

GOVERNMENT OF NEPAL, MELAMCHI WATER SUPPLY PROJECT SUB-PROJECT-02, KATHMANDU UPATYAKA KHANEPANI LIMITED, PROJECT IMPLEMENTATION DIRECTORATE

Message from PID

he current focus of the Kathmandu Upatyaka Khanepani Limited, Project Implementation Directorate (PID) is on flushing, testing and commissioning of the new water supply system designed to supply Melamchi water to the



Kathmandu Valley after its diversion to and full treatment at the Sundarijal water treatment plant (WTP).

PID, to ensure that the system consisting of Bulk Distribution System (BDS), Distribution Network Improvement (DNI) and service reservoir tanks (SRTs) has the capacity to start the supply process after the arrival of Melamchi water and full treatment at the WTP, is diverting water from the upper reaches of Sundarijal and treating it fully at the WTP for flushing, testing and commissioning of BDS, DNI and SRTs.

Thus far this year, PID has conducted flushing and testing of 59.78 km of BDS out of 77 km, apart from conducting 72-hour drop tests at Khumaltar, New Mahankal and Maharagunj SRTs.

PID is also supplying part of the fully-treated water brought from Sundarijal in the valley, providing immediate relief to the public waiting for the arrival of Melamchi water.

Work related to installation of the BDS pipeline from Ghalati of Katunje area to the SRT under construction in the area is moving smoothly after PID reached an all-party understanding for the same.

PID has also made significant progress in construction and operation of wastewater management infrastructure. Out of the plan to lay 44 km interceptors along the banks of Hanumante, Manohara and Khasyangkhusung rivers, it has laid around 30 km. PID has achieved a critical milestone by starting the operation of the modern, environment-friendly wastewater treatment plant (WWTP) at Guheshwori, where rehabilitation of another WWTP is in progress. During this period, Hon'ble Minister for Water Supply Bina Magar inspected the WWTP and issued instructions for timely completion of the remaining work. It gives us pleasure to inform that the WWTP work is moving ahead smoothly.

Lastly, if you see project infrastructure at risk or damaged or if you have any suggestions/complaints regarding our work, please call us at toll-free number 1139 for swift response.

Shap9

Bhoj Bikram Thapa (Project Director)

Improvement in water, sanitation and sewerage management Set to transform whole of Kathmandu Valley



Flushing of the Bulk Distribution System in progress on the banks of the Manohara river in Lalitpur (Report on Page 2).

Kathmandu Valley Water Supply Improvement Project (KVWSIP)

WSIP, launched in 2011 with joint financing from the Government of Nepal (GoN) and the Asian Development Bank, is striving to develop a reliable, equitable and sustainable water supply system for providing water supply services in the Kathmandu valley.

With total budget of US\$ 265 million, KVWSIP, in the first phase, focuses on the distribution of clean and pure water to 1,02,574 households within Ring Road of the Kathmandu Valley.

For this, it is constructing a 77 km BDS, 10 SRTs (total capacity 74,500m³), 1,132 km DNIs, besides increasing the number of household connections and improving operational efficiency as well as service delivery of the Kathmandu Upatyaka Khanepani Limited.

Under KVWSIP, water supply improvement works are gathering momentum in most of the areas within Ring Road.

Due to lack of financial resources. water supply improvement works are yet to begin in Tahachal, Chhauni, Swayambhu, Panipokhari, Maharajgunj, Baluwatar and Bishalnagar within Ring Road. After financing is made available, improvement works will begin in these areas. Once Melamchi water arrives, these areas will be served by existing infrastructure till new ones are in place.

Separately, GoN has initiated DNI work in Kapan area. For installation of approximately 250 km pipeline, it has allocated NRs 1.6 billion (US \$ 1.6 million).

Progress in testing and commissioning of water supply system

ID, by diverting water from the upper reaches of Sundarijal and treating it at the Sundarijal WTP, is conducting flushing, testing and commissioning of the Bulk Distribution System (BDS), Distribution Network Improvement (DNI) and Service Reservoir Tanks (SRTs).

Thus far this year, PID has conducted flushing and testing of 59.78 km of BDS out of 77 km. After bringing turbidity of the water used in BDS flushing to government-prescribed permissible limits, water is fed into SRTs for 72-hour drop test to ensure their full functionality. Corrective action is taken if they fail the test. PID has already conducted the drop test at the SRTs located in Khumaltar, Panipokhari, Mahankal (New Mahankal) and Maharajgunj. Water fed into SRTs through BDS is supplied to households through the network of small pipes, the DNI. Thus far, PID has conducted pressure test on 907 km DNI out of the 1,006 km laid thus far, installed 69,377 household taps out of 1,02,574 and reinstated 40 km roads out of 110 km.

However, full flushing, testing and commissioning of the new water supply system will require steady supply of huge quantities of water, something which will not be possible without the availability of Melamchi water.

Notice

- Leakages can occur during flushing, testing and commissioning of BDS pipelines. PID requests the public to inform it through the toll-free number 1139 (during office hours) if they see pipes leaking so as to ensure swift repair. If you see such leakages beyond office hours, please contact 9841594938.
- For the sake of safety, do not go close to flushing points and downstream when flushing of pipes is going on. Keep children, senior citizens and cattle away.
- PID has made arrangements with Nepal Medical College (Jorpati), Om Hospital (Chabahil), B&B Hospital (Gwarko) and Manmohan Memorial Community Hospital (Thamel) for swift and free treatment if staff concerned and other members of the public suffer injury during flushing, testing and commissioning works apart from taking other safety precautions. Please avail yourself of this free service in case of any such incident.

	Kathmandu Valley Water Supply Improvement Project	Target	Unit	Progress
1	Construction of BDS	77	km	75
2	Flushing and testing of BDS	77	km	59.78
3	Construction of SRTs	10	nos	9
	Total capacity	74,500	m ³	97.295 %
4	Household connections	1,02,574	nos	69,377
5	Road repair works	110	km	40

Progress status of construction of valve chambers								
S.N	Package	Target	Unit	Progress	Remaining			
1	Package 1	65	nos	60	5			
2	Package 2	96	"	89	7			
3	Package 3	36	"	36	0			
4	Package 4	25	"	25	0			
	Total	222	"	210	12			
Distrib								
1	Package 1	226	nos	222	4			
2	Package 2	241	"	214	27			
3	Package 3	130	"	130	0			



A community mobiliser distributing notice before flushing and testing of the BDS pipeline.



• Hon'ble Minister for Water Supply Bina Magar getting updates from Project Director of PID Bhoj Bikram Thapa and Project Manager Surat Kumar Bam about primary commissioning of the new, environment-friendly WWTP and rehabilitation of the old WWTP, at Guheshwori. Minister Magar instructed PID to complete the remaining works of the WWTPs as soon as possible and run the entire infrastructure in full capacity.

Kathmandu Valley Wastewater Management Project (KVWWMP)

he KVWWMP was launched in 2013 with loan assistance from the Asian Development Bank and Government of Nepal. It aims to improve access to, and increase efficiency of wastewater services for the residents of the Kathmandu Valley by 1) rehabilitating and expanding sewerage network 2) modernising and expanding existing wastewater treatment plants at different locations in the valley.

Under this project, around 30 km of interceptor pipelines have already been laid along both banks of Hanumante, Manohara and Khasyangkhusung rivers out of 45 km. In parallel, High Powered Committee for Integrated Development of the Bagmati Civilisation (HPCIDBC) has installed interceptors along Bagmati and Vishnumati and is installing wastewater collection laterals.

Wastewater collected from households will be transferred to modern,

	Major works	Target	Units	Progress				
1	Installation of interceptors along river banks							
	Installation of interceptors along both banks of Hanumante	25.35	km	16.32				
	Installation of interceptors along both banks of Manohara	nks of 11.36		5.5				
	Installation of interceptors along both banks of Khasyangkhusung	7.68	km	7.1				
2	Construction of wastewater treatment plants (WWTPs)							
	Guheshwori WWTP (treatment capacity 32.4 MLD)		percent	95.9				
	Dhobighat WWTP (7.4 MLD), Balkumari WWTP (17.5 MLD) and Sallaghari WWTP (14.2 MLD)		percent	16.3				

environment-friendly WWTPs being constructed under this project in Sallaghari (14.2 MLD), Balkumari (17.5 MLD), Dhobighat (74 MLD) and Guheshwori (16.2MLD) for treatment. Wastewater treated at these WWTPs will be discharged into rivers. These WWTPs, under the first phase, will

have total treatment capacity of 130.81 MLD.

Operation of modern, environment-friendly WWTP begins

ID, achieving a critical milestone in the field of wastewater management in the Kathmandu Valley, started the operation of the Guheshwori-based modern, environment-friendly wastewater treatment plant (WWTP) on September 13, 2019.

Along with operation of the modern, environment-friendly WWTP, rehabilitation of the conventional WWTP

is going on at Guheshwori. The new and the conventional WWTP are designed to treat 32.4 million litres of wastewater per day (MLD), generated upstream of Guheshwori, and directly benefit around 4.54 lakh people. It will take time to operate the entire plant in full capacity as that will mean bringing down various parameters to permissible limits and completing the rehabilitation of the old WWTP. Equipped with modern and environment-friendly features like de-odorisation unit, anaerobic digester and activated sludge process, the WWTP will reduce water pollution levels in the sacred Bagmati river by discharging treated water rich in oxygen. The plant is designed to produce 320 KW/hr and produce 7 tonnes of fertilisers (sludge cake), which can be used to increase farm yields.

Grievance Redress Mechanism

ID has a Grievance Redress Mechanism (GRM) and Grievance Redress Committees (GRCs) at different levels to deal with grievances. It has provided orientation to relevant human resources to receive, evaluate and facilitate resolution of grievances coming from affected people/families/communities. The GRM examines grievances about losses, compensation, social and environmental safeguards issues at local level and forwards the cases to different levels, if not resolved locally.

In the quarter of July-September 2019, PID has redressed 114 out of 447 grievances, which are related to missing house connections, crop loss, structural loss, disposal of construction materials and social/environmental aspects, among others. Overall, the GRM aims to provide a trustable environment to address affected people's concerns.



■ Hon'ble Member of Parliament Mahesh Basnet, local government representatives, Project Director of PID Bhoj Bikram Thapa and consultants participating in an all-party meeting on installation of the BDS pipeline from Ghalati to the SRT under construction at Katunje, Bhaktapur.

Effort to conserve environment

ID is serious about carrying out development works in environment-friendly ways.

As part of its environment conservation activities, PID organised afforestation programmes on the banks of Manohara at Kathmandu Metropolitan City ward number 31 on August 19 and August 31, with encouraging participation of local people.

At the programmes, PID officials, representatives of Design Supervision Consultant (DSC)-06 and Community Awareness and Safeguards Support Consultant (CASSC) and local people planted saplings of different species in a bid to improve environmental well-being of the area and further beautify it.

Also on the occasion of the Civil Service Day (September 08), PID officials planted saplings of different species at Balaju along with representatives of DSC-05, CASSC and the contractor.

ADB mission briefed about status of Melamchi water supply system

n ADB review mission for Loans 2776/3255-Kathmandu Valley Water Supply Improvement Project (KVWSIP) acquired information from Project Implementation Directorate (PID) officials about different aspects of the KVWSIP, including flushing, testing and commissioning of Bulk Distribution System (BDS) and Distribution Network Improvement (DNI).

The mission consisted of ADB's Urban Development Specialist and Mission Leader Vivian Castro-Wooldridge, Project Management Specialist and Incoming Team Leader of Asian Development Bank-Nepal Resident Mission Saugata Dasgupta, Senior Environment Officer DB Singh, Senior Social Development Officer (Safeguards) Laxmi Prasad Subedi, GESI Consultant Shuvechha Khadka and Project Analyst Sujan Raj Regmi.

The main objective of the mission was to review and discuss all aspects of project implementation related to successful diversion of Melamchi river water to Kathmandu Valley, delivery of treated water to Kathmandu Upatyaka Khanepani Limited consumers through the new Bulk Distribution System (BDS) and distribution network, and sustainable service provision by Kathmandu Upatyaka Khanepani Limited (KUKL).

During a meeting with the review mission, Project Director of PID Bhoj Bikram Thapa, Chief of PID's Safeguards Unit Laxmi Pant Bhatt, Project Manager of KVWSIP Lokendra Yadav, Design Supervision Consultant-05 and Community Awareness and Safeguards Support Consultant discussed, among other issues, a) the revised schedule for testing and commissioning of BDS and DNI packages, and the need to accelerate testing of sub-district metering areas b) need to strengthen Occupational Health and Safety and environmental management plan compliance at project sites, even during the testing and commissioning phases and c) GESI performance.

The mission members also visited flushing, testing and commissioning sites at Anamnagar area.

Our Request

Ministry of Water Supply and Project Implementation Directorate apologise for inconveniences faced by the public during the implementation of the mega-project and appeal for everyone's support in this transformative endeavour. Kathmandu Upatyaka Khanepani Limited Project Implementation Directorate Anamnagar, Kathmandu Phone No: 01-5705771, 01-5705916, 01-5705148 Fax: 01-5705057, Toll-free no: 1139 Homepage: www.kuklpid.org.np Facebook: http://www.facebook.com/kuklpid