

ENVIRONMENTAL
SUSTAINABILITY



WATER, WATER EVERYWHERE, BUT NOT A DROP TO DRINK

Budhiya Mudiary, a housewife who lives in Ward no. 1 of Bhaudaha VDC, Morang, doesn't know her age. She thinks she is about 20, but she has a son of 14 years. She also has two daughters aged seven and five years. She is not even sure when her marriage took place.

Her parents' home was in Inaruwa, Sunsari district, which had no problem with water. They had a well and two tube wells. But when she came to this village after getting married, the house did not have its own tube well. There was one public tube well, built by the Nepal Red Cross Society, which was shared by six or seven households. "I felt very awkward going to the public tube well the very next morning of our marriage to collect water," she said.

After a few years of marriage, the tube well stopped functioning. They had to depend on a private tube well next to her house. Her husband never fetches water. Neither do her children. Fetching water is her sole responsibility. She can collect water only after the owner has taken a bath, washed

the kitchen utensils and drawn enough water to meet the household needs. The water from the tube well contains iron because her teeth have turned black, and her clothes turn yellowish after washing. She now uses the water only for washing the kitchen utensils and clothes.

She uses water from another tube well owned by a *Mukhiya* (a village leader) for drinking purposes. This tube well is located about 100 m from her home. Some say the tube well is a public one, but the *Mukhiya*

"There is heavy presence of arsenic in the water but there is no alternative to the tube well water. We hear there are arsenic filters, but none of the organisations have brought them here. And we don't understand how poison mixed with water can be filtered."

Shiva Lal Rana Tharu

Teacher, Kasarol, Ward no. 6, Jhalari VDC, Kanchanpur

claims it is his. Irrespective of who owns the tube well, Budhiya has no option other than to carry 4-5 *gagris* (water vessels) each day. No arsenic test has been conducted in this village.

Budhiya's daughter, Amrita, aged 7, frequently suffers from pneumonia, cough and diarrhoea. She does not know how her daughter catches these diseases.

To cook her meals, she uses dried cow dung and straw as fuel. Since they do not keep their own cattle and land, she along

with her children collect cow dung, leaves and straw in the village and from other public places. She has not heard of the improved smokeless stove. As the cow dung and straw do not burn for a long time, she prepares just rice. Therefore, they have plain rice with cooking oil and salt.

Her husband seems little bothered by the hassles which Budhiya faces while fetching water. Budhiya has repeatedly asked her husband to build a tube well of their own, but it has been postponed time and again. "If we had our own tube well, I would have more time for my children and household chores," she says. "Also there is no latrine in our house; hence, we have to go to the bushes to defecate. We are poor, so we cannot afford to build one."

Added she, "Had the government provided a tube well to the poor like us, our life would have been more comfortable."

KEY MESSAGE

The poor are not able to invest in water and sanitation facilities. As a result, women and children face tremendous trying to cope with these problems. The government and other social organisations should focus their programme and projects on women and children.

SELLING FIREWOOD KEEPS FAMILY GOING

Letang VDC lies 12 km north of Kanepokhari on the East-West Highway. All the inhabitants are migrants from the hill districts of Taplejung, Bhojpur, Sankhuwasabha and Panchthar. The VDC takes its name from Letang Bazaar which has about 2,500 houses. Among them, about 200 houses are involved in selling firewood to the inhabitants of the bazaar for a livelihood. The firewood is brought from the Kharlang community forest, where once a week on Wednesdays, they are allowed to cut wood. There is no other forest nearby.

A few years back, a massive campaign was launched to promote improved smokeless stoves in the village. Many households adopted the stove, but it was soon dismantled as it was inconvenient for large families although it saved considerable amounts of firewood.

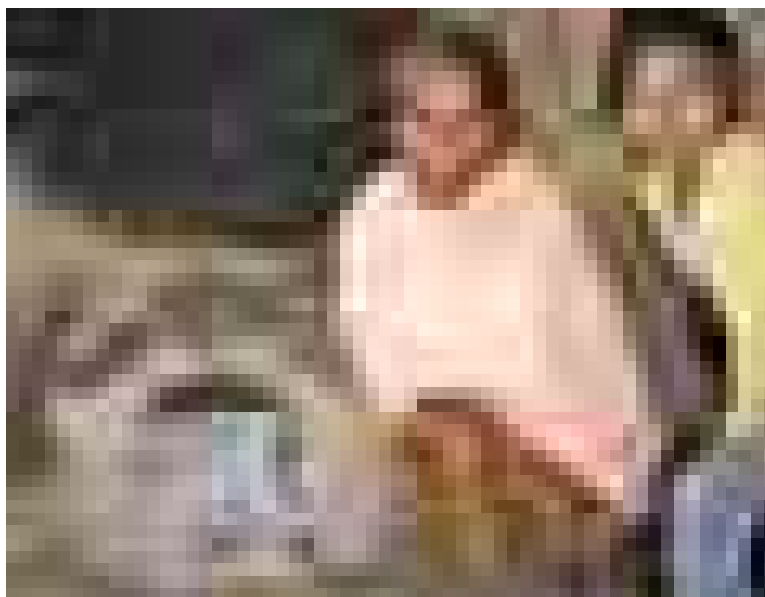
Dil Maya Shrestha is dependent on selling firewood for a livelihood. She is about 50. Her husband died 15 years ago, leaving behind a son and three daughters for her to look after. All of her children, except for

one daughter, are deaf and dumb. A daughter is married while the remaining two work as domestics in others' houses. The son helps Dil Maya at home and works as a labourer in the village.

The Shrestha family had land and a house in the bazaar area. The land was provided by the government for the victims of the flood in 2022 B.S. But after Dil Maya lost her husband, she sold the land to repay the Rs. 20,000 loan taken for the treatment of her husband who had been suffering from ARI. She sold the land for Rs. 60,000 and

“Those who have land have built a toilet, but we have no land and must depend on the public toilet. The municipality is doing nothing for us.”

A local person
Ward no. 19, Hadtali Haat
Rani, Biratnagar municipality, Morang



repaid the loan. Whatever money was left was spent on meeting the daily expenses. The family now lives in a rented thatch house.

Every Wednesday, she can collect two bundles of firewood from the community forest, which fetches about Rs. 100 in the

KEY MESSAGE

Many poor people are dependant on a scarce natural resource like firewood. Their livelihood is at risk in the absence of alternative employment opportunities.

market. Therefore, she can earn about Rs. 400 a month. As about 90 per cent of the inhabitants of Letang Bazaar use firewood for cooking, she has quite a good market, although she cannot collect much firewood. She also collects grass in the community forest, which can be done everyday. But life becomes hard when the community forest is closed for three months from Asar to Bhadra (June-August) each year. "When the forest is closed, I do the dishes and wash clothes for others. I cannot do other hard work," she said.

She also uses firewood to cook. "Earlier, we had kerosene stoves, but when the price went up, we switched to firewood," she said. There is no electricity in the house, and she cannot afford kerosene.

Letang Bazaar consumes a huge amount of locally-made liquor, which requires a lot of firewood to distil. Similarly the bazaar has many hotels that, too, consume a lot of firewood. Although some have introduced liquid petroleum gas to cook their meals, about 90 per cent of the families still use firewood for cooking. The community forest is, thus, under great pressure to supply firewood to the inhabitants.

Says Dil Maya, "If there were other employment opportunities in the village, I would stop selling firewood."

AN ACTIVIST TRIES IMPROVING WATER AND SANITATION

Dinesh Kumar Mahato, 27, is from Nuniya *Tole*, Ward no. 5 of Rangeli VDC. He has passed SLC and is responsible for looking after a family of seven members. His parents are old and cannot work now. They have about 0.7 hectares of land, the produce of which meets the needs of the family for six months only. The remaining six months are hard times for the family.

Given the poor economic condition at home, Dinesh left for Malaysia where he worked for about three years. He returned eight months ago, but all his earnings went into the marriage of the eldest sister and for a gall stone operation of his mother.

In his village of 120 households, Dinesh is the secretary of the water supply and sanitation management committee formed with the support of NEWAH, an NGO helping out with water and sanitation schemes. As he was the only person in the village with SLC, the villagers had appointed him secretary of the committee.

Dinesh's house has a tube well and a latrine. The tube well was built by his

father 10 years ago and the latrine more recently. But he is not content with having these facilities for his family alone. There are only 10 tube wells in the village, but no public ones. So about 10-15 households must fetch water from one private tube well.

“There are more than 100 people in our village who are speech and hearing impaired. The people used to drink water from the Chisang River, and I think this is the reason behind it. After piped water from different sources was supplied in 1986, no one was born with hearing or speech impairments. Every time I gave birth, I feared that my child would be born with faults. I have five sons who are, fortunately, normal. Now no mother has to worry.”

Sunita Adhikary

Sidhartha Line, Ward no. 6, Letang Bazaar
Letang VDC, Morang

As a woman in the village put it, it is very uncomfortable to draw water from a private tube well, but there is no alternative. There were dug wells in the past, but none of them are functioning now. NEWAH is the first agency to have come to the village to support the community.

Children are not allowed to collect water from the tube wells as they tend to splash water around and make the surroundings dirty. Sometimes women quarrel over their turn while staying in a queue. The neighbours are allowed to collect water only after the owner has finished drawing enough water for the household.

“At times, we cannot prepare meals for our children if it takes a long time to fetch water. So they miss school. We also don’t have large vessels to store water for emergency situations,” said a woman from the village.

The water from the tube well water is not very good. It contains iron. The clothes generally turn yellowish when washed in the water. “So we wash our clothes after long intervals to prevent them from turning

yellowish fast,” said Nirmal Devi, Dinesh’s mother.

When water is placed in a pot for about 1-2 hours, red materials are precipitated at the bottom. The villagers think that iron causes stones (gall stone) to form in the stomach. Says Kalpana, a Grade 7 student, “We are sick of the iron in our water. We want to get rid of it.”

Sanitation is equally poor in the village with only 10 per cent of the total households having latrines. The rest of the population defecates on the outskirts of the village. And children defecate in the open in the gullies of the village. “As the people are very poor, they cannot afford to build latrines. Diarrhoea, jaundice, cold and cough are common in the village, especially among children,” says Dinesh.

When there are no latrines, women are the ones who face greater difficulties. Women must go to the village outskirts before the sun rises. The men go after sunrise. While a woman is defecating, and if a man comes along, she will stand pretending she is doing nothing. To defecate, sometimes a woman will have to sit and stand three times.

People in the village are excited that a water and sanitation project has been launched. The poor people will have a public tube well soon from which they will be able to draw water without much inconvenience.

KEY MESSAGE

Access to clean and safe water and sanitation facilities is the basic right of the people. Social activists can play the role of a catalyst to bring changes among the people if an enabling environment can be created through policies and programmes.

SLUM SEEKS BETTER SANITATION

Since the last eight years, Manoj Kumar Chaudhary has been working as a labourer in Biratnagar Jute Mill. His father also used to work in this factory until he died. Manoj is now 32 years old and looks after a family of eight members - wife, mother, sister, four children and himself. The first daughter is eight years old whereas the youngest son is six months old.

The jute mill has provided shelter to the workers on the mill premises in Ward no. 19 of Raniban in Biratnagar. More than 500 compact houses are built in this area. They have been living here for years now since the time of Manoj's grandfather. As the houses were closely built and compact, there was no place for building latrines. Hence, the families used to defecate in the open until a few years back.

It was only in 2000 that the Biratnagar municipality built a public toilet near the settlement. The facility is used by more than 500 households with a population of 3,000. Initially the municipality had a plan to generate bio-gas from the public toilet.

The capacity of the septic tank was very small, so the waste used to overflow and spread to the surroundings. "The pigs and chickens feed on the waste. The place is like hell," says Manoj. During the dry period, there is a foul smell, and in the rainy season, the septic overflows and pours into the yards and even into the kitchens of the households.

The facility has 20 toilets - 10 for men and 10 for women. In the morning, one must

"I have attended a lot of training on sanitation and hygiene conducted by NEWAH. Now I have built a toilet and wash my hands with soap. I also encourage people to do the same to be safe from various diseases like diarrhoea and dysentery."

Urmila Devi Mandal

Vice Chairperson, Users' Committee
Tetrigacchi Tole, Ward no. 4, Rangeli VDC, Morang

queue for about 15-30 minutes. Those who can't wait for their turn will defecate in the open. There is a tube well near the toilet. Neither the municipality nor any other agency has taken the responsibility of repairing and maintaining the toilets. As a result, the toilets are overflowing with excrement all the time, and the whole settlement smells.

Because of the poor sanitation, Manoj's family members often fall sick. "Everyday, someone falls sick. The same is with the other households. Last month, all of my four children had diarrhoea and fever for three days," said Manoj. Cough and diseases of the stomach and skin are other common ailments prevalent in the settlement.

When someone falls sick, it is customary to wait for one or two days to see if the patient will recover. If not, the patient is taken to a nearby drugstore where the drug retailer prescribes some medicines after a check-up. If the drug retailer prescribes

four tablets, Manoj will buy only one. According to him, the drugstore always tries to sell more medicines than necessary.

Manoj earns Rs. 3,000 a month and spends about Rs. 500 on the treatment of his family members. "If I could save the Rs. 500, I could have bought another half bag of rice to feed my family," he says. Manoj understands that these diseases are due to human wastes surrounding their settlement. He is aware that one should wash hands after visiting a toilet. "This morning I washed my hands with soil and water; I always do that. Since we cannot afford soap, every family member in the home washes hands with soil and water," he said.

His family has a private tubewell built a few years ago. Previously, they used to fetch water from a public tubewell which stopped functioning for lack of repairs and maintenance. The depth of his tube well is 45 feet, so he thinks the water is safe for drinking.

Manoj wants to control the flow of human waste flowing from the septic tank, but he is helpless. He thinks that the municipality should take the responsibility of managing the public toilet. He also suggests starting a sanitation and hygiene campaign in the slum so that cleanliness can be maintained.

KEY MESSAGE

It is not important to build public toilets, they must also be regularly maintained. Ownership is important in keeping the slums clean. The municipality should take the responsibility of maintaining cleanliness in such areas by mobilising the local residents and groups.

HOUSEWIFE SWITCHES FROM FIREWOOD TO BIO-GAS

Kalpana Adhikary, 37, hails from Torikhet, Ward no. 14 in Bharatpur municipality. She is a housewife who lives with her husband and two children. The family built a new house in 1998 after splitting from the joint family. They have about 0.7 hectares of land which is sufficient to feed the family round the year.

When she was married, she used to cook with firewood, which was available near the village. With the passage of time, it became difficult to get firewood. She then bought a kerosene stove, which she used for about 10 years.

“When the price of kerosene went up significantly, we gradually switched to stoves that used husks of rice and wood dust that were easily available in the district. The price of rice husks was significantly lower than that of kerosene, but it took a longer time to cook the meal,” she said. “Then came the turn of gas (cylinder) stoves, which we used for a couple of years. But with gas becoming expensive, we were once again forced to change our fuel.”

Her husband is an accountant in a village school. As her children go to school, there is no one to look after the farm and livestock. It was, therefore, difficult for them to have a bio-gas plant although they could afford to build one. They had been planning to keep a few cows since a couple of years and build a bio-gas plant. However, they have only one cow. They

“If I had not installed a bio-gas plant, I would need a bundle of firewood everyday which would cost about Rs. 120. Thus, I save about Rs. 3,600 every month. Previously I had not connected the latrine to the bio-gas plant as elderly members of the family did not like it. Now I have it connected. Every household should connect the latrine to the bio-gas plant. The elderly members have also now realised the resource of the latrine.”

Saraswati Adhikari
Housewife

Torikhet, Ward no. 14, Bharatpur Municipality, Chitwan



then thought of connecting the latrine to the bio-gas plant, which is very common in the village these days. Until a few years ago, most people, especially the old people, did not like the idea of generating bio-gas from human waste, thinking it will emit a foul smell.

“However, since ours is a nuclear family, there is no objection to using bio-gas generated from cattle and human waste,” says Kalpana.

KEY MESSAGE

Bio-gas is a sustainable alternative fuel that can be promoted among the middle class families in the villages. Policies and programmes should also be formulated to promote the technology among the poor.

Kalpana’s calculation shows that the family would need about 10 litres of kerosene a month, whereas a cylinder of gas would last three months. Considering that the price of kerosene is Rs. 50 a litre and that of a cylinder of gas Rs. 1,200, the cost of fuel for one month comes to around Rs. 500.

“But since the prices of these fuels go up almost everyday, I opted for bio-gas,” says Kalpana. It cost about Rs. 23,000 to install the plant; of which Rs. 5,500 was provided as subsidy while the rest was borne by the family. She returned the cylinder to the gas dealer three months back.

“The bio-gas plant generates sufficient gas in summer, but it is likely to be insufficient during the winter. However connecting it to the latrine will help generate the gas necessary for the family,” says Kalpana. The bio-gas plant has saved the family considerable sums of money that went into buying a cylinder of gas, kerosene or rice husks.

Her husband, Mohan, sees multiple benefits in using a bio-gas plant as compared to firewood. “Bio-gas is the only alternative in the absence of firewood,” says he. “It is easy to cook and also easy to clean the pots as it doesn’t leave black soot at the bottom. Also there is no smoke which is hazardous to health. It is particularly ideal for hot, tropical areas like our village.”

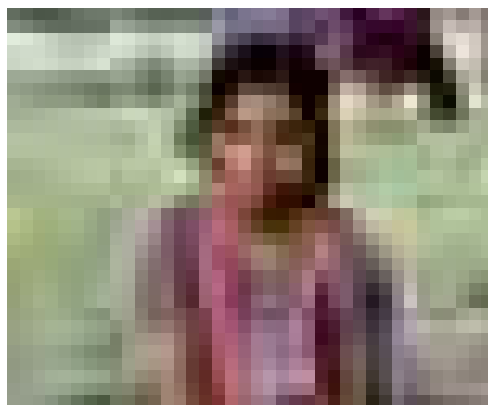
There is one more benefit. Mohan wants to use the slurry on their farm instead of the chemical fertilisers he has been using until now.

NOT SCARED OF WILD ANIMALS WHILE GOING TO TOILET

Im not scared of wild animals,” says Sita Poudyal, a 10-year-old who studies at Sri Rab Rapti Vidyalaya, a government primary school in Lotharkhola village, Piple VDC. The school stands on elevated land close to a river, and across the river begins a stretch of the Chitwan jungle. Sita and her friends walk 10-15 minutes to the edge of the jungle every time they need to attend to the calls of nature since they do not want to use the one and only toilet in the school. Some 270 students attend the primary school, but there are only two toilets in the school - one for the children and the other, which is kept locked, for the teachers.

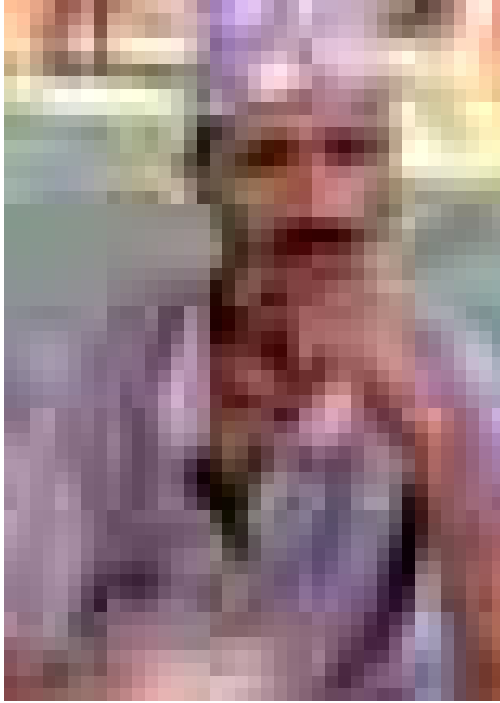
Says Sita, “I wish there was a separate toilet for girls in my school as the one we have is very dirty and crowded. I never go in there. Instead, my friends and I walk to the jungle. Yes, there are wild animals in there, but I’m not scared. They’ll run away when they see us.”

Sita and her friend, Pramila Hamal, 11, haven’t encountered any wild animals so far, but they know that there are tigers, rhinos and wild elephants lurking in the



jungle, and so they must be on their guard. To be on the safe side, the girls form a group of four or more when they make the trip.

In addition to the risky trip that they make at least once during the school hours, they also lose a lot of time - about 20 minutes - going back and forth. Sometimes their teachers scold them when they are late. “But we can’t scold our teachers who are late most of the time. Sometimes they are half an hour late, and, of course, they leave when the bell rings,” said Pramila. Both Sita and Pramila said that they liked to study and wished they didn’t have to



waste so much time everyday waiting for their teachers.

Asked why the children could not use both the toilets, Tika Dutta, the administration chief of the school, replied, "Who will clean the toilets if the children are allowed to use the other toilet as well? You should see the condition of the children's toilet! And water

is scarce here, and we cannot afford to hire someone to clean it."

Shortage of drinking water is another problem as the only hand pump that stands outside the school doesn't work. "You have to pour a mug of water and pump it very hard to make it work. And to get that mug of water, we have to go to the village," said Sita. So when the children need to drink water, they walk five minutes to a nearby village where some house owner is kind enough to give them some water.

"In summer, when the temperature soars to 40 degrees Celsius, it gets so hot that we feel, thirsty and tired all the time," said Sita. The girls said that much of the problem would go away if the water pump was to start functioning.

Tika Dutta said that the school authorities were aware of the problems but added, "Without money, there is nothing we can do. The District Education Office is always short of money, and all the children who come here are from a very poor background. So there's no way we can raise any money from the community." He said that other schools in the area also suffered from similar water and sanitation problems.

DALIT WOMEN BARRED FROM DRAWING WATER

Rupa Sunar, who grew up in Koteswor, Kathmandu, came to Kapahiti of Changu Narayan VDC in 2002 after her marriage. She is now 22 and has a daughter who is three years old. She lives in a joint family of seven members. The family has a small patch of land on which stands their house with a kitchen garden. Her husband and brother-in-law are employed in the Nepalese Army as blacksmiths, which is their traditional occupation. They still have a smithy in their house, but lies idle as they are employed in the army.

The income of her husband and brother-in-law does not meet their family requirement as they don't have farmland. To support the family, Rupa has joined the agricultural group, village development women's group and VDC group in the village. In each group, she must deposit Rs. 20 every month under the savings and credit programme. As member of the village development women's group, she was entitled to a pair of hybrid pigs for only Rs. 100. She now keeps three pigs in a pen.

"Although rearing pigs gives good income, it is dirty work. My daughter and children of my brother-in-law always suffer from one disease or the other, mostly diarrhoea, cough, cold and fever. I know all these diseases are due to the poor sanitation around our house," she says. She, thus, tries hard to keep the house yard and the surroundings clean.

"We don't have farm land. Therefore, we have built a pit latrine. Compost cannot be made from human waste in such latrines. In our village, people who don't have farm land have built such latrines. The Sulabh latrine can also produce compost, but it takes a long time - more than two years. If I had farm land, I would have built an Ecosan latrine as it is a compost latrine and can produce manure in six months."

Dharma Maya Raajbahak
Housewife

Tigani, Ward no. 3, Madhyapur Municipality, Bhaktapur

“Flies are the major problems in April-May, and, hence, diseases usually strike during these months. In the case of minor diseases such as cough, we treat them at the household level, but for diarrhoea and dysentery, we take our children to the nearby health post which is an hour on foot,” she said. Jeevan Jal (oral rehydration solution) is available free of cost at the health post.

She knows how to prepare Jeevan Jal. Six glasses of water are boiled and cooled, and a packet of Jeevan Jal is added to it. “Since we visit the health post immediately after a disease strikes, there have been no deaths in my home or among our neighbours,” said Rupa.

There is a temporary latrine at the back of the house. Every member uses the toilet, but sometime children defecate in the yard and surroundings. Whenever she sees excrement, she throws it in the toilet. She and other members of the family wash their hands with soap after defecating.

Although she grew up in Kathmandu, she studied only up to the primary school as her poor parents couldn't afford the education after that. In her parent's village, there was no feeling of untouchability. In Kapahiti, however, the custom of untouchability is very strong.

“I felt so humiliated when I came to this village and found this custom. When I went to the nearby water point to fetch water on the very second day of my marriage, I was told to stay away until everyone had drawn water and gone away,” she said. It took time for her to adapt to the custom.

The name of the village is derived from the word ‘water’. ‘Kapahiti’ in Newari means “cloth washing waterspout”. There are three natural water points in the village - for Brahmins, for Kamis (blacksmiths) and for Chhetris and are known accordingly as Bahun Dhara, Kami Dhara and Chhetri Dhara respectively. Although the water points are meant for different castes, anybody can collect water from any of the points. But Rupa and other so-called untouchables are not allowed to stand on the same stone slab while the high-caste women are fetching water.

“When people are poor, others will dominate. So is the case with us. Moreover, we are few in number and not well organised. If we were to be organised, the other castes would not be able to discriminate against us in this way.”

KEY MESSAGE

Disadvantaged communities face discrimination while accessing natural resource and water facilities, especially if they are poor, disorganised and uneducated. Therefore, such people need to be organised to increase their access to the natural resources and other facilities by empowering them through education and economic opportunities.

FAMILY SUFFERS DUE TO LACK OF LATRINE

Sanu Tamang, 27, is illiterate and lives in Kakra Bari, Ward no. 3 of Nangkhel VDC. He lives in a joint family of eight members, who include his wife and a son of two-and-a-half years. His family has two ropanis of upland and two ropanis of low land. The harvest from these fields meets the family's needs for only three months. For the remaining months, they work as labourers in the village and in Bhaktapur city.

Sanu collects milk in the village and carries it to a local milk cooperative in Bhaktapur bazaar. He earns Rs. 30 a day for working about four hours - one hour for collecting milk, three hours walking up and down. With the wages, he buys rice and cooking oil for the day. In the day time, he also works as a coolie, carrying goods for the houses under construction in the village. But work is not available round the year.

His younger brother is also married and has a child. They have only three rooms in the house, which is becoming difficult to house the increasing number of family members. They want to build a new house,

but they have no money. "Since we don't have enough space in the house, we have not been able to build a latrine. If I had the money, I would have built a new house with a latrine for about Rs. 10,000," said Sanu.

He lives in a Tamang community of 20 households. About 50 per cent of the households have latrines, while the others go to the nearby forest to defecate. "As the

"We have a plan to have 100% latrine coverage in the village, as a few households are still without one. They lack land to build a latrine. Therefore, we are planning to connect their latrines to the sewer lines so that minimal space is required for building a latrine."

Sunkaaji Raajbaahak

Chairperson, Tigani Community Development Committee
Tigani, Ward no. 3, Madyapur Municipality, Bhaktapur

forest is near, we at times question, why build a latrine? Instead of water, we use leaves of trees and bushes or stones to clean ourselves after defecating. As a result, we have haemorrhoids. It is best to use water after defecating,” said Sanu. At night, as it is difficult to go to the forest, he and the family members use the yard behind the house to relieve themselves.

World Vision, an INGO, is active in the village. He has heard that it provides some support to build latrines. Although it provides some support, the family would still need to come up with about Rs. 5,000. Therefore, he is not interested in participating in the World Vision programme.

His son frequently suffers from diarrhoea. “Three months ago, my son suffered from a severe bout of diarrhoea. But I don’t know the reason. I took him to the traditional faith

healer for treatment. Later I went to the health post and brought a package of Jeevan Jal. Only after seven days did my son recover. Diarrhoea is very common in our village,” said he.

The village also lacks safe drinking water as the water is brought straight from a stream. He has never boiled water or filtered it before drinking.

Sanu is enthusiastic about building a latrine if he has the money. He is also interested in receiving training in building latrines. He says that if he knows how to build a latrine, he could build one at a low cost.

He says that he and his neighbours lack knowledge about preventing diseases because most of the villagers are illiterate. Apart from diarrhoea among children, fever, dysentery and typhoid are other common diseases in the village.

KEY MESSAGE

Due to lack of awareness about sanitation and hygiene as well as resources, the poor people have no latrines in their homes. A massive awareness campaign along with a wide range of technical options for building latrines should be promoted in such illiterate and poor communities.

“Although many diseases break out here, there are no deaths. This is because there is a health post, which is an hour on foot. We believe in the traditional faith healer, but we also take the sick to hospital,” Sanu said.

TOTAL SANITATION APPROACH TO BETTER LIVING

Dande Damai, 48, who lives in Dalaipur, Ward no. 9 of Kamdi VDC, has a wife, four sons and a daughter. The daughter and the eldest son are married, whereas the next two sons, aged 18 and 14, are out of school. Presently only the youngest son, aged 12, attends a public school in Grade 6. He has four *katthas* of land and a house built on public land.

Dande's family is one of 145 Dalit families out of the 238 households in the village. The major occupation of Dande is sewing clothes for the local *bistas* (clients). Until last year, he was sewing clothes for 14 *bistas* in Dalaipur and another 13 *bistas* from the neighbouring Khajuradi village. Every year, each *bista* family used to give him about 20-50 kilos of food grains, which means he received about 10 quintals of grains a year.

Last year, his wife and granddaughter were humiliated while trying to draw water from a tube well of a *bista*. Dande was so upset by the incident that he decided to discontinue his services to the *bistas* in both the villages. Instead he is determined

to build a tube well for each of the Dalit households and demolish the system of untouchability. He has formed a Pidit Dalit Uthan Nagarik Samaaj (Disadvantaged Dalit Upliftment Civil Society) and is working to empower the Dalits in the community.

Plan Nepal has implemented a number of programmes in Dalaipur since 1995. They include the construction of water and sanitation facilities, and creating awareness. "About 200 tube wells have been built over the years, but the Dalits have not benefited," he says.

As Plan Nepal didn't help build latrines, the village had very few latrines. Defecating in the open was quite common. As a result, the yards and road sides were dirty and smelled badly. "When my children were small, they often suffered from diarrhoea and dysentery. I think it was because the flies that were carrying dirt contaminated our food," said Dande. "But now I have become quite aware."

Until NEWAH, an NGO, came to the village and launched the Community Led Total



Sanitation (CLTS) programme and introduced a number of ignition PRA tools and awareness activities, Dande was unaware about the quantity of excrement that flies were dropping on people's food.

The ignition tools used by the NGO included showing open defecation areas with yellow colour on a community map, arranging walks along the defecation areas in the village to create awareness, publishing the names of those people who do not build latrines and establishing a

norm to fine anyone who defecates in the open.

“We villagers came to the conclusion that a person was consuming a minimum of one kilo of excrement a year. So it was decided that this had to stop, and the best way was to stop defecating in the open. This way, flies cannot carry dirt in their legs and pass it on to our mouths,” said Dande. With the knowledge, he also built a latrine, but a door has yet to be fixed.

Following the introduction of ignition tools through the CLTS approach, every household has built a latrine - either temporary or permanent. Dande is happy and says, “After the introduction of the total sanitation approach, every household in the community has built a latrine, and defecation in the open has stopped completely.”

The community itself carried out a well-being classification. The community people were divided into two groups - ultra poor and non-poor. Everyone in the community was provided material support to build the latrines. The non-poor had to contribute Rs. 500 in cash whereas the poor did not have to contribute anything except local materials and their labour.

Dande, who is also the advisor of the sanitation users committee, is quite happy to see a latrine in each household. He is also actively involved in building a tube well for each of the households in collaboration with the NGO.

KEY MESSAGE

The total sanitation approach has been an effective tool in creating awareness among the people and stopping defecation in the open. Such an approach is most appropriate for improving sanitation among the disadvantaged communities.

SOCIAL ACTIVIST TRIES AT IMPROVING SANITATION

Guddu Khan, 35, is a carpenter by profession and lives at NP Marg, Ward no. 6 of Nepalgunj municipality. Since last year, Masanghat, next to NP Marg, has been used as a dumping site for the solid waste generated by the municipality. Both metal and non-metal waste is discarded here. Even the carcasses of animals are dumped. Although the dumping site is owned by two individuals, the pollution from the solid waste has affected the whole community living nearby. About 50 households are directly affected by the waste dumped at Masanghat. Guddu's family is one of them.

"The waste gives out foul smell day in day out. Children in this area have especially been affected by the garbage. A child died four months ago from an unknown disease, and I think it was due to the pollution caused by the solid waste," says Guddu. "There are always swarms of flies and mosquitoes, and fever, diarrhoea and dysentery have become very common these days."

Dogs and foxes are seen dragging away the dead bodies of animals. Although NP

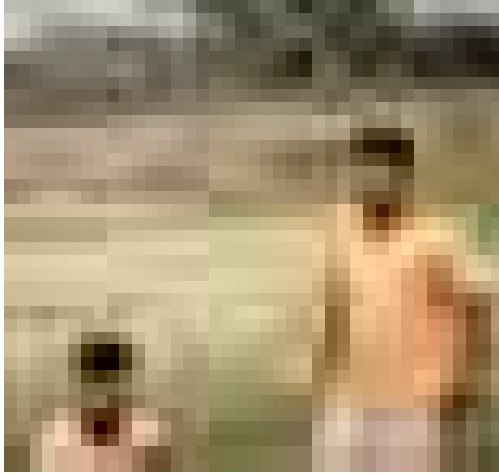
Marg is located in the municipality, this place is neglected. There are no sweepers to regularly clean the roads or the side drains. Only once a year does the municipality dispatch people to clean the streets and the drains.

The people in the village are also uneducated, and the neighbours, too, throw all their waste at the dumping site. The solid waste is also thrown into the drains, which causes clogging. Guddu says that

"My father was a butcher, I am into it, and so is my son. The local administration comes to pick up the monthly charge from us, but we don't know whether it is a government tax or a No. 2 tax (illegal tax). We simply pay the tax and do our business as usual."

Kaiyum Koreshi

A butcher, NP Marg, Ward no. 10
Nepalgunj Municipality, Banke



it is the responsibility of the municipality to see that the drains are maintained and the solid waste is managed properly. “The municipality instead has only added to the existing problems.”

Only about 20 per cent of the households in the village have latrines. Most of the people still defecate in the open in the drains, rivers, bushes or on the road sides. Women go to defecate early in the morning by covering their heads with a piece of cloth.

KEY MESSAGE

Water logging and unmanaged municipal waste cause serious health hazards. In the absence of an organised voice of the people, they are neglected. It is the responsibility of the municipality to manage the problem before it becomes too serious and not wait till there are elected representatives in the local bodies.

Water logging is a big problem in the village as it is lowland. Even if someone builds a latrine, it is submerged in water. People in these areas are, thus, discouraged from building and using the latrines due to this problem. However, the village has sufficient number of tube wells.

Guddu and other social activists have visited the municipality office a couple of times with the request that the dumping site be shifted. But the municipality has been indifferent to the request. “As there are no elected representatives in the municipality, no one listens to us. I think our problem will remain the same until the next municipal elections,” says Guddu. “We pay taxes to the municipality, but it is unfortunate that it refuses to look into our problem.”

Guddu and other young activists sometimes launch campaigns to increase awareness among the people about the need to keep the village neat and clean. A campaign has been launched asking people not to throw solid waste in the streets or into the drains.

“The municipality should manage the solid waste through consultation with the local people. The solid waste can be dumped in an open space near the Duduwa Nala, which is about five kilometres from the municipality,” says Guddu. “The solid waste must eventually be disposed at Duduwa Nala after treatment.”



MODEL EX-KAMAIYA CAMP

Bina Tharu, 15, is the first daughter of Somal Tharu, an ex-Kamaiya. She settled in Rajhena camp, Ward no. 4 of Rajhena VDC about five years ago when the government declared an end to the Kamaiya system in 2000. Her father used to work for a landowner as a Kamaiya in Bankatwa VDC. Bina has two brothers, aged 12 and 8, and they go to school in the camp.

She left school this month, where she was studying in Grade 6. Her mother died last month, and her father pulls a rickshaw. So the responsibility of running the house has fallen on her shoulders. Her father goes to Kohalpur Bazaar at 6 a.m. looking for customers and returns at 7 in the evening. In between, he comes home for lunch at noon. Bina has to cook and make preparations to send her brothers to school.

Fortunately, Bina has a tube well in the courtyard. Previously, a tube well was shared by five households. Last year, NEWAH, an NGO, provided support in building a tube well which is now shared by two households. "The tube well is located on the premises of our house,

which has eased my household chores. It has saved my time," she says. "Arsenic tests have been conducted two or three times, but the results have yet to arrive. The depth of the tube well is about 130 feet, hence the quality of water is good."

When they lived in Bankatwa as Kamaiyas, they did not have their own tube well and latrine. "Now I am happy and proud that we have our own tube well and even a latrine," she said. The toilet was built three years ago with support from an NGO. "Thanks to the NGO for building the latrine, as it has made our life so easy; otherwise we would have had to go far from here to attend to our calls of nature," she said.

"In the camp, everyone has a latrine. No one defecates in the open. Every household keeps the yard and trail in front of the house neat and clean. You can see how clean our village is!" she added.

The government gave each of the ex-Kamaiyas four *katthas* of land, on which they have built their home. They also received Rs. 10,000 to build the house.

**KEY MESSAGE**

The integration of water and sanitation and a clean environment brings positive changes in the community.

There are about 150 households in the camp. They were settled in 2001. Many NGOs and government agencies are carrying out development activities in the camp. As a result, every household in this camp has a latrine, while two households share a tube well. Somal - Bina's father - received a rickshaw through a group loan facilitated by one of the NGOs. He has already paid back the loan and now owns the rickshaw.

Bina is aware about hygiene and says one should wash his/her hands with soap after visiting the toilet. "NEWAH also advised us to build a *chang* (a rack for drying kitchen utensils) near the tube well. When I finish washing the utensils, I put them on the *chang* the whole day. The sunlight kills the germs if there are any," she said.

Since the last one year or so, no one from Bina's family has suffered from diarrhoea, dysentery or cholera. "How can anyone fall sick when we have maintained such neatness and cleanliness in our house and village?" she questioned.

WOMEN INCONVENIENCED BY LACK OF LATRINE

Himali Chidimar, 12, is the youngest daughter of Gomiya and Rajkanni of Belashpur, Ward no. 16 of Nepalgunj. Her eldest sister, Ram Sariya, whom Plan Nepal had sponsored, was married seven years ago when she was just 10 years old. After marriage, she left school where she was studying in Class 5.

Himali studied up to Class 5 and left school this year. Himali's younger brother is in Grade 5. It is an irony that Himali, who is also sponsored by Plan Nepal, had to leave school after being unable to pay Rs. 440 for registration and an additional Rs. 300 for the Grade 6 books.

But this time, her mother has made no plans to get her married. Gomiya is aware that early marriage is not good and is also against the legal system of Nepal. "Ram Sariya wanted to study further, but we did not fulfil her desire. Instead we got her married at an early age. We could not say no to our culture," says Gomiya.

Himali wanted to be a teacher, but she is already out of school. "There is money

coming in our name, but we cannot attend school," said Himali hinting at NGOs.

By tradition, Chidimars hunt wild birds by establishing mobile camps. But Gomiya's generation abandoned the occupation and went into farming. But they have little land, so they work the land of others. When he is free, Rajkanni also works as a labourer.

They live in their own house, but the backyard is very small. Hence, there is no place for building a latrine. Plan Nepal had

"In order to solve drinking water problem I had no option other than to build the well on my own with the money earned from doing labour work. I have built a well and installed a hand pump. Now I feel proud that I have built a well myself."

Aitaram Darai

Salyani Darai Tole, Ward no. 8
Bharatpur Municipality, Chitwan

provided materials to build a latrine five years ago. Concrete rings and a slab with a pan were placed on the road leading to the house. But they never built the latrine. A tube well was constructed near the latrine pit. “We never used the latrine as my parents said that when a latrine pit and tube well are built together, the water is polluted. That is why we never built the superstructure or used the latrine,” she said.

KEY MESSAGE

Despite the necessity and desire, some people are simply unable to build a latrine. Tube wells should be constructed a bit far from the latrine. Lack of simple technical know-how affects the lives of the people.

“Latrines are especially necessary for women, hence, we would like to have a latrine near our house. But we don’t have the land and money to build one. I hear it costs about Rs. 10,000 to build a latrine,” said Gomiya. “A small patch of land at the back of our house is on sale. If we had Rs. 35,000, we would buy it from our neighbour and build a latrine.”

“In the absence of a latrine, we are forced to go to the fields to defecate. We girls and women go to the field early in the morning,” said Himali. “If we are near someone’s house, they throw stones at us from the roof. Therefore, we have to go a bit far into the open field. Our mothers cover their heads with a piece of cloth while attending to the call of nature.”

NO LATRINE FACILITY DUE TO WATER LOGGING

Samim Banu Siddhiki, 35, a Muslim by religion, lives with her husband and five children at NP Marg, Ward no. 10 of Nepalgunj municipality. She has two sons and three daughters. The eldest son is 13 years and the youngest daughter two years. The eldest son studies in Grade 5. Her husband is a salesman who goes from house to house selling ladies' ornaments. He rides a bicycle and sells goods worth Rs. 200-300 a day and makes a profit of about Rs. 80-100. He begins work at 5 in the morning and returns home at 9 in the evening.

Samim is literate having attended the madrasah (Muslim primary school). "As Muslims, we cannot adopt family planning methods. But because my husband has to work more than 15 hours a day to feed the family, I have adopted temporary contraceptive methods so as not to have more children," she said.

A month ago, they bought a readymade home built on one *kattha* of land for Rs. 200,000. The house does not have a latrine, although it has a tube well. So they have built a temporary urinal in a corner at the back.

Samim wants a latrine, but they don't have the money. She is also frustrated that the area surrounding her home is water logged and dirty. In front of the house, the municipality's waste is dumped. Next to it, local entrepreneurs keep their donkeys. She regrets not noticing all these things before buying the house. "But there is nothing I can do now except get used to the poor sanitation all around," she said.

"Look, there are two nice latrines built with bricks, but they are under water. Unless the municipality can provide an appropriate drainage system, a permanent structure cannot be built in the area. I hear it costs about Rs. 10,000-15,000 to build a latrine, which is beyond our capacity," she added.

As they don't have their own latrine, they must defecate in the open. Samim goes out early in the morning. "In daytime, I use my neighbour's latrine. But my children use the open spaces or places around the house."

Even though Samim's family has been in this village for only a month, her children have suffered from diarrhoea, and they

have vomited a couple of times. “The poor sanitation in and around the house is to blame. Water logging, the donkeys and

defecting in the open have resulted in the poor sanitation,” she said.

When the children suffer from diarrhoea, she waits for a few days to see if they will recover on their own. The last time her daughter had diarrhoea, she recovered on her own in two days.

Despite the many problems, the family doesn’t have a clue as to how they can be overcome.

KEY MESSAGE

Diarrhoea is the most common disease that occurs in the absence of latrines. Human waste management must be taken up seriously in the rural areas.

A SQUATTER WOMAN WHO LOST HER HUSBAND TO TYPHOID

By the time Basanti Sunar was 35, she had given birth to five daughters and one son. The two eldest daughters are already married, whereas all the other children, except the youngest daughter, who is seven years old, are studying in the local school. Although they lived on a small patch of public land, and her husband used to pull a rickshaw in Mahendranagar, they were a happy family. Occasionally, Basanti also worked as a labourer to support the family.

However, a year back, her husband died, leaving the responsibility of raising all the children to Basanti. He had a fever for several days. So Basanti took her husband to a nearby hospital. But the medicines given by the hospital did not improve his condition, so she took him to a hospital in India, near the Indo-Nepal border. They returned with more medicines. Unfortunately, her husband could not be saved even though she had taken some loan from a neighbour for his treatment.

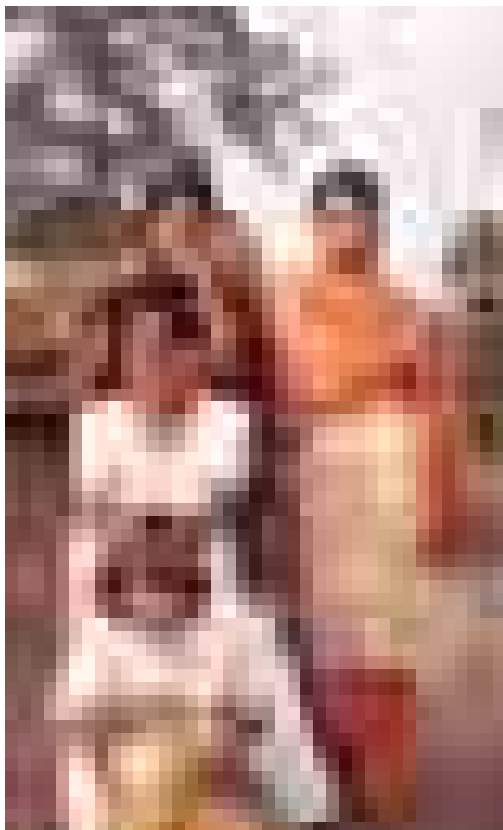
Doctors told her that her husband was suffering from typhoid. "Typhoid is caused

when fever gets worse," she said, apparently unaware that it is caused by contaminated water. They do not own a tube well and draws water from a neighbour's facility.

She has been to India for different reasons and seen the Indian government provide water and latrine facilities to the poor. "Water and latrine facilities are our basic right. Therefore, the Nepal Government should provide these facilities free of cost to the poor and Dalits like us," she says.

In the village, there are 16 Dalit families including that of Basanti. Almost all of them have been living on public land for the past several decades. They came from Dadeldhura and settled here as squatters. Basanti's family has a small thatch house. She had taken a loan of Rs. 10,000 for the treatment of her husband and does not know how she is going to repay it.

After her husband's death, she has become not only helpless but has also lost all hope. She works as a labourer, but her earnings cannot feed her children and pay



for the school fees. Therefore, her third daughter, Sharada, has quit school. However, Pushpa, the fourth daughter who is 14 years old, and son, 11, are still studying.

Says Pushpa, “I don’t know when I, too, will have to leave school due to our poverty.” Basanti says money is essential to provide an education, but how can the poor afford it? Sharada helps her mother in the kitchen so that she can go out in time to work as a labourer. Basanti does mostly agriculture-related work such as paddy transplanting, harvesting and collecting grass. Her daughters also occasionally work as labourers to pay for the school fees, books and stationery. However, such work is available only at times at the local level.

No one has a toilet in the house in this village. The adults defecate in the nearby street, whereas the children do so in the courtyards and village trails. As this is public land, no one wants to invest money on a latrine. The women get up early in the morning and head for the road sides. Then it’s the turn of the men. “Men do not have much of a problem during the day. But we women must finish our thing when it is still very dark,” said Basanti.

KEY MESSAGE

Poor people receive little support in meeting their basic water and sanitation needs. Poor sanitation results in poor health and makes them even poorer. Programmes and projects should focus on the poor, Dalits and landless people so that they can also contribute to the national endeavour of eradicating poverty.

DEPLETING FORESTS MAKE FIREWOOD COLLECTION DIFFICULT

Saraswati Kumari Chaad, 17, lives in a joint family at Pipalchour, Ward no. 6 of Suda VDC. She studied up to Grade 4 and left school seven years ago. Her parents, grandmother, five sisters and one brother make up the family members. Her family has 14 *katthas* of land, but it is not irrigated. Her father works in India as a labourer and returns home once a year with about Rs. 5,000.

She is the second among the five sisters. Her elder sister is married, and the third one also left school a few years ago. However, the two other younger sisters and brother are attending school. It looks as if the children study only till the primary level and drop out. Apart from farming, their main occupation is collecting and selling firewood from the Amar Community Forest, which is a two-hour walk from their home.

“As there was very little income, I had to leave school to sell firewood,” said Saraswati. She goes to the forest at noon after the meal and returns with a bundle

of firewood at 5 in the evening. The next morning, she is bound for Mahendranagar and is usually back by 9 am. Saraswati, thus, spends about five hours collecting firewood and four hours selling it. She makes about Rs. 50-60 for every bundle of firewood sold.

Saraswati and her younger sisters take turns collecting and selling firewood on alternate days. About 80 villagers are

“The community forestry users’ group probably has the largest network of organisations across the country. Many Community Forestry Users’ Groups have the ability to contribute to poverty reduction initiatives.”

Madan Joshi
Chairman

Shree Batavaran Community Forestry Users’ Committee
Jhalari VDC, Kanchanpur

involved in selling firewood from the community forest. About 1,000 families are members of the community forest, but Saraswati's family is not.

"As my father is not here, the users' committee did not ask us to be its member. Since we are not a member, we cannot legally collect firewood in the community forest," said Saraswati. Therefore, Saraswati sometimes goes to the government forest, which is located a bit further. If the caretakers of the forest see her, her firewood is confiscated. She must also pay a fine of Rs. 25 for using a sickle and Rs. 50 for an axe.

"We have to collect wood to keep our stomachs full. We want to do something else as selling firewood is not a prestigious occupation. Moreover, deforestation is taking place rapidly," she said. "Once the forest is gone, it will also be the end of us."

Until a few years back, the woods were within an hour's walking distance. Now it takes about two hours, an indication of how fast the forests are depleting.

In this village, nobody keeps a buffalo or cow, only a few goats for income generation. Since they don't have cattle,

they can't adopt bio-gas stoves to save on firewood. Moreover, they can't afford the Rs. 15,000 to install a bio-gas plant. Out of the 1,000 families in the VDC, 275 families are very poor, most of whom are from Pipalchour village, a survey has shown.

As an alternative to selling firewood, Saraswati has started a grocery shop in the village. She also keeps about 10 goats. When she goes to the forest to collect firewood, she also takes the goats for grazing. She uses the money from the grocery and sale of goats to sew new cloths, celebrate festivals, buy books and stationery for her sisters and brother, and for medical treatment.

Saraswati's house has no latrine. "We don't need a latrine as long as the forest is nearby. But with the forest gradually diminishing, we now have to start thinking of building a latrine," said Saraswati.

There is a gravity water supply system in the village which was built a long time ago. The source of the system is a river, which, however, generally washes away the intake and collection chamber. When it is functioning, about 10 households share a public tap. When the water system breaks down, one must walk for about an hour to fetch water.

According to tradition, a woman having a period is not allowed to take water from the public tap or bathe there. "So during the four days of our period, instead of trying to be clean, we are forced to stay untidy," said Saraswati.

KEY MESSAGE

Many a villager has taken up selling firewood as a livelihood. But with no proper forest management plan, they are likely to be affected as the forests are fast depleting. The government should, therefore, take initiatives to engage them in other occupations and income generating activities.

ALTERNATIVE ENERGY WOULD REDUCE FIREWOOD USE

Gopal Damai Pariyar, 32, is the second child of Mani Damai's four sons and a daughter. All the four sons live in separate houses next to each other. Gopal has studied only up to Grade 4. All the four brothers only have a primary education. His father was a tailor by profession, but he quit the work after his eyesight got poor. None of his sons adopted the traditional tailoring work.

Gopal chose to play in a band in the village. He gets to attend about 10 wedding ceremonies a year and makes about Rs. 500 per occasion. He also runs a small grocery shop. He owns about four *katthas* of land. Even with all these engagements, it is difficult for him to manage two square meals a day. He, therefore, also works as a labourer in the village.

Although Gopal only has a primary education, he does not repent. "Education alone does not help, we also need luck. Not all educated people find employment," he says.

Gopal's family is not a member of the community forest. "I have heard that a

member gets firewood at half the price charged non-members. But even if we want to become a member, the elite group does not want us. Not a single Dalit is a member of the community forest," he said.

Gopal also sees no reason why he should seek membership of the community forest. "Why should we pay Rs. 155 to the community forest a year when we can collect firewood from the river banks for free?"

"The poor households should also be provided with privileges to install bio-gas plants. Bio-gas hasn't reached the poor people. Rather this programme has benefited the better-off people in the country."

Gyanendra Bahek

Chairperson, Dodhara Savings and Credit Co-operative
Dhodhara VDC, Kanchanpur district

Until a few years ago, Gopal's family used to sell firewood for some income. But after a forest caretaker confiscated his wood and axe, he stopped selling firewood. "But we must start thinking of alternative energy sources as there is limited firewood to collect from the river banks and also because we are not members of the community forest," says he.

There are about 25 Dalit households in the locality, but none of them use bio-gas or an improved cooking stove to cook meals. The Nepal Red Cross Society has divided the community into three classes - poor,

middle class and rich. Gopal's family falls in the poor category.

"We are poor, so how can we install a bio-gas plant? Also we do not have cattle. "If we are given improved cooking stoves, it would be very good for us because it would save our time in collecting firewood," said Gopal's father, Mani. It is an irony that Gopal's village lies in the programme area of the Nepal Red Cross Society which is promoting the improved cooking stove under their community development programme.

Gopal built a latrine a few years ago after he and his wife attended a sanitation and hygiene training. They also have their own tube well. An arsenic test conducted by an NGO showed that the water did not contain the harmful element. The water is warm during winter, so instead of storing water, the family takes a bath near the tube well.

KEY MESSAGE

The poor and Dalits are underprivileged and have no access to bio-gas and improved cooking stoves, which could curtail the use of firewood and reduce the pressure on the natural resource.