking water samples (jar, tanker, stone spout and well) were found to be contaminated with coliform during monsoon season. In compared to monsoon season, the coliform contaminated in 'ready to-drink' water found to be lower in post monsoon season. The quality of drinking water using jar water, tanker, stone spout and well sources after monsoon season were found to be improved.

**Orientation** programs on Water Safety Plan (WSP), WASH and Cholera preparedness along with awareness raising activities were conducted to capacitate people.

- **Orientation on Cholera/ AWD Preparedness** with awareness raising activities were conducted for school teachers and child clubs. School level WASH orientation with the documentary shows were also given to enhance knowledge on prevention of waterborne diseases.  
  - **775** Beneficiaries

- **FCHVs and WASH volunteers** were oriented on Cholera and WASH to enhanced their capacity and selected individuals then were mobilized to orient community members.  
  - **72** Beneficiaries

- **Orientation on Water Safety Plan for private tanker water suppliers** to enhance capacity of private tanker on water safety plan and to ensure safe collection and distribution of water for consumers.  
  - **57** Beneficiaries
Emergency WASH Response at Flood Affected Districts

On August, 2017, Terai belt of Nepal faced massive flood that affects 27 districts. Out of the total flood affected area, 12 districts were severely affected. Through this period, these inundated region faced scares of safe drinking water and sanitation. On 23 August 2017, ENPHO staff members in coordination with Paschim Paaila youth volunteers headed towards flood affected districts to support the flood victims.

Altogether 15 orientation programs were conducted at 9 different districts of Nepal.

Backpacks containing WASH materials were distributed to each participants of orientation program.

<table>
<thead>
<tr>
<th>PEOPLE REACHED</th>
<th>Total Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>118</td>
</tr>
<tr>
<td>Male</td>
<td>255</td>
</tr>
</tbody>
</table>

ENPHO with the support of UNICEF responded to 9 severely affected districts by WASH improvements through facilitation support to local WASH stakeholders in Morang, Sunsari, Jhapa, Saptari, Dhanusha, Rautahat, Sarlahi and Mahottari.

They provided orientation on water, sanitation and hygiene (WASH) in emergency to the local WASH volunteers and monitored the information delivered. The local WASH volunteers further provided the information to the flood victims and community on safe water, sanitation and hygiene to be highly considered in order to avoid epidemic after disaster.

In responding to the flood victims of Terai region, Paschim Paaila also organized a fundraising events to support and serve in the sector prior to WASH. The event incorporated the informative street drama disseminating the message on causes of cholera and its prevention measures. More than 350 people took part in fund raising events and receive the cholera message.
An Effort towards Disaster Risk Reduction

With an aim to create Disaster Resilient community focusing on WASH, ENPHO under BISWASH project supported by Practical Action and funded by European Union strengthened capacity of stakeholders from Panauti Municipality and technically supported for replication of good practices on disaster resilient and WASH in other municipalities within the District. Capacity building and sensitization activities was focused in 5 wards (ward no 4, 5, 6, 7 & 8), as core and 7 (ward no 1, 2, 3, 9, 10, 11 & 12) as non-core wards in Panauti Municipality and, with replication target in other 1 municipality of Kavrepalanchowk District.

In coordination with local government, ENPHO facilitated for planning processes on Local Governance and Community Development Program (LGCDP) to allocate funds for Disaster Preparedness/ Disaster Risk Reduction (DP/DRR) at local and municipal levels. Existing structures at municipality and community level was mobilized with optimum resource mobilization to implement DP/DRR plan. A one-day workshop on “Prioritization of Disaster Risk Reduction Management Plan” worked as foundation to implement DP/DRR plan. During the workshop, present data related to vulnerability was revised and discussed and Disaster Risk Reduction Management Plan was prioritized for implementation.

Panauti Municipality and ENPHO signed MoU for the “Construction of Disaster Risk Reduction (DRR) Information Centre” to sensitize the community people through disseminating appropriate and adequate information on DRR. ENPHO in partnership with Practical Action Nepal, has agreed to construct the ‘DRR Information Centre’. As per the agreement, an inaugural ceremony of construction of ‘DRR Information Center was conducted on August 23, 2017. The municipality will appoint a focal person for DRR information center who will be responsible for disseminating DRR information to the people. The municipality has appreciated and expressed gratitude for being supportive to ENPHO team for initiating disaster preparedness in Panauti Municipality.

Major Achievements

- Sensitized community people (more than 20,000) including women groups, school students, elderly people on DRR & WASH through street drama, door to door mobilization, video documentary show, wall painting, mass awareness through national celebrity and earthquake mock drill.
- 81 energetic youths have been prepared to conduct Vulnerability Capacity Assessment (VCA) and to mobilize for DRR/WASH awareness and mass mobilization.
- Total 738 community people have been trained on different trainings like; CBDRR/WASH, First Aid, Search & Rescue, E-WASH, LDRMP & 14 step development planning process and Pre Crisis Market Analysis (PCMA) with 61% female participation.
- Formed taskforces in 7 core wards to response immediately after emergency.
World Water Day (22 March, 2017)
ENPHO along with Paschim Paaila, organized a “WASH Mela” incorporating WASH exhibition, street dramas and flash mob to raise awareness on importance of water as well to disseminate knowledge and information to local people on safe water, sanitation and hygiene, water quality and water resource management. More than 500 people participated in the program.

Menstrual Hygiene Day (28 May, 2017)
World Menstrual Hygiene Day was celebrated in joint collaboration with Guthi, WaterAid Nepal, UK Aid, MHM Alliance and Safety Sanitary Pad. Mr. Madan Krishna Shrestha with other male guests willingly wore sanitary pads or cotton cloths for the period of a day to understand few of the difficulties that females experience during menstruation.

World Environment Day (5 June, 2017)
Grand Mass Event and WASH/DRR related Awareness Raising Cultural program was organized to disseminate information on WASH/DRR among mass along with a WASH/DRR stall. More than 2500 general public witnessed the program.

Global Handwashing Day (15 October 2017)
ENPHO organized a “Mass Rally” to raise awareness on importance of handwashing for healthy living. The rally was followed by formal program incorporating performances and result announcement of inter-school art competition where best drawings were also showcased. Altogether, 88 child club member students of four different schools actively participated in the program.

World Toilet Day 2017- Special Bulletin Published
On the occasion of World Toilet Day 2017, ENPHO published “World Toilet Day 2017-Special Bulletin”. The bulletin mainly aimed to present the significant impact of the reuse of the wastewater. It also showcased the highlights of research papers related to wastewater.

World Toilet Day (19 November, 2017)
ENPHO opened its doors for the Toilet Expo, Nepal Academy Hall, New Baneshwor to create a platform and sensitize the students and general public about importance of toilet, growing issue of wastewater, and its effect on environment. More than 150 individuals participated in the expo.
Research Grant Awards and Recognitions

In memory of Late Bigyan Acharya, environmentalist and a member of ENPHO, and in memory of Late Raju Shrestha, colleague of ENPHO and a youth activist in the sector of environment and science, ENPHO has been awarding individual or organization remarkably working in Water, Sanitation and Hygiene (WASH) sector in Nepal with “Bigyan Memorial Research Award” and “Raju Memorial Youth Award”.

ENPHO established a “Bhairab Risal Media Fellowship” to support journalist working in print or electronic media to bring up creative and research based writings, news and information in the sector of environmental journalism.

Ms. Anu Radha Baral a student to Tribhuvan University, received the “Bigyan Memorial Research Award”, grant of NRs. 25,000 and a certificate of appreciation for her research on “Study on Utilization of Pine Needles for the Production of Fuel.”

The award was presented to Mr. Gopi Krishna Dhungana, Senior Reporter of Annapurna Post to support his writing on “Environmental impact in Kathmandu Valley before and after 20 years”. The fellowship includes a grant of NRs. 25,000 and a certificate of appreciation.

Mr. Parmeshwor Jha received the “Raju Memorial Youth Award” for his contribution in WASH sector in Saptari where coverage of Sanitation elevated from 20% to 80% in 3 years and also for the continuation and effective WASH improvement during Terai Flood 2017 in Saptari.

Endeavor to Research Initiative

ENPHO signed MOU with Kyoto University, Graduate School of Global Environmental Studies (GSGES), Japan on 19 June, 2017 at ENPHO office. The main purpose of this MOU is to collaborate in research initiatives and enhance knowledge and skills to solve various environmental problems. As a part of this MOU, ENPHO will host a PhD scholar as an intern and will work together with researchers and intern in designing and conducting research activities related to application of urine and treated excreta for sustainable agriculture production.

ENPHO publishes its first Journal of Environment and Public Health

ENPHO published the very first edition of “Journal of Environment and Public Health” that combines research and action to develop, demonstrate and disseminate sustainable and appropriate WASH technologies and approaches. The Journal of Environment and Public Health aims to present and disseminate research knowledge and evidences in the sector of environment, public health and WASH.

This edition of Journal of Environment and Public Health resonates with the theme of World Water Day 2017 – ‘Wastewater’ and highlights the research papers on Wastewater Management, Faecal Sludge Management, City Sanitation Planning, Productive Reuse and Bagamati River Quality. ENPHO intend to give continuity to this publication as a yearly publication, publishing on the occasion of World Water Day.
Self-Initiated Project of ENPHO

ENPHO’s self-initiated project – Supporting Educational and Environmental Development in Schools (SEEDS) Initiative after rigorous WASH assessments and following a feasibility study, selected Shree Srikhandapur Secondary School, Kavre as the first school to implement its project. A MoU was signed between Shree Srikhandapur Secondary School and ENPHO, on 16 June, 2017.

“It was challenging for us to maintain clean, safe and healthy environment at the school premises due to insufficient school funds. With the support of ENPHO and Impact Marathon Series, school environment in terms of sanitation and hygiene has been improved. I am extremely delighted to see my school and students practicing safe and healthy WASH habits,” said Mr. Jaya Ram Shrestha, Principal.

The SEEDS Initiative focuses on the WASH facilities and ultimately developing the selected schools into an exemplary models via both hardware and software interventions under the school-lead paradigm. Till date, ENPHO has provided the following hardware and software interventions to develop the school’s WASH status.

Hardware Intervention

- Urinal Toilet Improvement
- Construction of Drinking Water Station
- Construction of Burning Chamber
- Construction of Hand Washing Station
- Roofing Work
- Library Room and Science Lab
- Construction of Table Tennis Board
- Computer Lab
- Boring with Tank
The overarching idea of the SEEDS Initiative is to ensure facilities for integrated WASH, and to advocate for adequate and accurate knowledge about WASH and to conduct activities for the overall improvement of the environment and productivity of the selected schools, and ultimately the surrounding communities.

**Environment and Public Health Organization**

110/25 Adarsa Marg – 1, Thapagaon, Kathmandu, Nepal  
+ 977 - 1 - 4468641, 4467151  

[enpho@enpho.org](mailto:enpho@enpho.org)  
[www.enpho.org](http://www.enpho.org)

**Editorial Team**

Mr. Bipin Dangol  
Ms. Lasata Manandhar  
Ms. Rosy Singh  
Ms. Anita Bhuju