Right after successful 1st & 2nd lot of vaccination program against corona virus and steadily recovering economic growth when everything seemed just fine, neighboring country India is devastated with the 2nd wave of deadly virus. To no surprise, Nepal had to have the domino effect with its people returning from India. Nepal now is facing its own worst second phase of COVID-19 effects. The muted virus of second wave is believed to be more contagious and deadly which is well backed up by the collected data that shows death tolls being higher than the previous wave. In spite of all these harsh situations NRCS is relentlessly working in the frontline to fight against COVID-19 and be supporting hand to the authorities.

NRCs in partnership with IFRC is implementing a national emergency WASH capacity development project in Nepal with funding from the Australian and Austrian Red Cross. The 3-years program (1.1.2019 to 31.12.2021) aims to “Strengthen the WASH capacity, readiness and resilience of the NRCS to respond to local disasters”. Following the global trends for Cash and Voucher based assistance (CVA) an element of pre-crisis market assessment (PCMA) was included in the project to contribute to informed decision making in WASH response mechanisms. This will prepare NRCS for emergencies, by providing thorough and regularly updated market systems maps available for key WASH markets in the most disaster-prone regions that could be rapidly adapted to crisis situations to serve as a basis for professional response options analysis. Furthermore, understanding and supporting markets through programming based on market assessment and analysis was identified by the Austrian Red Cross as a topic of strategic interest, because of a respective skill gap in the RCRC movement generally and for WASH in particular. Because it visualizes complex systems, it is also considered as an ideal entry point for raising awareness about the complexities of market-based approaches, to promote internal capacity development to address the skill gap. Consequently, NRCS and AutRC used the opportunity provided by the NRCS project for developing its market assessment capacities.

NRCS conducted pre-crisis market assessments in four districts namely Parsa, Rautahat, Mahottari and Saptari of Province 2 in Nepal. A 3-days national workshop was organized at headquarter level to conceptualize the WASH PCMA approach in NRCS and have a common understanding among the team members conducting the assessment. 2-days of the workshop focused on the concept of market analysis, market tools, critical market selection and analyzing market data and the third day of the workshop focused on selecting tools and approaches for data collection, key analytical questions and finalizing tools and approaches for data collection.

After the national workshop, the teams were deployed to four districts to conduct the assessment. Teams were involved in analyzing the market chain, market actors as well as other stakeholders who are directly or indirectly involved in the market system. NRCS now proudly stands tall to be the first and only organization within country to conduct PCMA in WASH commodities. PCMA will now be further institutionalized as one of the primary tools for the preparedness and response mechanism to be commenced by NRCS.

COVID-19 Situation Overview
(as of 4 May 2021)

<table>
<thead>
<tr>
<th>Description</th>
<th>Nepal</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td># of confirmed cases</td>
<td>343,418</td>
<td>153,551,099</td>
</tr>
<tr>
<td># of patients recovered</td>
<td>286,015</td>
<td>90,255,904</td>
</tr>
<tr>
<td># of death</td>
<td>3,362</td>
<td>3,213,573</td>
</tr>
<tr>
<td># of people in isolation</td>
<td>54,041</td>
<td>19,352,297</td>
</tr>
<tr>
<td># of countries affected</td>
<td>192</td>
<td></td>
</tr>
</tbody>
</table>

**NRCS approach**

**Bio-digester project: First trial in Nepal**

Nepal Red Cross Society in support of the International Federation of Red Cross and Red Crescent Societies (IFRC) and Bill and Melinda Gates Foundation, for the very first time, has introduced an onsite fecal sludge management technology called **Bio-digester** that can be used at the household level, intending to provide a plausible solution to address the sanitation gap in Nepal. The inoculum (groups of bacteria) for the bio-digester technology has been in use for over two decades by the Indian Army with great success over a wide variety of environmental conditions and contexts.

The Nepal earthquakes (of 25 April and 12 May) have rendered a significant number of houses without onsite sanitation thus has been chosen to try and address the need for onsite sludge management in urban and semi-urban contexts. Additionally, due to the wide range of temperatures experienced in Nepal, it has been deemed a good location to test how the inoculum performs given the claims by the DRDO (Department of Research and Development Organization). Therefore the plan was to use the opportunity to add the inoculum to targeted septic tanks of 8 earthquake-affected families following an adaptation of the existing design as part of the recovery. Simple Engineering is required to allow anaerobic conditions for the bacteria to survive and consume fecal matter resulting in a negligible buildup of any solids residue that is almost pathogens free, which was measured about 99%. Effluent that is odor and pathogens-free are safe to the environment. Bio-tanks (septic tank) were constructed as per approved design by DRDO for the household. The design was based on brick masonry and plaster. With the technical orientation and mobilization of local masons, the construction was completed with close technical monitoring from NRCS engineer. For the increment of quality of effluent water, reed beds (aquatic plants and filtration media) were constructed adjacent to bio-tanks. Lab testes were carried out in various time intervals along trial phase to check the effluent quality to verify if it meets the claim made by DRDO and Nepal standard as well. After analyzing the first phase of testing of four households, the lab report of effluent was within Nepal government standards in general. Furthermore, 2nd phase of testing has been completed and the results showed improvement in quality of effluent than the first phase but still did not meet the standards claimed by DRDO yet.

Concluding the technological trial, the continuation of the test with closer monitoring and localized adoption is required to check the claimed result by DRDO for further assurance. However, importing inoculum is a very tedious and lengthy process, it is advisable to seek for local licensing process which will make it easily available for all kinds of users/institutions in Nepal for the future use.

**Hygiene promotion in emergencies Training of Trainers’ (ToT)**

It is important to include an effective hygiene promotion (HP) program as part of all WASH interventions in an emergency response. HP activities encourage awareness of key public health risks among the affected population and are enabled to adopt safe hygiene practices and make the best use of WASH facilities and services (including their operation and maintenance). Nepal Red Cross Society, unlike many organizations, is in a unique position of having community-based staff and volunteers and is well-placed to work with communities, which is essential in rolling out HP initiatives. However, experience has shown that during an emergency response the approach generally focuses on ‘delivering’ HP in the form of giving messages. The new *WASH guidelines for hygiene promotion in emergency operations* assist Red Cross staff and volunteers to work systematically, working through all the important steps for planning, implementing and monitoring HP, starting with understanding the problem, the barriers and motivators for behavior change—with the community involved at all stages—listening and working with the affected community, ensuring the response is effective and appropriate to the needs. Although every situation is different, this approach, with a clear pathway, assists with quality assurance, linking with agreed standards, assuring effective implementation, with monitoring and training appropriate to the needs. NRCS for the very first time organized a specific training on hygiene promotion from 22–25 March 2021. With a need to deploy specific profile personnel during any emergency, aligning with the regional Hygiene Promotion training, NRCS has commenced the training. The training was a mixture of theoretical sessions and practical breakouts on eight steps of hygiene promotion namely (i) **identifying the problem** (ii) **identifying the target group** (iii) **Analyzing barriers and motivators for hygiene behavior** (iv) **Formulating hygiene behavior objective** (v) **Planning** (vi) **Implementation** (vii) **Monitoring and evaluation** (viii) **Review, re-adjust**. A self-evaluation survey of sub-competencies areas under hygiene promotion of the IFRC WASH Competency Framework was adopted in this training.

The participants have been evaluated not only on their technical abilities but also their soft skills such as leadership, management, teamwork, leadership, etc. demonstrated throughout the training. This evaluation process determined which participants are ready for deployments during local disasters, and who are not, requiring more experience or training to further develop their skills.

April 2021 (Published by: Nepal Red Cross Society, National Headquarters, Red Cross Marg, Kalimati)
Nepal Red Cross Society (NRCS) in Action

FGD (women group) during PCMA field assessment (PC: Dikendra Pokharel, NRCS, HQs)

Awareness message being disseminated through mobile KIOSK loudspeaker (PC: NRCS, Dang)

Proper handwashing demonstration session to community children (PC: Bhakta BK, Jhapa)

Sindhuli recovery WASH project being completed (constructed FRVT) (PC: Birendra Shahi, NRCS, HQ)

NRCS volunteer explaining about vaccine against COVID-19 to elderly citizen (PC: NRCS, Bhaktapur)

Caretaker and Plumbing hands on training (PC: NRCS, Palpa)

Ferrocement Tank being constructed in Tinau RM, Palpa (PC: Krishna Prasad Subedi, NRCS, HQs)
Award for cleanest house

Milan Pun, who is a farmer by occupation but after he received mason training from NRCS, he enjoyed the training and then after decided to leave his old occupation and start a new one as a skilled mason. He had also participated in all health and hygiene awareness classes conducted by the local motivator in his community. After active participation in awareness classes, he and his family started to clean his house and its surroundings daily, as a result of which, during hygiene campaign, all the community people agreed to award Milan puns' house as the cleanest house of the community. After being awarded with the cleanest house in the community his family was very happy and were more energized to continue the safe hygiene and sanitation practices. He even committed to raise awareness of other community people. Soon after community people saw the reward behind safe hygiene and sanitation behavior now all his neighbors are practicing the same.

My gratitude to NRCS

COVID-19 with its second wave of infection had created a great threat in Nepal in recent times. In this scenario, NRCS along with Vajani Municipality ward no.-6 have been tackling this epidemic situation. UAT (Unit Action Team) members were formed by NRCS during COVID-19 pandemic times and that team was busy motivating India returnees to stay in home isolation or to stay in quarantine centers if they feel any sort of symptoms. UAT have been disseminating awareness campaigns about SMS (social distance, using of mask and handwashing with soap) in the communities with the help of which community people are now more aware on how to be safe from corona crisis. With great effort from UAT and local government, ward no.-6 of Vajani Municipality had reported only 6 COVID-19 positive cases of which all were recovered.

Now, UAT members are busy raising awareness in the community people by removing negative rumors about vaccines. UAT members further assisted old age people above 65 years by bringing them to the vaccination center. I would like to thank NRCS and its volunteers for the relentless support to make our ward less vulnerable.

Upcoming/participated event

- PCMA national workshop on 29-31st March, 2021
- PCMA field assessment on 1-8th April, 2021
- PCMA workshop on 9-10th April, 2021
- NRCS and IFRC review meeting on 13th April, 2021
- PCMA de-briefing on 23rd April, 2021
- WASH literature club meeting on 23rd April, 2021
- RCRC menstrual hygiene webinar on 28th April, 2021
- Two hybrid lift water supply system handover on 26th and 28th April, 2021

Contact Detail
Sagar Shrestha, Director, Community Development Department
email: sagar.shrestha@nrcs.org

Amar Mani Poudel, Deputy Director, Community Development Department
email: amar.poudel@nrcs.org

Suvechhya Manandhar, PMER Coordinator, Community Development Department, WASH Division, email: suvechhya.manandhar@nrcs.org

Contributors
Kiran K. Acharya (WASH Engineer), Sirjana Devkota (PMER Officer), Birendra Shahi (WASH Coordinator), Shashiram Pun Magar (Motivator, Dailekh), Community Development Department, Disaster Management Department, Health Department, Junior/Youth Department and Humanitarian Values and Communication Department