

Rejuvenating Traditional
Stone Spouts at _____
KIRTIPUR & GODAWARI



ABOUT THE ORGANIZATIONS



Kirtipur Municipality is the oldest and typical Newar settlement of the Kathmandu Valley and spreads over an area of 14.76 sq.km. The name Kirtipur comes from "Kirti" (Glory) and "pur" (city). It is also said that once a queen named 'Kirti' ruled over this place so, it might have been named after same queen since 'pur' means city, and it states Kirtipur means city of 'Kirti'. In its native language, it is called as "Kipu" or "Kapyu" carrying meaning of "famed town".



Godawari municipality spreads over an area of 96.11 sq.km and is famous for its botanical garden. The municipality is rich in water resources and home to the Godawari River, a tributary of the Bagmati River.



The Bermen Overseas Research and Development Associations (BORDA) is a German non-profit organization, which works for poverty alleviation, sustainable protection of natural resources and strengthening of social structures.



The Federal Ministry for Economic Co-operation and Development provides monetary and knowledge support by mutually cooperating with developing countries to create a more sustainable urban living space



Established in 1990, Environment and Public Health Organization (ENPHO) is a service oriented, scientific, national, non-governmental organization which is constantly striving towards sustainable community development by developing, demonstrating, and disseminating eco-friendly technologies and approaches on water, sanitation, and hygiene.

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I NTRODUCTION

"Water is linked with religion. Offering adequate water to thirsty people is regarded as a virtue and taking money to offer the water is a sin," says Dr. Saphalya Amatya, a Nepali archaeologist.

Stone spouts are beautifully carved stone elements, in the shape of a crocodile head (considered as a holy water animal - the carrier of the Goddess Ganga) or serpent head, installed in the front or side walls of sunken and stepped platforms for the purpose of channelling water for human use. Stone spouts are the unique outcome of excellence of ancient Nepalese engineering and architecture. The stone spouts with animal engraved symbolizes the connection of different animals with the rain and the abundance of water. In ancient Nepal, people worship the source of water and managed them according to the situations and circumstances.

Urbanizations and emerging cities have been hindering directly to the century old systems of water supply. The traditional stone spouts that once served as the only system of the water supply are in the verge of extinction. These beautiful monuments of stone spouts are declining inside the valley, whereas the priority should be to preserve these historical assets. With the increased encroachment into this system, and with the scarcity of the water inside the valley, there is a movement going on to revive the traditional system of water management.

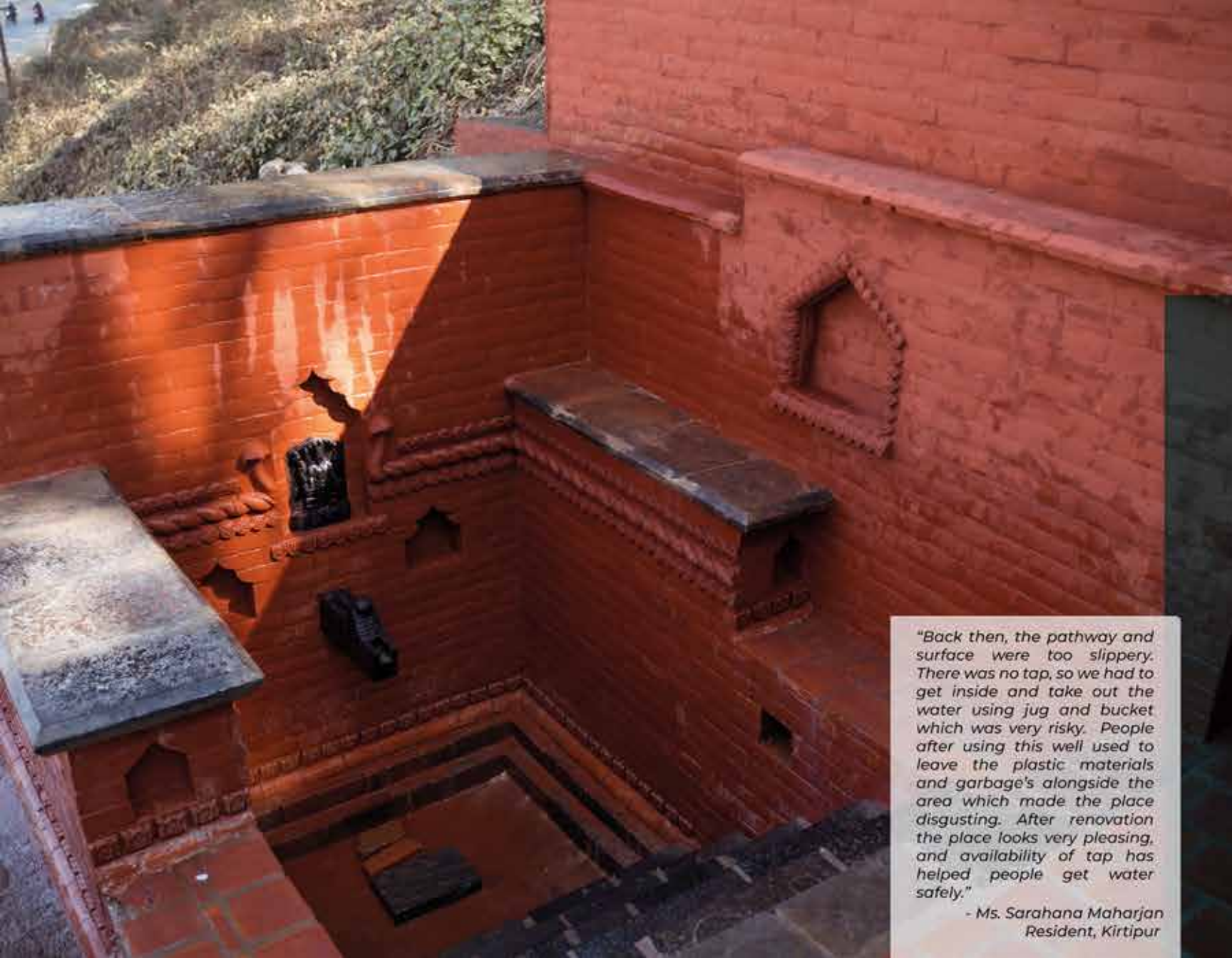
Stone spouts which is a symbol of social, historical, and cultural monument is degrading and disappearing everywhere, unless we start to conserve it from now, we will lose it forever.

Hence, the 'Integrated urban water management at the centre of municipal public services' project with the aim to provide improved municipal water and sanitation services contributing further by improving living condition and reducing health and environmental risks associated with adequate water supply and sanitation have taken the initiative to renovate such spouts that are in the blink of extinction.

The renovation of stone spouts at the project municipalities were well acknowledged by the local communities during the project year 2020 AD. Hence, until today, a total of eight big and small scaled stone spouts have been revived at Kirtipur and Godawari Municipality. Holistic spouts rejuvenation efforts have considered social and cultural aspects along with the users- friendly features for its efficient use.

This booklet aims to bring together the rejuvenation efforts made for the traditional spouts and provide an emphasis on conserving the ancient water systems not only to revive the face of the stone spouts, but also to secure the water sources for the urban people of the community. Hence, the books also can act as a trigger to revive the traditional spouts at other adjacent municipalities, encouraging the readers with the motivation to take over and ponder the actions of traditional water sources conservation. The book is aimed for anyone who might pick up the book for the light read.

We hope you enjoy reading this book and we look forward to hearing your opinion on its presentation. Your feedback will help us learn and use it to develop more efficient ways of disseminating our works in the future.



"Back then, the pathway and surface were too slippery. There was no tap, so we had to get inside and take out the water using jug and bucket which was very risky. People after using this well used to leave the plastic materials and garbage's alongside the area which made the place disgusting. After renovation the place looks very pleasing, and availability of tap has helped people get water safely."

*- Ms. Sarahana Maharjan
Resident, Kirtipur*

AJUDEGA KUWA

- ▶ Location: Aaju Dya Gaa, Ward No-2, Kirtipur Municipality
- ▶ No. of Users: 800
- ▶ Established Year: More than 200 years old
- ▶ Restoration Date: 2020 AD
- ▶ Budget for Restoration: NRs. 6,40,000/- (Exact 640,787.14)
- ▶ Funding Agency: BORDA South Asia

BEFORE



AFTER



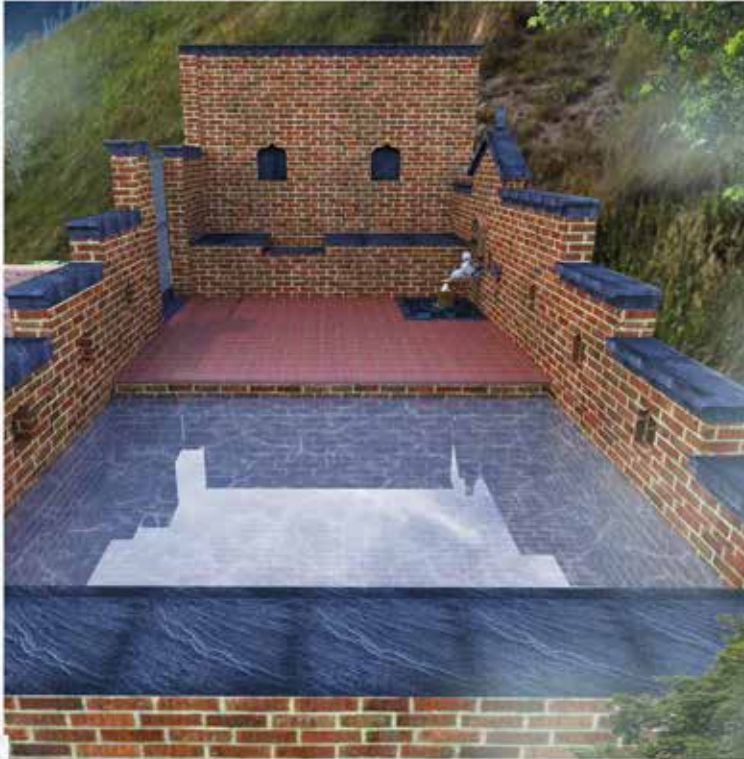
Aaju Dya Gaa(Kuwa), is located below the historical Bhag Bhairab Temple, which has striking religious and cultural importance in the city. The water from the well (Kuwa) is used for the purification of Bhag Bhairab Idol every year during the Bhadra Sakranti, for the local annual festival. Local residents believe that the well (Kuwa) was dug by Aaju Degha (God Bagh Bhairab) himself. Migrants from other cities, also have coined it with different name as "Jungle ko Kuwa" meaning, dug well near the forest.

Most of residents of Kirtipur and people from neighboring villages use this well. More than 150 households, living in the rented house, use its water for various purposes like drinking, washing dishes, laundry washing, bathing, and even to irrigate nearby fields. Locals believe this kuwa has historical and cultural value so it must be preserved.

But apart from a simple foot trail, there was no proper stairway to the Kuwa, which has caused many incidents in the past. Assessing the need, ENPHO during the reconstruction, renovated the Kuwa, constructed a proper stairway, and installed a stone spout at the premises. With this, the renovation of the Kuwa into a stone spout in a traditional way has helped the place look attractive and has added value to it.



BAHARKHE HITI



This stone spout was built by the locals at Licchavi period for daily use and irrigation purposes. This stone spout is seasonal where water flows in rainy season during summer and hence has been named after its character as Barkha Hiti.

During those times, there were not enough water resources for drinking and irrigation, so the locals built this stone spout having a small well and a collection pond that catches water from the spout. Therefore, locals use the water from this spout for drinking and daily household chores. And the water from the collection pond is used for irrigation. According to the local people, water is regularly being used by around 50 households and the migrants residing in the rented houses in this area. Now, as the population is gradually increasing, usage of this stone spout has also increased.

During those times, there were not enough water resources for drinking and irrigation, so the locals built this stone spout having a small well and a collection pond that catches water from the spout. Therefore, locals use the water from this spout for drinking and daily household chores. And the water from the collection pond is used for irrigation. According to the local people, water is regularly being used by around 50 households and the migrants residing in the rented houses in this area. Now, as the population is gradually increasing, usage of this stone spout has also increased.

ENPHO with the renovation of the stone spout also reconstructed the existing Kuwa and the collection pond. To assist people, and fetch water easily, the premises is designed and constructed in a user-friendly way giving it a traditional look. As the place is now clean and organized, local residents will spend more time at the premises.



- ▶ Location: Majaau Degha Tole, ward No-09, Kirtipur Municipality
- ▶ No. of Users: 450
- ▶ Established Year: 400-700 AD, Lichhavi Period
- ▶ Restoration Date: 2020 AD
- ▶ Budget for Restoration: NRs. 6,82,000/- (Exact 682,688.44)
- ▶ Funding Agency: BORDA South Asia

BEFORE



AFTER



"Everyone used to litter here. The pathway had converted into the landfill. I was delighted to hear plan of rejuvenating the deteriorating Barkhe Hiti. After observing the successful transformation of this Hiti, residents of other wards also wanted to reconstruct their stone spouts."

-Mr. Narayan Shrestha, Resident, Ward no. 9, Kirtipur Municipality





PAKO HITI

It is believed that the spout was built by the farmers with the support of residents, who come there for their agricultural works, and the spout used to be the only source of water to quench the local farmer's thirst during the agricultural seasons. It was restored in 2050 B.S. with the financial assistance of Thecho V.D.C. and the labor donation of the local club.

It is also believed that there used to be 3 more stone spouts around this area and the water from this spout was only used for drinking purposes, and the remaining were used for other purposes.

The water from the spouts has uniform flow/discharge throughout the year. Locals say that water is reaching around 150 households in this area. Currently, the population is gradually increasing in this place so that demand of this spout is also increasing.

Understanding the need, ENPHO developed the detailed design of this stone spout. As per the detailed project report, ENPHO then renovated the stone spout in a traditional design making it more eye-catching.

- ▶ Location: Thecho, Ward No-12, Godawari Municipality
- ▶ No. of Users: 750
- ▶ Established Year: (Before 1800 BS)
- ▶ Restoration Date: 2020 AD (2079 BS)
- ▶ Budget for Restoration: NRs. 6,60,000/- (Exact 660,228.16)
- ▶ Funding Agency: BORDA South Asia

"This spout is hundreds of years older. As the stone spout looked dirty and scary, people were afraid to come to this spout alone. But now after its reconstruction, the place looks very attractive and pleasant. I am happy that this spout is now preserved for at least 30- 40 years."

- Mr. Hera Kaji, Elderly,
Ward no. 12, Godawari Municipality

BEFORE



AFTER







"Before reconstruction, the infrastructure of the stone spout was in a dilapidated state. During the rainy season due to slippery way people had to be carefully while using this spout. I myself have fallen down several times. After the renovation, using this spout has been very convenient and safe. We are grateful to ENPHO for this remarkable work."

- Mr. Dil Deshar, Local Resident,
Ward no. 10, Godawari Municipality

PORINGA HITI

The spout was built by King Bishnu Malla on the southern side, inside the forest of the mystical Bajra Barahi Devi Temple and the community believes that the water flows throughout the year. The stone scripts and evidences available around the temple premises show that the stone spout is also an integral part of the divine adobe of the deity. It was restored in 2050 B.S. by Bajra Barahi Religious Forest Conservation Committee under his Majesty King.

Currently, the local conservation committee are looking after the developmental and conservational works to ensure legacy is persistent for its religious and cultural importance.

According to the locals, even though this spout lies at the outer belt of jungle, is shadowy and far away from the residential area, thus, they believe it to be risky to go alone. As the way to the stone spout was also not good, many incidents of accidents had occurred in past.

Understanding the need, ENPHO provided its technical support for designing and reconstruction of the stone spout. First of all, the pathway reaching to the spout was maintained. Adding to this, a stone spout located near the jungle was renovated in a traditional way to protect the historical values and making it more user friendly for the community.

After the restoration of this spout by ENPHO with the support of BORDA under IUWM Project, it has been easier for users to wash cloths with open place with manageable passage and clean environment.

BEFORE



AFTER



- ▶ **Location:** Bhujura, Ghatye Danda, Ward No-03, Godawari Municipality
- ▶ **No. of Users:** 2000
- ▶ **Established Year:** More than 100 Years Old (Before 1979 BS)
- ▶ **Restoration Date:** 2020 AD
- ▶ **Budget for Restoration:** NRs. 5,00,000/-
- ▶ **Funding Agency:** Godawari Municipality





S HERAPHATA HITI

The stone spout was built by the local people and neighboring villagers. Water flows continuously for 12 months in this spout. It was restored in 2070 B.S. with the financial assistance of ward office and the residents. After that, it was restored in 2077 B.S. under IUWM project run by ENPHO with the help of BORDA.

The area is observing increased settlement and even though with water line system exists in this area, sufficient water is unavailable. Hence, the local residents are dependent on this spout for drinking and other water uses.

Mr. Durga Shrestha, an 88-year-old local resident recalled that it used to be there during his childhood. So, no wonder the existing stone spout has been there for ages. Residents report that, after the renovation works, it has been easier to fetch water, with proper stairway, and the surrounding has been cleaner and spacious than earlier.

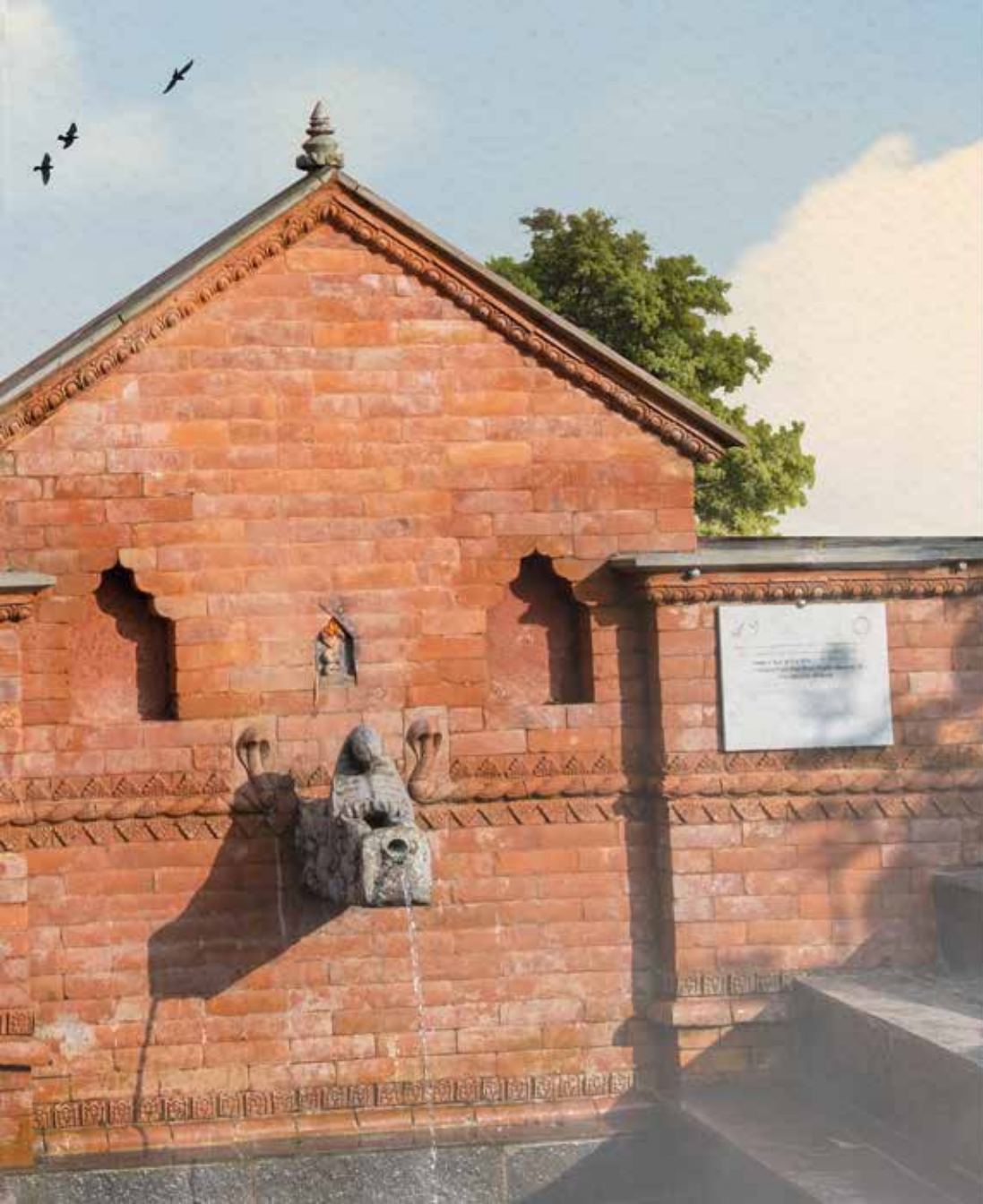
The community people along with the neighboring villagers also used to fetch water from this spout, nowadays more than 35 households are regularly fetching water from the stone spout, and the practice is increasing.

As the stone spout was located in sloppy area, the way to the spout was steep and chaotic. People had to go through the risky way to fetch water from the spout.

ENPHO after the assessment, prepared a detailed design, carried out the construction and technical supervision throughout the process of reconstruction of the spout. With this, the two pathways to reach out to the stone spout were also constructed which made this spout user-friendly and convenient. The spout was designed and renovated in a traditional way which made the ambience more pleasing.

"A unique ancient technology along with a long history and traditional values make these stone spouts special. These traditional stone spouts are one of the important assets which can help in lifting the tourism sector at Wari. Renovation of these spouts has helped in preserving these important entities for more generations."

- Mr. Nil Bhadur Deshar, Ward Chairperson,
Ward no. 11, Godawari Municipality



BEFORE



AFTER



- ▶ Location : Sheraphat, Ward No-11, Godawari Municipality
- ▶ No. of Users: 350
- ▶ Established Year: Before 1990 BS
- ▶ Restoration Date : 2077 BS/ 2020 AD
- ▶ Budget for Restoration:
NRs. 9,84,000/- (Exact 9,84,245.71)
- ▶ Funding Agency: Godawari Municipality



SIMA KO DHARA

According to the locals, the community had identified the source of water, protected it and converted it into a stone spout for daily use. There used to be only a single stone spout before and in the fiscal year 2052/053 BS, they built the temple and park nearby the spout and added a few more spouts as their local need.

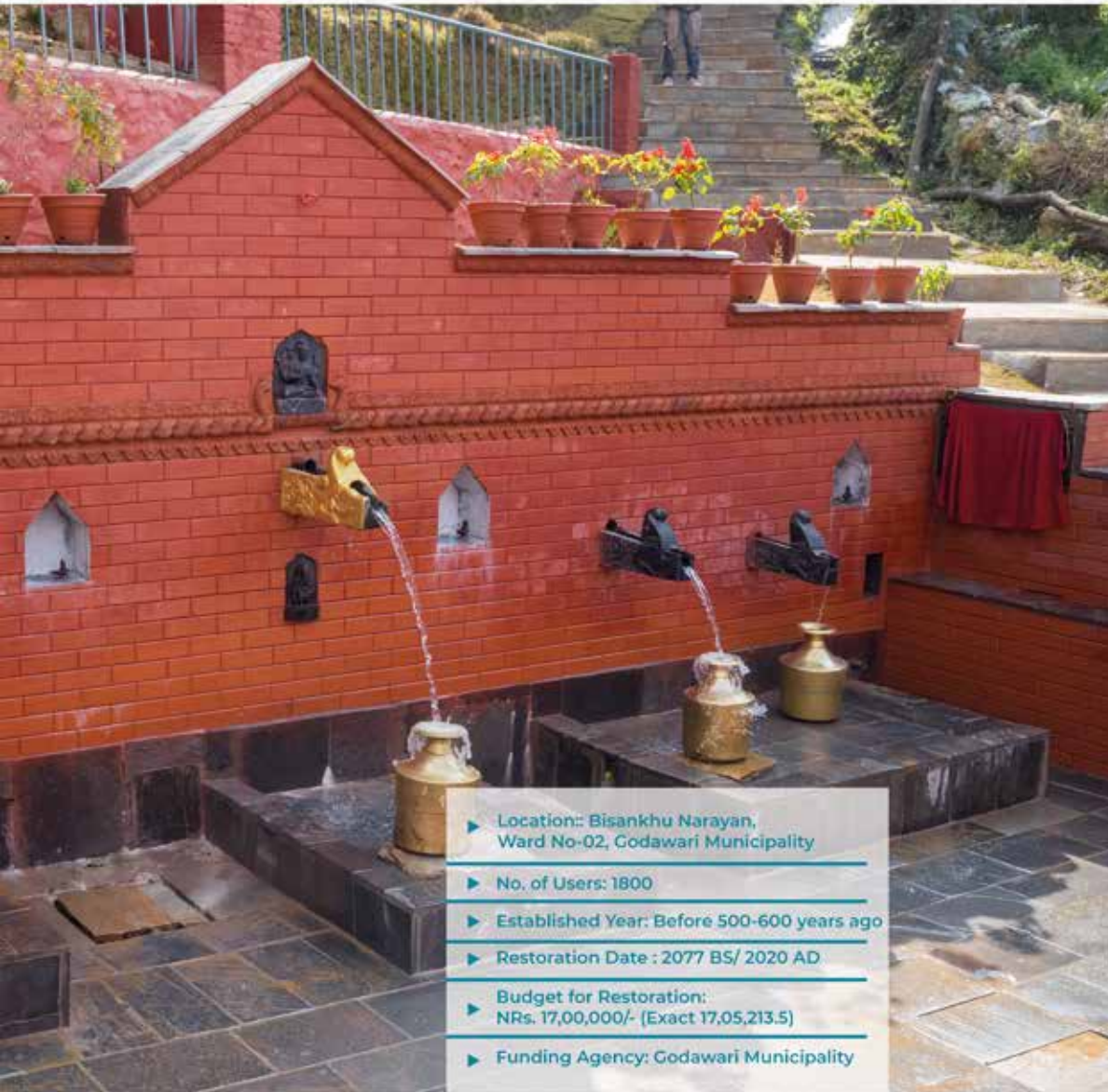
Locals say that this spout has been in use since ancient times and is believed to be used by more than 12/13 generations. Currently, around 250 households from the community and neighboring villages use this spout. This spout is different from other spouts because the water flows increase during dry season compared to the monsoon season and its value is added with the presence of the temple and park attached to the spout premises.

Even though the community now has the pipeline system, contrastingly they are using the water for secondary purposes and are using the spout water for drinking. People from nearby hotels and restaurants also collect water from this spout. Other institutions and organizations are also using this spout water for bathing and washing their clothes.

ENPHO under the IUWM project carried out renovation of the stone spout making it more vibrant and user-friendly. Besides the renovation of stone spout premises, features like sitting provision while waiting for turns, raised platform for filling water, washing platforms, clear, wide and easy entry and exit, so avoid congestion and collision, and aesthetically attractive pathways were also improved. And to make the place look more attractive, a small park was also constructed near to stone spout so that people can relax on the premises. Additionally, non-slippering floor and disable friendly features like handrails ramp have also been added during the renovation. Apart from the stone spout renovation, a single seat toilet facility, with an eco-septic tank was also installed around the premises.

After the recent restoration, passengers have started noticing the grandeur of the beautiful stone with the traditional look.





- ▶ Location: Bisankhu Narayan, Ward No-02, Godawari Municipality
- ▶ No. of Users: 1800
- ▶ Established Year: Before 500-600 years ago
- ▶ Restoration Date : 2077 BS/ 2020 AD
- ▶ Budget for Restoration: NRs. 17,00,000/- (Exact 17,05,213.5)
- ▶ Funding Agency: Godawari Municipality

"Another alternative to get water is pipe lined drinking water. As we have found dead insects and frogs in the water taps and pipeline, we prefer using this stone spout and have been using this for many years. Due to slippery pathway and poor infrastructure, I have fallen several times while fetching water. Renovation of this stone spout has made task of fetching water very safe and convenient."

- Ms. Gauri Silwal, Resident, Ward no. 2, Godawari Municipality







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