

**Conference  
On  
Rainwater Harvesting for Livelihood, Urban Resilience and Ecosystem  
Kathmandu, Nepal  
28<sup>th</sup> July 2019**

**Background**

Globally, water resource is unequally distributed as a result 97.5% of the water on earth is marine water (salt water) and the rest is fresh water. Out of 2.5%, 1.72 % of water is ice cape of southern & Northern Hemisphere, 0.74 % of water is ground water and only 0.04% is accessible surface water. Due to the limited amount of water and unequal distribution of water resource, people are facing severe water scarcity. The water scarcity condition is further worsened by the haphazard settlement, increasing population, direct discharge of domestic and industrial effluents into the water bodies, and climate change.



Today, approximately 1.3% of the world's population uses rainwater as primary source for meeting their domestic purposes. In developing countries, the technology plays pivotal role in meeting rural population water demand where approximately 2.4% of the rural households rely on the rainwater harvesting technology. Rainwater collection has become significantly more important as a source for domestic water supply since 1990. The technology became famous among the settlement, especially in those areas where people are facing water shortage, and more than 89% of the household relied on it in 2010. Rain water harvesting (RWH) was developed in ancient civilizations, especially in Asia and Africa to meet their water demand. The technology is still adopted by many countries. It is a technology for the collection and storage of rainwater from rooftops, the land surface or rock catchments using simple techniques such as jars or more complex as underground check-dams. RWH is the simplest and economically feasible methods of self-supply of water for households.

Besides domestic use, advocacy for rainwater harvesting has fuelled to argue for improving the health of watersheds through retention and slowing down the run-off of water to encourage water restoration of aquifers which gradually improve the water supply system. Practicing RWH not only fulfills present water demand but also could ensure water security for future generations.

Rainwater management is critical in Nepal. Monsoons will bring rain and will contribute to replenishing aquifers. To retain sufficient water for use during the dry season, enhanced infiltration, bunding and restoration of pokhari's is necessary to ensure that water is slowed down in the landscape. The cities in the Kathmandu Valley will continue to face water shortages. More efficient water use at household level, reduction or non-revenue water, storage of rainwater in ponds and in domestic rainwater systems, combined with replenishing of aquifers by channeling excess rainwater through existing wells will help raise the water security in the urban environment and contributes to disaster risk reduction.

Despite being one of the water richest countries in the world, Nepal has been suffering from shortage of water from long time ago. In recent years, the severity of water shortage became rampant in Nepal, especially in Mid-hills Nepal. In Mid-hills spring sources have dried up and the problems of water shortage became critical. Due to climate change and other anthropogenic activities water discharge is lessened in the existing springs. The perennial spring becomes seasonal and seasonal spring has dried up. Majority of the settlement are scattered and live far

away from water sources. In such, situation, rain water harvesting technology could play pivotal role in meeting the water demand for the villagers. Collection of water in the RWH jar can improve the infiltration rate that consequently helps in recharge system of the groundwater.

The severity of water shortage is very high in Mid-hill region of Nepal. In some areas, villagers have to travel 4-5 hours to fetch a 20 liter water jar. In other words, the water scarcity increases women drudgery as women are responsible for household chores in rural areas. In some regions, villagers have to buy spring source from the land owner. In such scenario, marginalized and poor communities are severely affected and deprive from their basic water user rights.

Therefore, it is proposed to organize a conference on Rainwater Harvesting that intends to share innovations, knowledge and experiences about Rainwater Harvesting and utilizations.

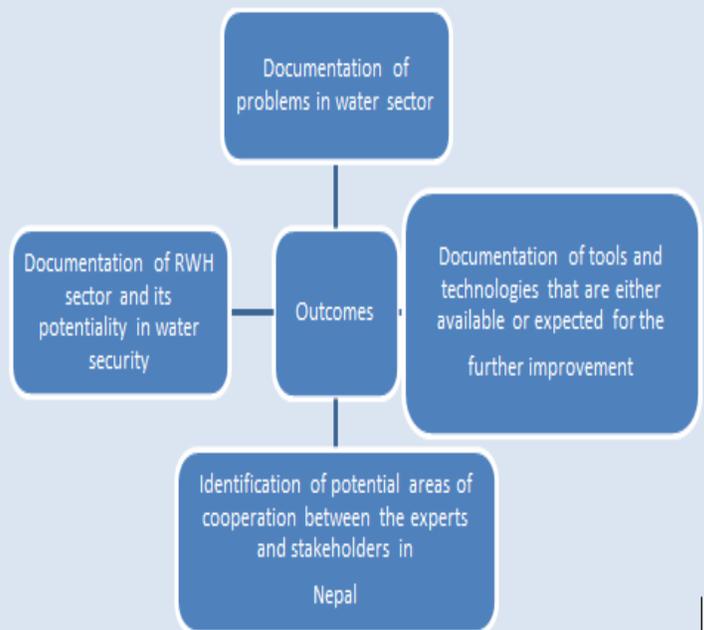
### Objectives

To bring together professionals, academicians, researchers, entrepreneurs, government and non-government institutions to discuss and deliberated on opportunities and strategies involved in RWH

To provide interdisciplinary platform to exchange and share experiences, research, knowledge and technologies regarding Rain Water Harvesting system

To provide an opportunity to have very interactive and discussion based sessions so that the attending participants could get the opportunity to share the knowledge and foster partnership, and outline recommendation to policy makers to address water related issues and its possible solutions.

### Expected Outcomes



### Organizers

Department of Water Supply and Sewerage Management and Smart WASH Solutions will jointly organize this conference in collaboration and support of other organizations.

## Themes

Papers are invited to submit in the following themes:

- Government Policy and Institutions
- Technology, Innovation, Entrepreneurship in Water Management
- Ecosystem/watershed management through RWH
- Role of Local Government in Rainwater Harvesting Promotion
- Financing on Rain Water Harvesting

## Conferees Organizing

**For successful completion of the conference following contribution is expected:**

**Organizer** NRs. 1,00,000 ( Registration for 6 participants will be waived)

**Co-organizer** NRs. 50,000 (Registration for 4 participant will be waived)

**Supporter** NRs. 25,000 (Registration for 2 participants will be waived.)

## Registration fee

<b>Participation</b>	<b>Fee</b>
<b>Institutional</b>	NRs. 7,000
<b>Individual</b>	NRs. 3,500
<b>Students</b>	NRs. 1,500
<b>Stall Exhibition</b>	NRs. 10,000

## Exhibition Stall:

There will be an exhibition. Interested companies are requested to exhibit their products and services in exhibition at the conference, please contact Smart WASH Solutions office for details.

## Key Dates

**Process**

**Submission Deadline**

<b>Abstract Submission</b>	April 14 – May 14, 2019
<b>Notification of Acceptance/Rejection</b>	May 21, 2019
<b>Manuscript (Full Paper) submission</b>	June 13, 2019
<b>Early Bird Registration</b>	July 1, 2019

## Duration, Date & Venue

Conference will be held on 28<sup>th</sup> July 2018 in Kathmandu.

Venue : Yellow Pagoda Hotel. Kantipath

Time : 8:30 AM -18:00 PM

## Organizing Committee

It is formed in chairmanship of Er. Ramdeep Sah, Chairman of Smart WASH Solutions (SWS) with Department of water Supply and Sewerage Management, (DWSSM) Youth Alliance for Environment (YAE), SEWA Nepal, Small Earth Nepal (SEN), Smart Paani, Kantipur

Engineering College (KEC), Institute of Engineering (IOE), Central Department of Environmental Science (CDES), WaterAid, Rooster Logic, Nepal Water Conservation Foundation (NWCF), Society of Public Health Engineers' Nepal (SOPHEN), Kathmandu Valley Water Supply Management Board (KVWSMB) and other Government organizations and academic institutions.

### **Technical Committee**

It comprises of five members namely:

1. Dr. Guna Nidhi Paudyal - Chariman
2. Dr. Anup Gurung - Co-chairman
3. Iswar Man Amatya - Member
4. Raja Ram Pote - Member
5. Hari Prasad Sharma - Member

### **Management Committee**

It comprises organizer and co-organizers.

### **For further information, please contact:**

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