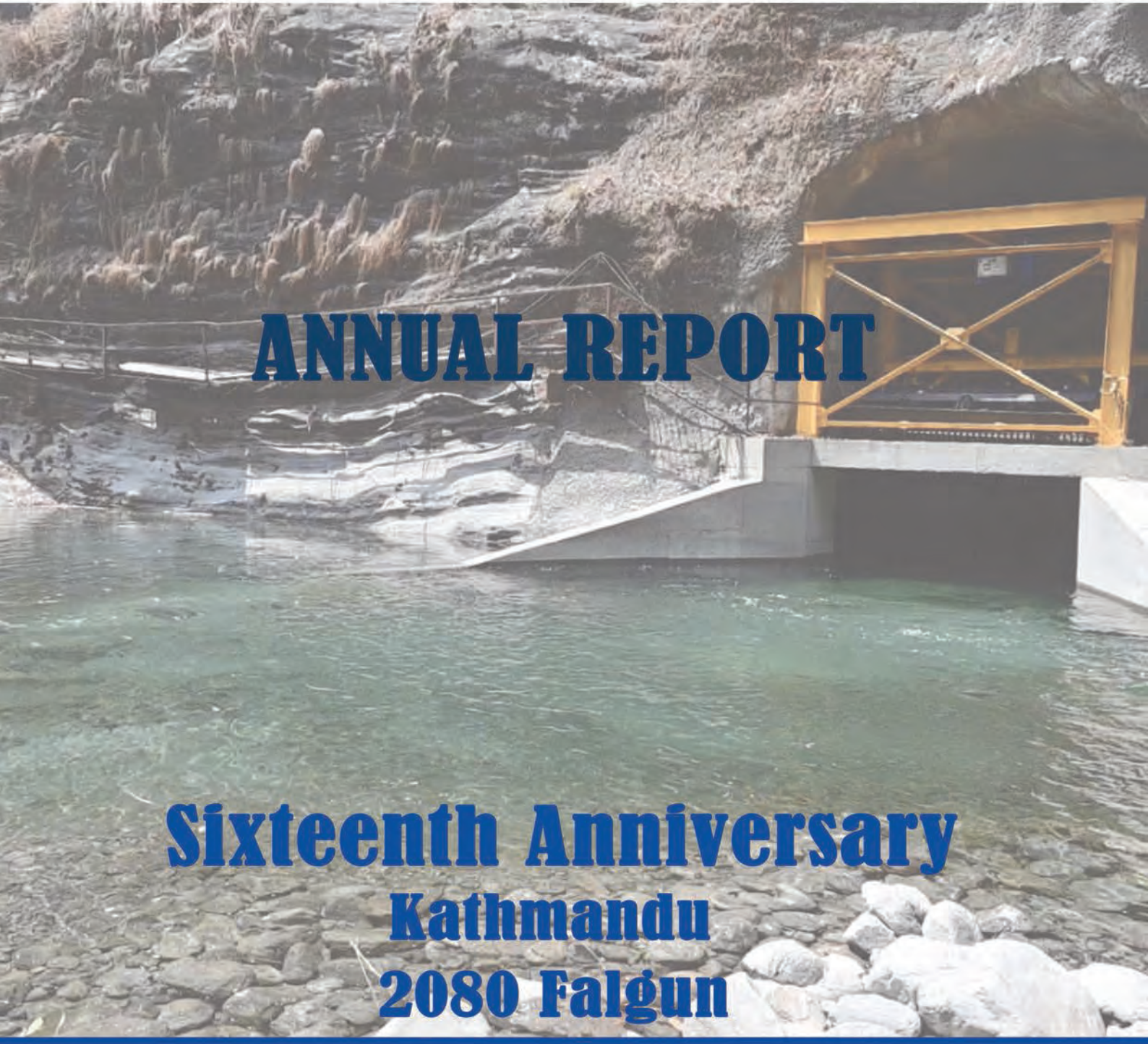
KATHMANDU UPATYAKA KHANEPANI LIMITED

KATHMANDU WATER



ANNUAL REPORT

Sixteenth Anniversary

Kathmandu

2080 Falgun

Inauguration of Melamchi Water Re-distribution by Rt. Honorable Prime Minister on Magh 1, 2080

Inauguration Cermony of Melamchi Water Re-distribution on Magh 1, 2080

Field visit by Secretary, MOWS to Sundarijal WTP

Handover Ceromony of Melamchi WTP

मा. महिन्द्र राय यादव
मन्त्री
खानेपानी मन्त्रालय
सिंहदरवार, काठमाडौं, नेपाल

प. सं. :
च. नं.:

नेपाल सरकार
Government of Nepal

Hon'ble Mahindra Ray Yadav
Minister
Ministry of Water Supply
Singhadurbar, Kathmandu, Nepal

Message from the Honorable Minister of Water Supply

It is my great pleasure to express my warm congratulations and best wishes to the Kathmandu Upatyaka Khanepani Limited (KUKL) for its 16 years of dedicated service in delivering water and wastewater services in the Kathmandu Valley.

Every citizen of Nepal has the inherent right to access clean and safe drinking water as well as sanitation. Our dedication revolves around safeguarding this essential right by actively engaging in sustainable development practices, environmentally conscious management of water and wastewater services, and contributing to the overall prosperity of the nation. Aligned with constitutional principles, the Ministry of Water Supply places paramount importance on guaranteeing that every individual across the nation has access to high-quality drinking water and sanitation facilities. In the Kathmandu Valley, KUKL bears on the responsibility of fulfilling this commitment and possesses the competence required to achieve the water and sanitation related standards set by the Ministry.

KUKL has been actively and effectively overseeing water distribution, showcasing resilient and efficient approach in addressing challenges to ensure an ample water supply to its customers. The successful distribution of Melamchi water, the operation of the new Sundarijal Water Treatment Plant and Bulk Distribution System, and water distribution through the initially handed-over Sub-District Metering Area (DMA) represent significant achievements made so far. KUKL's proactive approach, especially during the temporary closure of the Melamchi water, by distributing Bagmati water demonstrates adaptability and responsiveness to maintain water supply during challenging situations, fulfilling its commitment to providing water to consumers during times of crisis.

Following the commencement of Melamchi water redistribution from Magh 1, 2080, the Ministry is confident that KUKL will efficiently manage this water, along with the water available inside the Kathmandu Valley, to bring joy and satisfaction to customers. Consequently, the financial status of KUKL is expected to improve significantly due to the excellent dedication and commitment of the KUKL team by controlling non-revenue water.

I have a firm faith that KUKL will persist in its effective operations and dedicate maximum efforts to guarantee the continuous availability of water to the residents of the Kathmandu Valley. This includes utilizing Melamchi water and the increased water volume from the Bagmati River during the wet season. Anticipating KUKL's role as a sound water service provider, we trust that the organization will exert maximum efforts in the coming days. Ensuring the smooth operation of the Melamchi water supply, additional supply of water from local sources and the operation of wastewater treatment plants upon their completion are the key challenges to KUKL. This concerted effort will contribute to making our Kathmandu Valley cleaner, healthier, and more vibrant.

Before concluding, I would like to convey my heartfelt wishes to KUKL for ongoing success and prosperity in the days ahead. I also reaffirm my commitment to providing support to KUKL in its future endeavors, both personally and on behalf of the Ministry.

(Hon. Mahindra Ray Yadav)
Minister

Hon'ble Mahindra Ray Yadav
Minister

हट लाईन नं. १९७१ फोन नं. : ०१ ४२११५६५, इमेलः mahendrayadav.np@gmail.com

Government of Nepal
MINISTRY OF WATER SUPPLY
Phone: 4211693
Fax: 977-1-4211433
Singhadurbar,
Kathmandu, Nepal

Ref. No.:

Message from Secretary, Ministry of Water Supply:

On the auspicious Occasion of the 16th Anniversary of the Kathmandu Upatyaka Khanepani Limited (KUKL), I would like to convey my heartfelt congratulations and sincere appreciations to the KUKL on behalf of the Ministry of Water Supply and on my own. Throughout the years of delivering water and sewerage management services, KUKL has manifested steadfast commitment in offering the essential drinking water and wastewater management services to the inhabitants of the Kathmandu Valley.

Over the last two years, KUKL has showcased commendable efforts in distributing Melamchi water since Mangsir 2078, bringing joy and optimism to the community of Federal Capital. Additionally, KUKL initiated the operation of the Bulk Distribution System (BDS) from Magh 2079. Furthermore, the management of the Melamchi Water Treatment Plant at Sundarijal has been effectively handled by KUKL since Falgun 2079, following its handover to the organization. Nevertheless, KUKL has efficiently managed the operation and maintenance of the four Sub District Metering Areas (Sub DMAs), encompassing 5399 consumer connections. Similarly, 10 more DMAs are being handed over to KUKL today via Valley Board commemorating its Anniversary. These accomplishments serve as proof that KUKL is well prepared to tackle challenges in the distribution of Melamchi water through the newly established DMA based system. With the gradual handover of the remaining DMAs, KUKL has to demonstrate enhanced efficiency and reduction in Non-Revenue Water (NRW) in future.

Recently, the intermittent supply of Melamchi water was resumed through the implementation of 28 days compact action plan as per the instruction of Rt. Honorable Prime Minister which was accomplished three days ahead of the schedule. With the reinstatement of Melamchi water, KUKL now has received a substantial quantity available for distribution, therefore is able to bear the responsibility of ensuring fair and equal distribution of this resource among the residents of the Kathmandu valley. The Ministry of Water Supply anticipates a continuation of the distribution observed in the past year, expecting it to strengthen KUKL's financial position through increased revenue generation, utilizing new networks also.

On this 16th Anniversary of KUKL, the Ministry has initiated some restructuring and reform schemes for KUKL that would help support for its capacity building and financial stability, ultimately striving to achieve its goal of becoming an excellent water service provider. At this important stage, we are really thankful to Asian Development Bank (ADB), Japan International Cooperation Agency (JICA) and other Development Partners for their continuous support to KUKL for the capacity development and service level improvement.

At last, I would like to take this opportunity to thank KUKL for its step by step performances, expect continuous improvement of its services and best wishes for prosperity in the future endeavors.

(Suresh Acharya)
Secretary

Suresh Acharya
Secretary

Government of Nepal

KATHMANDU VALLEY WATER SUPPLY MANAGEMENT BOARD

Sainbu, Bhaisepati, Lalitpur

Message of Best Wishes

We are delighted to extend our heartfelt congratulations to Kathmandu Upatyaka Khanepani Limited (KUKL) on the occasion of its sixteenth anniversary. KUKL has consistently committed itself to the noble mission of ensuring equitable and widespread distribution of water to the residents of the Kathmandu valley and has been serving accordingly under a 30-year lease license agreement with the Kathmandu Valley Water Supply Management Board (KVWSMB).

In the Kathmandu valley, a significant gap between water demand and supply is evident, stemming from various factors like accelerated population growth leading to urbanization, behavioral changes, and the reduction of water sources within the valley due to the effects of climate change. This circumstance presents a considerable challenge for KUKL in fulfilling its obligations to provide water and wastewater services throughout its service area.

The integration of water from Melamchi into the Kathmandu Valley stands as a noteworthy achievement. Simultaneously, KUKL has been entrusted with the management of newly constructed water infrastructures like the Bulk Distribution System (BDS), the Melamchi Water Treatment Plant at Sundarijal, the District Metering Area (DMA)-based Distribution network et cetera. The distribution network is strategically crafted based on district metering areas (DMA), with the expectation that the approach will enhance KUKL's efficiency in water distribution and reduce Non-Revenue Water (NRW). As the infrastructure is gradually transferred to KUKL, it opens up new possibilities, but concurrently, it introduces challenges like operation of multiple networks simultaneously. This situation necessitates meticulous water management within its service area, posing a significant challenge for the organization.

On the significant milestone of its sixteenth anniversary, we extend our warmest greetings and express our sincere wishes for the continued progress and prosperity of KUKL. We believe that KUKL will enhance its operational efficiency, cultivate positive connections with stakeholders in harmony with the community's vision, and achieve financial self-sustainability. Additionally, we anticipate that KUKL will successfully settle its debts with KVWSMB, GoN while ensuring smooth and effective operations.

Congratulations and best wishes on the 16th anniversary of KUKL, and to numerous additional years of accomplishing its predetermined goals with success.

.....

Dr. Sanjeev Bickram Rana
Executive Director
KVWSMB

Lalitpur Metropolitian City, Ward No.-18, Sainbu, Bhaisepati, Laitpur
Phone: 01-5591737, 5591937, Fax: 01-5591571
E-mail: info@kvwsmb.org.np, Website: www.kvwsmb.org.np

Messages from Chairman of Board of Directors

As we celebrate the significant milestone of 16th anniversary of Kathmandu Upatyaka Khanepani Limited (KUKL), I extend my heartfelt gratitude to our valued customers for their unwavering support and collaboration. Their trust has been instrumental in our journey, and we deeply appreciate their continued partnership. I would also like to express my sincere appreciation to the dedicated and committed staff at KUKL. Their tireless efforts, hard work, and dedication have played a pivotal role in reaching this memorable day. Their contributions have been invaluable, and I am truly thankful for their commitment to excellence. Together, with the support of our customers and the dedication of our staff, we look forward to continuing our mission of providing quality services and contributing to the community.

Over the past few years, providing water and overseeing wastewater services in the Kathmandu Valley has become an increasingly challenging undertaking. This is attributed to factors such as the rapid growth in population, swift urbanization, and heightened water demand resulting from changes in the living standards of Valley residents. The depletion of water sources within the Kathmandu Valley, coupled with the disorganized state of existing infrastructure, presents significant hurdles to maintaining service standards. The availability of Melamchi water for a certain duration of the year has eased this difficult challenge to an extent. Similarly, to address the water supply and sewage management challenges in the metropolitan Kathmandu area a strategic plan aimed at economically viable, environmentally sustainable, and socially acceptable solutions are needed. This has given rise to a project led by the Project Implementation Directorate (PID) of KUKL, focusing on the construction of new infrastructures like the Bulk Distribution System (BDS), Distribution Network Improvement (DNI) works, and wastewater management infrastructure.

The completion of construction and transfer of the pivotal infrastructures such as the bulk water conveyance system, Melamchi water treatment plant, numbers of service reservoirs and an improved distribution network improveKUKL's efficiency and reliability. As a result, I urge all KUKL personnel to capitalize on this new situation and guarantee the fair distribution of the increased water quantity among consumers. With these advancements, I have faith in KUKL's capability to manage the additional water and new infrastructures in a professional and efficient manner.

In two monsoonsin last four years, catastrophic debris flow in Sindupalchowk impacted the intake structure, disrupting the conveyance of water from Melamchi to the Kathmandu Valley. This year, KUKL effectively managed the situation by utilizing excess water from the Bagmati River during the wet season. It is

imperative for KUKL to develop a contingency plan to mitigate potential interruptions in Melamchi water conveyance in future. The resumption through the rigorous effortby team at Water Supply Ministry and Melamchi Water Supply Project for executing 28 days action plan prepared as per the instruction of Rt .Honorable Prime Minister has resulted in availability of Melamchi water from Magh 1, 2080. KUKL has proven its proficiency in handling this augmentedwater. In this context, we have conscientiously tackled challenges associated with equitably distributing excess water and reducing leaks in the vulnerable existing system.

It is essential to highlight that the KUKL board has actively engaged in collaboration with the Ministry of Water Supply, Kathmandu Valley Water Supply Management Board, Melamchi Water Supply Project, and Project Implementation Directorate. This collaboration aims to facilitate the necessary arrangements for the effective management of increased water quantity and the implementation of new infrastructures by KUKL. Going beyond routine water and infrastructure management, the KUKL Board and management are committed to instituting reforms across various domains, including financial, administrative, technical, and customer relations. As Melamchi water supply resumes and more of the new systems become ready for handover, KUKL's monopoly may face significant competition, aligning with the best interests of the valley's residents and the government. Consequently, KUKL must exhibit responsibility towards the public, the government, and its own operations.

I want to convey my heartfelt appreciation to the Government of Nepal (GON), Asian Development Bank (ADB), Japan International Cooperation Agency (JICA), Kathmandu Valley Water Supply and Management Board (KVWSMB), and Australian Water Partnership (AWP), for their unwavering support and trust in KUKL, through this message. Their collaborative endeavors have been pivotal in our journey, and we sincerely value the strong partnerships we have cultivated. To our shareholders and customers, I want to assure you that KUKL remains dedicated to fulfilling its responsibilities by elevating service standards. We are committed to ongoing improvement, striving not only to meet but exceed your expectations. In conclusion, I trust that this anniversary will infuse additional energy and motivation into the entire KUKL team. May it inspire them to sustain their hard work and enthusiasm, delivering even more professional and improved quality services in line with the expectations of the people of the Kathmandu Valley.

Er. Tiresh Prasad Khatri
Chairman
KUKL, Board of Directors

Kathmandu Upatyaka Khanepani Limited

Project Implementation Directorate

Anamnagar, Kathmandu

Ref. No. 708/080/081

Message from KUKL-PID

First of all, I would like to extend my best wishes to Kathmandu Upatyaka Khanepani Limited (KUKL) on the occasion of its 16th anniversary. I hope that KUKL will be able to achieve the goal of distributing safe and clean water to the residents of Kathmandu Valley in the coming days to the satisfaction of customers as its most valuable clients and address the challenges ahead.

It is my pleasure to inform you through this platform that PID is expediting implementation works of infrastructure development wisely. In the first phase, it is striving to cater to water supply needs within Ring Road. Under Asian Development Bank (ADB) funding, PID has already laid 1,010 km pipelines within four Distribution Network Improvement (DNI) packages, which is already completed. Only commissioning works are left which are slated to be completed by the end of this fiscal year 2080/81. Similarly, under government funding, it is laying some 796 km of pipelines under another four DNI packages in various parts of the Kathmandu Valley to address the needs of people that were not addressed by ADB funded contracts.

Recently, out of a total of 32 District Metering Areas (DMAs) of the first phase, commissioning and testing of fourteen DMAs was accomplished and four DMA's were handed over to Kathmandu Upatyaka Khanepaani Limited (KUKL) via Kathmandu Valley Water Supply Management Board (KVWSMB). Likewise, PID is all set to transfer the ownership of another ten DMAs to KVWSMB. Gradually, PID is commissioning the remaining DMAs.

I also take this opportunity to thank field engineers, contractors, and KUKL staff for the cooperation extended to PID during the Functional Guarantee Test of DNI's and hope the same for the testing of remaining DMAs. I also extend my best wishes to KUKL for the successful operation of the newly developed network.

In addition, PID have recently completed the construction of civil structures of wastewater treatment plant at Dhobighat and installation of mechanical equipment and ready for testing and commissioning.

Finally, I also would like to assure every possible support to KUKL during the operation of the newly developed systems.

Er. Rajendra Sapkota
Project Director
KUKL-PID

Anamnagar, Kathmandu Tel.: 977-1-5705916 / 5705771, 5705148 www.kuklpid.org.np
Fax: 977-1-5705057, Email: pidmail@kuklpid.org.np

Commitment from Chief Executive Officer

Dear KUKL Team and Valued Stakeholders,

On the auspicious occasion of the 16th anniversary of Kathmandu Upatyaka Khanepani Limited (KUKL), I would like to extend my deepest appreciation to everyone who has played an important role in building a successful company. This journey has been marked by dedication, cooperated and a shared commitment to excellence.

I would like to begin by acknowledging our dedicated employees who are the backbone of KUKL. Their commitment and resilience, especially during the challenging periods of water scarcity in the Kathmandu Valley, is truly commendable. Their hard work has been instrumental in ensuring the uninterrupted supply of water to our community.

The cornerstones of KUKL's growth and success can be credited to the collaborative effort between our team and our customers. For this reason, I extend my sincere gratitude to our customers for their patience and cooperation. Their support has been essential in overcoming different challenges and achieving important milestones.

As we reflect on our journey, we must look back at some of the positive strides we have made together as a company. Our commitment to excellence begins with the team. We have a talented pool of professionals, with diverse skills and perspectives who put in day and night to ensure the smooth operation of our company. As we continue to grow, we have decided to embark on a recruitment drive to bring in more talented individuals who will contribute to the seamless operation of KUKL.

The commencement of the operation of Bulk Distribution System (BDS) by KUKL from Magh 19, 2079, and the operational success of the Melamchi Water Treatment Plant at Sundarijal from Falgun 23, 2079, have significantly contributed to optimizing water distribution. These initiatives underscore our commitment to efficiency and reliability. Furthermore, the operation and management of the four Sub District Metering Areas (Sub DMA's), consisting of 5399 consumer connections and covering a total pipe length of 69.38 km, has also been efficiently handled by KUKL. These achievements are evidence that KUKL is well-prepared to effectively address any challenges in distributing Melamchi water through the newly constructed DMA based system. Moreover, it has made KUKL confident enough to manage the 10 sub-DMA's that are going to handed over as well as the rest of the DMA's which will be handed over phase-wise.

Despite various challenges, KUKL has been successful in redistribution of 170 MLD from Magh 1, 2080 this year as Melamchi water reached Kathmandu valley. The temporary closure of the Sundarijal Treatment Plant ended up becoming a

testament to our team's adaptability. From Ashad 29, 2080 to Mangsir 19 2080; we distributed Bagmati water, ensuring continued water supply during this challenging period. This proactive approach reflects our team's commitment to meeting the water needs of the Kathmandu Valley even in the face of unexpected circumstances. Recognizing the importance of meeting water demands even during low water volume periods in the Bagmati River, we initiated the distribution of water from Dhap Dam through the new Sundarijal Treatment Plant from Mangsir 19, 2080 to Poush 1, 2080. This event marked our team's commitment to finding innovative solutions to sustain water supply.

These initiatives reflect our commitment to obtaining more revenue from water distribution, improving leakage maintenance efficiency and staying at the forefront of technological advancements. We would like to ensure that through the full operation of the DMA based network, BDS system to convey bulk water to 9 different Service Reservoir Tanks (SRTs) , the Sundarijal Treatment Plant and the SCADA system in near future, KUKL will efficiently manage the system in such a way that valley denizen need not worry about the water availability for their use. Similarly, we commit to upgrade our computerized billing system so that the online payment system in usage and online grievance management system so that customers have seamless experience.

As we celebrate our achievements, let's continue working together towards providing reliable and efficient water services to the community. The journey ahead is exciting, and I am confident that with our collective efforts, KUKL will continue to reach new heights.

Thank you for your dedication and hard work. Here's to our shared success and the promising future that lies ahead!

Best Regards,

Gyanendra Bahadur Karki
Chief Executive Officer, KUKL

BOARD OF DIRECTORS

Er. Tiresh Prasad Khatri
Government of Nepal
Ministry of Water Supply
Chairperson

Mr. Dhruba Kumar Kafle
Kathmandu Metropolitan City
Director

Er. Shree Kumar Maharjan
Lalitpur Metropolitan City
Director

Er. Nahendra Pradhan
Government of Nepal,
Ministry of Water Supply
Director

Er. Suraj Shakya
Kathmandu Metropolitan City
Director

Mr. Kamalesh Kumar Agrawal
Nepal Chamber of Commerce
Alternative Director

TOP MANAGEMENT TEAM

Mr. Gyanendra Bahadur Karki
Chief Executive Officer

Mr. Prakash Kumar Rai
Administration & Finance Department
Manager

Er. Ramesh K.C.
Water Operation
Division
Deputy Manager

Er. Umesh Babu Marahatta
Production Division
Deputy Manager

Er. Dr. Dol Prasad Chapagai
Waste Water Operation
Division
Deputy Manager

Er. Ujjwal Shrestha
Planning & Monitoring
Division
Deputy Manager

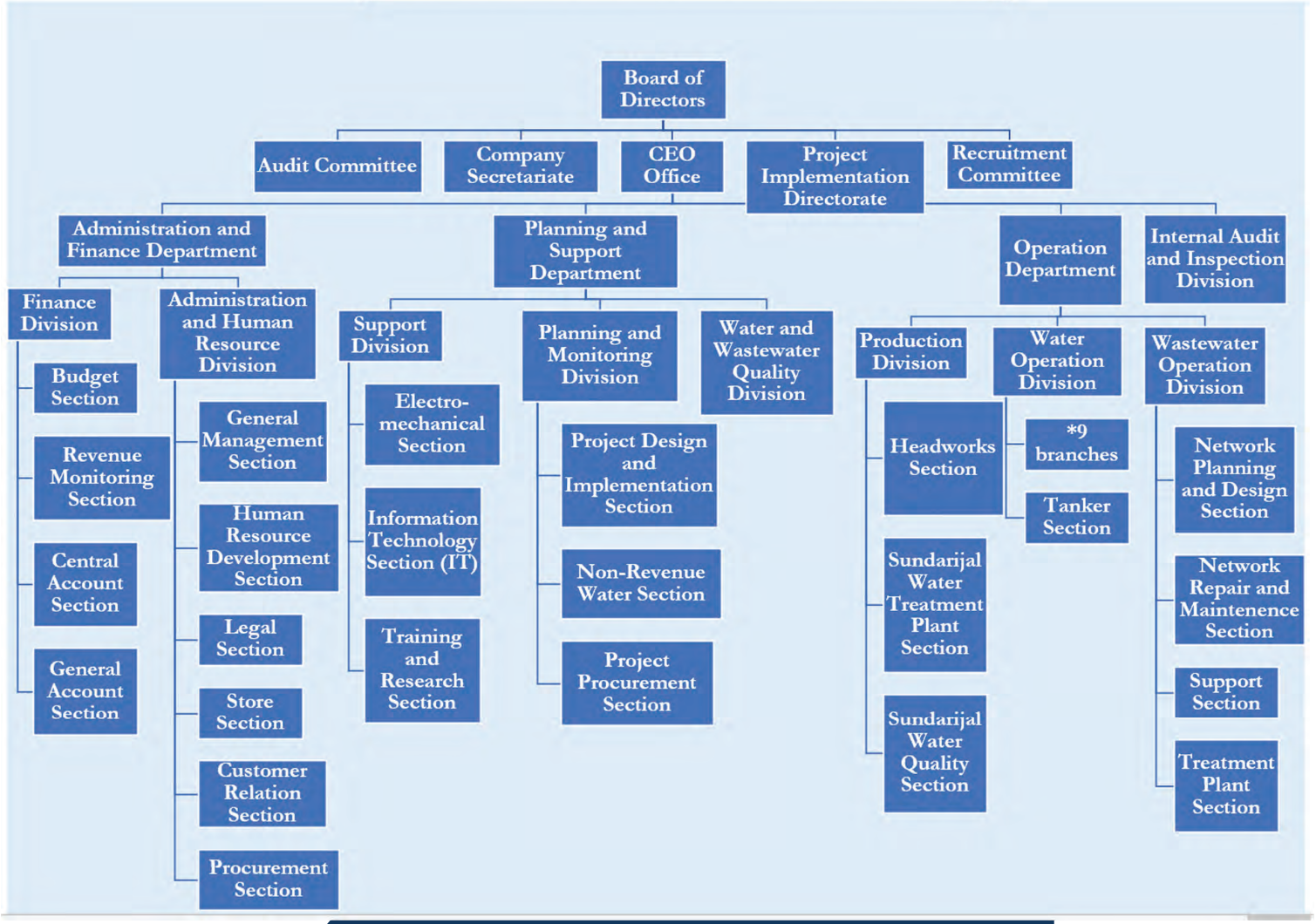
Er. Ila Bhatta
Support Division
Deputy Manager

Mrs. Shailaja Adhikari
Water/ Wastewater
Quality Assurance
Division
Assistant Manager

Mr. Yogendra Bahadur Bam
Administrative & H.R.
Division
Assistant Manager

Mr. Chet Raj Bajgai
Internal Audit Division
Assistant Manager

ORGANIZATION STRUCTURE OF KUKL



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INTRODUCTION

Kathmandu Upatyaka Khanepani Limited (KUKL) operates as the primary water utility provider for the Kathmandu Valley, functioning as an autonomous water company established through the Public Private Partnership (PPP) model and registered under the Nepal Government's Company Act 2063. As the exclusive water company, KUKL is responsible for delivering comprehensive drinking water and wastewater services across the Kathmandu Valley. Its origins can be traced back to institutional reforms initiated after the establishment of the government-owned public water system in 1893.

Since officially launching its services in February 2008, KUKL has remained dedicated to supplying drinking water and managing wastewater services in the Kathmandu Valley. Mirroring the growth of the Kathmandu Valley, KUKL has experienced significant expansion over the years and consistently explores innovative solutions to address water stress in the region. Operating as an efficiently organized entity, KUKL is committed to fostering the welfare of its employees. Additionally, the company shoulders the responsibility of operating and managing the Melamchi Drinking Water Project, making a substantial contribution to the availability of drinking water in the Kathmandu Valley.

From its inception, KUKL has placed a consistent emphasis on delivering high-quality service within its designated service area, actively tackling the water crisis in the Kathmandu Valley. The company proactively extends its service areas and invests in water resilience capabilities to ensure a sustainable water future for the Kathmandu Valley.

Sundarijal Water Treatment Plant

STRUCTURAL TRANSFORMATION FOR PROVIDING WATER SUPPLY AND SANITATION SERVICES IN KATHMANDU VALLEY

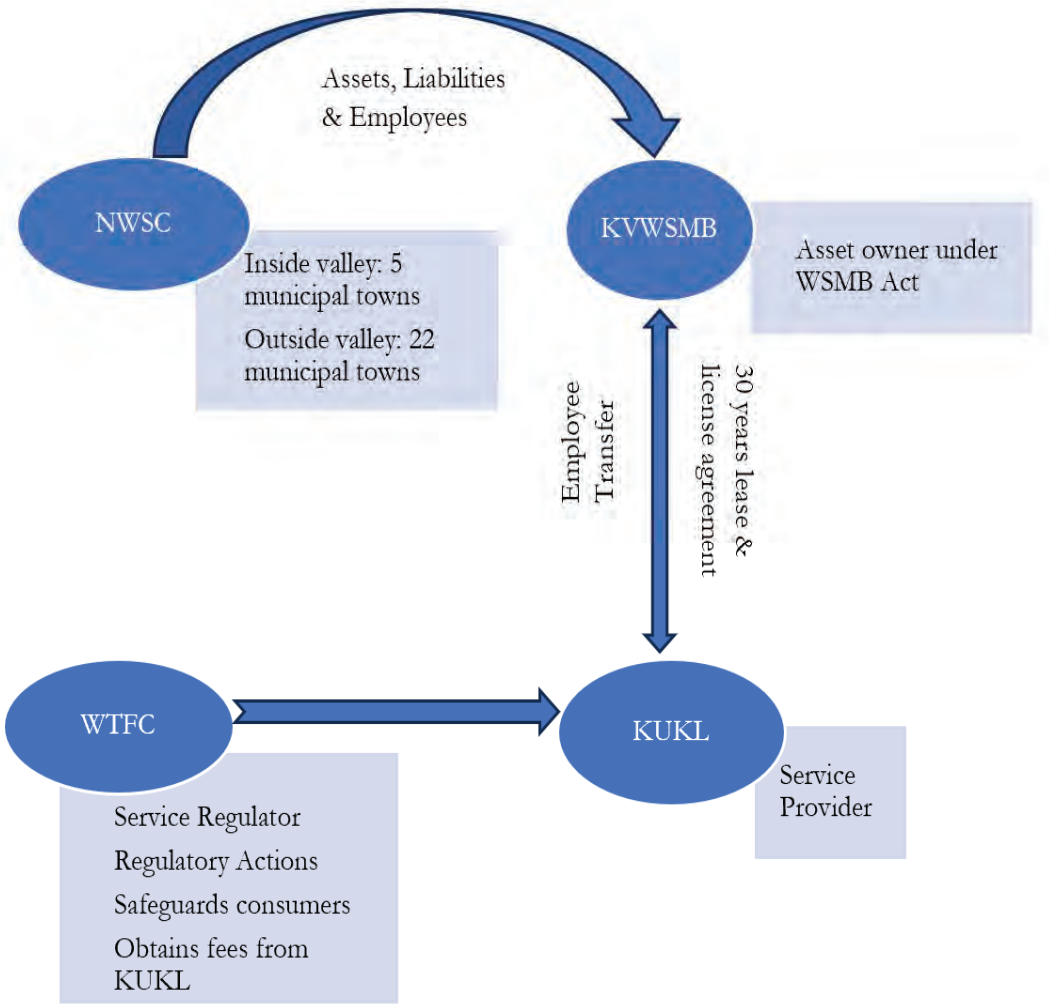
Since the commencement of Kathmandu Upatyaka Khanepani Limited (KUKL), it is subjected to changes and developments in the organizational structures and mechanisms responsible for managing and delivering these essential water supply and sanitation services. This transition typically involves shifts in governance, management models, and public-private partnerships to enhance efficiency, sustainability, and overall service quality. Key aspects of this transformation may include governance models, legal frameworks, Public-Private Partnerships (PPP), Infrastructure development, capacity building, community engagement, financial sustainability, innovation and technology adaption and environmental considerations.

Reflecting on history, the public water supply system in the Kathmandu Valley originated in 1893 AD. Before February 2008, the oversight of water supply and wastewater management in the valley was under the purview of various institutions established by the Government of Nepal (GoN) at different points in time. Entities like Pani Adda, Pani Goswara, Water Supply and Sewerage Management Board, and Nepal Water Supply Corporation functioned as the water utility operators for the Kathmandu Valley up until that period.

The need for institutional change in the water supply and management agency of the Kathmandu Valley was conceived and proposed during the Ninth and Tenth Five-year Plans (1997) of the GoN. These plans advocated for a policy involving local governments and private sectors in the management of water supply and wastewater systems. In 2000, the GoN envisioned the supply services through a corporate/private setup. Subsequently, the GoN created three key entities to implement institutional reforms in the water sector of the Kathmandu Valley. This institutional reform aimed to incorporate the representation of municipalities and private sectors at a policy level, with the intention of shielding the operating company from bureaucratic and political interference in management and operational decisions. The reform also sought to implement cost recovery-based tariff structures, commercialize the operation of the company, and introduce capacity development and technology transfer in the water sector. This new institutional framework for water supply and sanitation facilities in the Kathmandu Valley thus divided into three fundamental functions: ownership (planning and investment), operation (day-to-day activities), and regulation (setting tariffs).

KVWSMB (Kathmandu Valley Water Supply Management Board) functions as the custodian of water and wastewater infrastructure in the Kathmandu Valley. Its role involves formulating and overseeing policies concerning the development and operation of water and wastewater systems. Established under the Water Supply Management Board Act, 2063, KVWSMB is accountable for holistic planning, maintenance, service improvement, and additional investments. It's crucial to highlight that the board does not directly participate in operational service aspects, project implementation, or the setting of water tariffs.

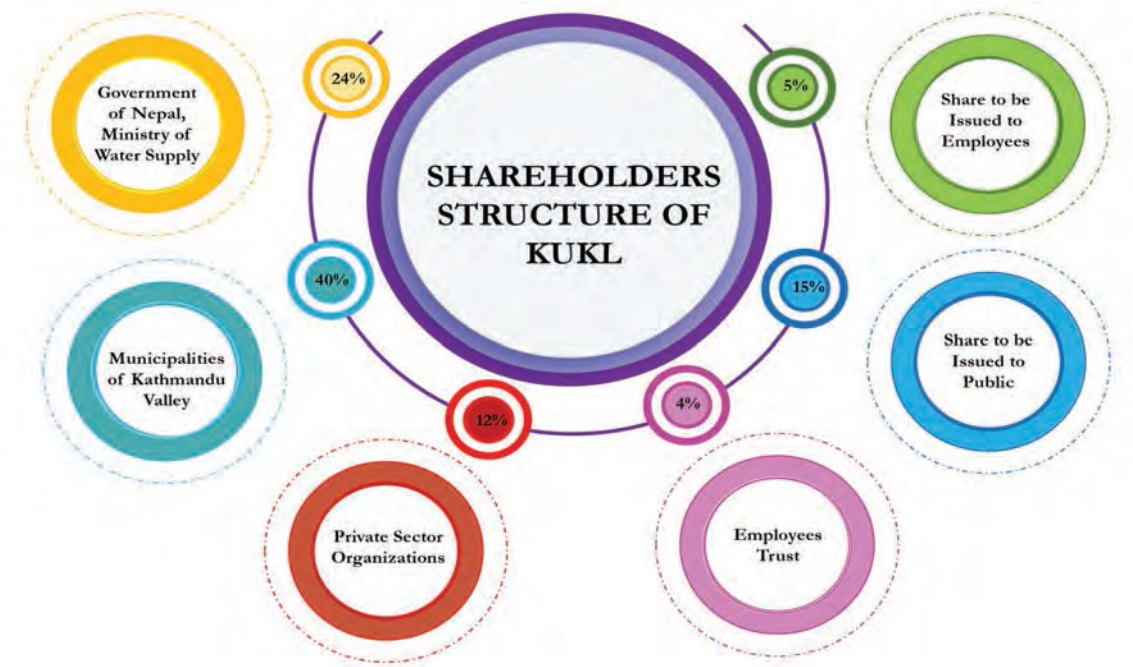
KUKL (Kathmandu Upatyaka Khanepani Limited) serves as the utility operator responsible for the operation and maintenance of the drinking water supply and sewerage system in the Kathmandu Valley functioning under a license issued by KVWSMB (Kathmandu Valley Water Supply Management Board), valid for a period of 30 years operating since February 2008.



Institutional Reformation of Water Utility Operator of Kathmandu Valley

PRESENT SHAREHOLDERS STRUCTURE OF KUKL

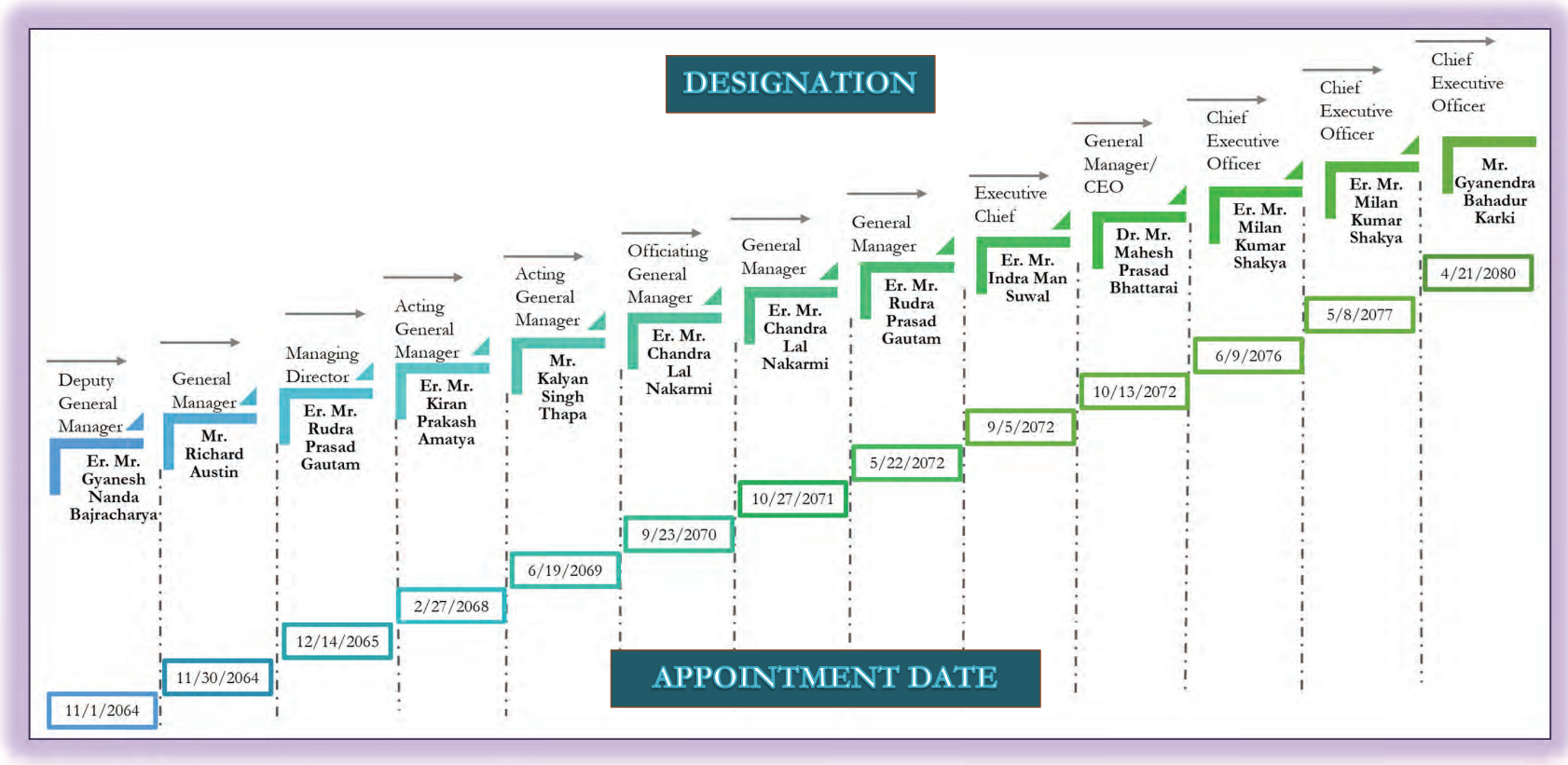
S.N.	SHAREHOLDER	SHARE AMOUNT (NRs)	SHARE (%)
1	Government of Nepal, Ministry of Water Supply	24 Crore	24
2	Municipalities of Kathmandu Valley	40 Crore	40
	Kathmandu Metropolitan city	24 Crore	24
	Lalitpur Metropolitan city	8 Crore	8
	Other 16 Municipalities of Kathmandu Valley	8 Crore	8
3	Private Sector Organizations	12 Crore	12
	Nepal Chamber of Commerce	7.2 Crore	7.2
	Federation of Nepal Chamber of Commerce & Industry	2.4 Crore	2.4
	Lalitpur Chamber of Commerce	1.2 Crore	1.2
	Bhaktapur Chamber of Commerce	1.2 Crore	1.2
4	Employees Trust	4 Crore	4
5	Share to be issued to Public	15 Crore	15
6	Share to be issued to Employees	5 Crore	5
	Total	1 Arab	100



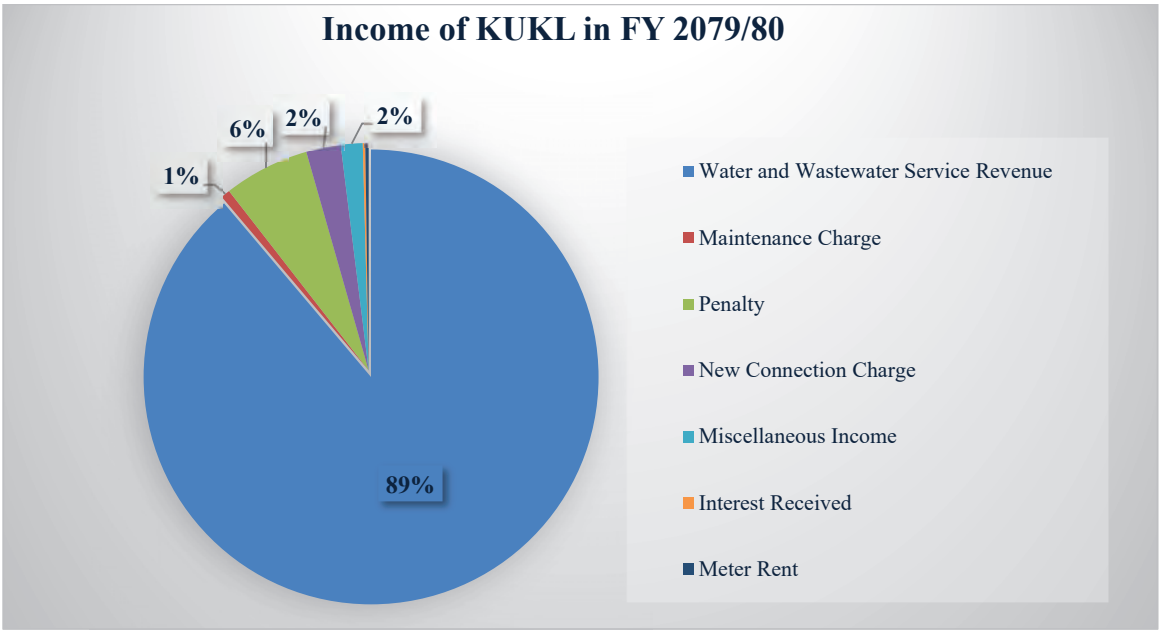
CHAIRMAN OF BOARD OF DIRECTORS IN KUKL TILL DATE

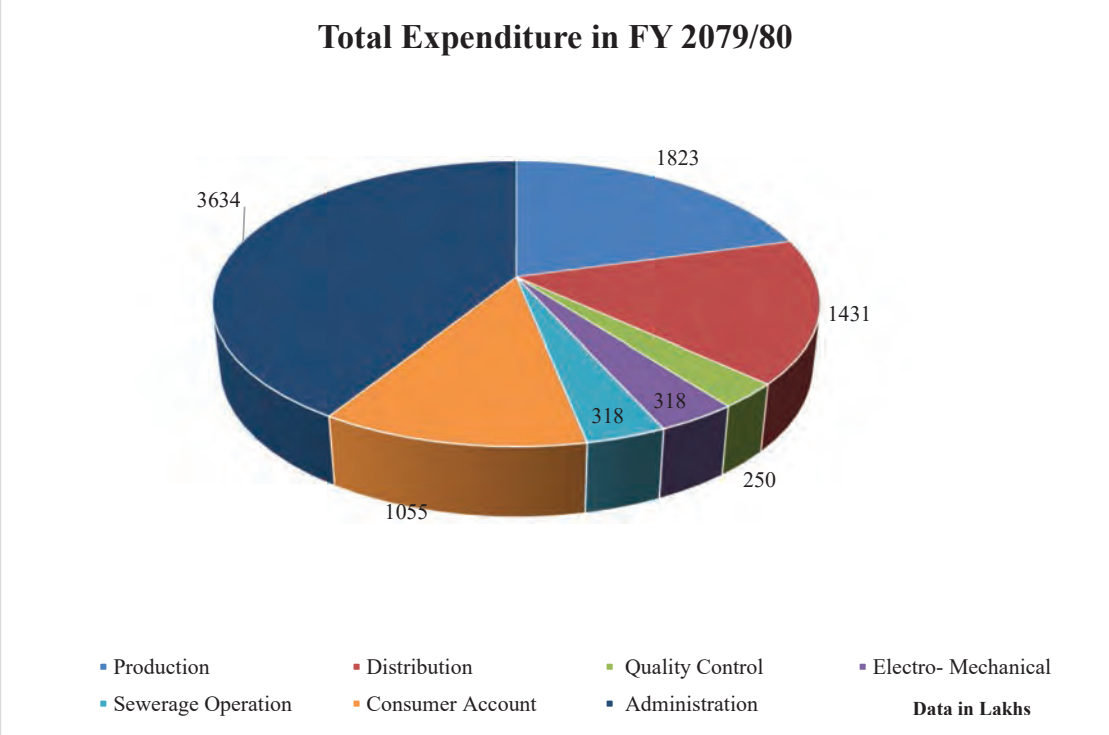
NAME	REPRESENTATION FROM	SELECTED AS CHAIRMAN
Mr. Birendra Man Shakya	Representative, GON	11/29/2063
Mr. Suresh Kumar Basnet	Nepal Chamber of Commerce	3/3/2071
Dr. Janak Raj Shah	Ministry of Physical Infrastructure and Transport	8/24/2064
Mr. Timila Thapa Yami	Ministry of Physical Infrastructure and Transport	10/22/2064
Mr. Dhruba Bahadur Shrestha	Independent Director	10/20/2065
Mr. Prayag Lal Joshi	Independent Director	10/8/2068
Mr. Sanjay Raj Upadhyaya	Kathmandu Metropolitan City	12/11/2069
Mr. Ghanashyam Bhattarai	Ministry of Water Supply	12/3/2073
Mr. Dhaniram Sharma	Kathmandu Metropolitan City	9/7/2074
Mr. Surya Raj Kadel	Ministry of Water Supply	3/4/2075
Mr. Rama Kanta Duwadi	Ministry of Water Supply	8/4/2076
Mr. Tiresh Prasad Khatri	Ministry of Water Supply	10/27/2077

TIMELINE OF EXECUTIVE CHIEFS OF KUKL



FINANCIAL STATUS





Note: The total expenditure doesn't include lease and license fee payable to KVWSMB

HUMAN RESOURCE STATUS IN THE ORGANIZATION

S.N.	Position	Level	Service	Approved Position	Permanent Staff Status (Till Magh 2080)	Mandatory Retirement Status	
						1 Falgun 2080 to 31 Aashad 2081	F/Y 2081/2082
1	CEO			1	0		
2	Deputy CEO	11	Technical	2	1		
			Non-Technical	1	0		
3	Manager	10	Technical	7	0		
			Non-Technical	3	1		
4	Deputy Manager	9	Technical	13	7		
			Non-Technical	6	0		
5	Assistant Manager	8	Technical	15	10		
			Non-Technical	7	6		
6	Officer	7	Technical	45	23		
			Non-Technical	20	13	1	1
7	Assistant Officer	6	Technical	29	15		1
			Non-Technical	55	32	3	3
8	Senior Assistant	5	Technical	92	60	3	3
			Non-Technical	117	86	2	12
9	Assistant	4	Technical	89	38		2
			Non-Technical	131	132	2	9
10	Junior Assistant	3	Technical	207	64	3	9
			Non-Technical	130	0		
11	Helper	2	Technical	21	1		
			Non-Technical		0		
12		1	Technical	239	75	7	3
			Non-Technical	154	60	3	5
Total				1384	624	24	48

SERVICE AREA OF KUKL

1. KUKL Service Area for Water Supply

KUKL manages 9 branch offices dedicated to the production and operation of water supply components. Following the restructuring of local bodies within the Kathmandu Valley, the updated service areas of KUKL are detailed in the table below.

Chhetrapati Branch Office	**Kathmandu Metropolitan City**	**Ward No. 15, 17, 18, 19, 24, 25, 26, 27, 28**
	Nagarjun Municipality	**Ward No. 2,3,4,5**
Tripureshwor Branch Office	**Kathmandu Metropolitan City**	**Ward No. 11,12,13,14,20,21,22,23**
	Naagarjun Municipality	**Ward No. 9, 10**
Maharajgunj Branch Office	**Kathmandu Metropolitan City**	**Ward No. 1,2, 3, 16, 26, 27, 28**
	Tokha Municipality	**Ward No. 1 -11**
	Tarkeshwor Municipality	**Ward No. 1 -11**
Mahankalchour Branch Office	**Kathmandu Metropolitan City**	**Ward No. 4, 5, 6, 7, 8**
	Gokarneshwor Municipality	**Ward No. 1 - 9**
	Budhanilkantha Municipality	**Ward No. 1- 12,**
	Kaageshwori – Manohara Municipaliity	**Ward No. 6, 7**
	Shankarapur Municipality	**Ward No: 4,6,7**

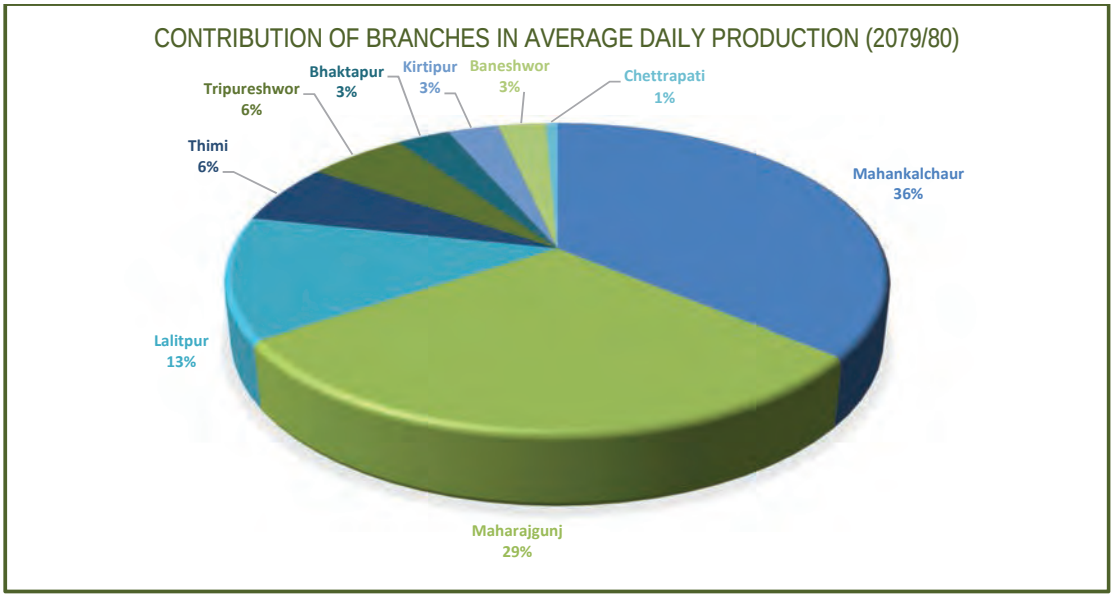
Kirtipur Branch Office	Kirtipur Municipality	Ward No. 1 -10
	Dakshinkaaii Municipality	Ward No. 2,3,5,6,7
Lalitpur Branch Office	Lalitpur Metropolitan City	Ward No. 1 - 27
	Mahalaxmi Municipality	Ward No. 4
	Godawari Municipality	Ward No. 6,10, 11, 12, 13
Bhaktapur Branch Office	Bhaktapur Municipality	Ward No. 1-10
	Suryabinayak Municipality	Ward No. 4,5, 6,8
	ChaunguNarayan Municipality	Ward No. 1,2,5,6,7
Madhyapur Thimi Branch Office	Madhyapur Thimi Municipality	Ward No. 1-9
	Changunarayan Municipality	Ward No. 1
Baneshwor Branch Office	Kathmandu Metropolitan City	Ward No. 9,10,29,30,31,32

2 KUKL Service Area for Wastewater Services

KUKL provides wastewater services to whole area covered by all water supply branch offices of KUKL.

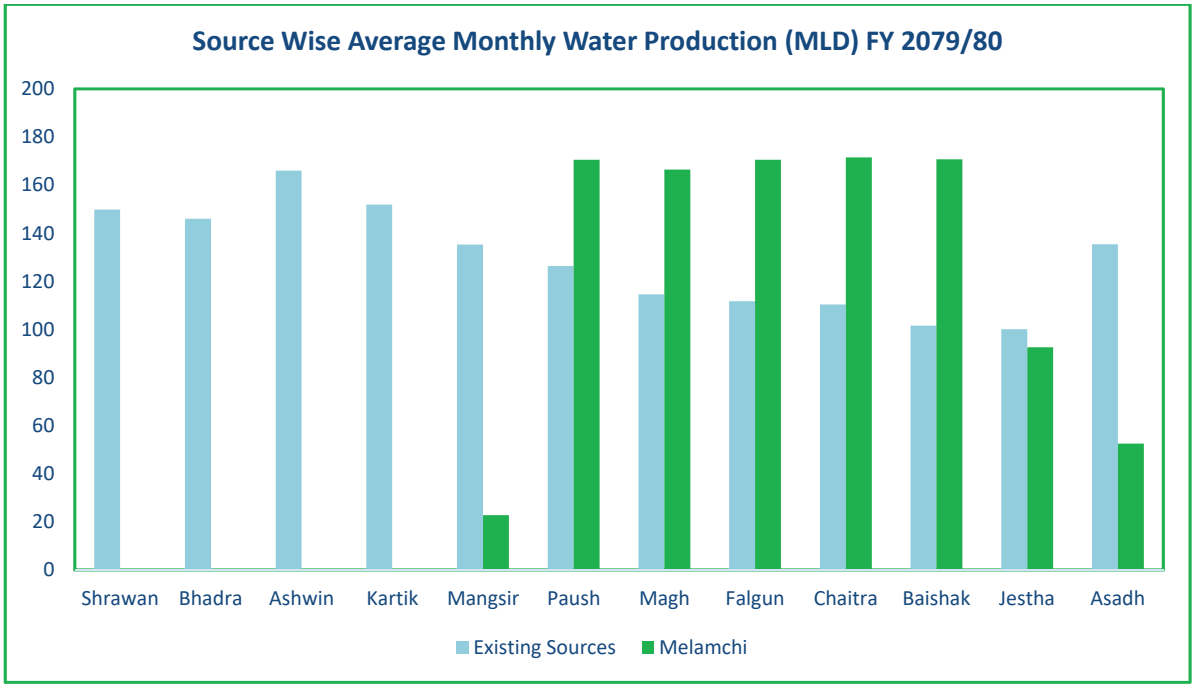
WATER PRODUCTION AND DISTRIBUTION STATUS

S.N.	DESCRIPTION	QUANTITY (Million Litres Per Day)
1	Demand	485
2	Production of water from existing sources	
A.	Minimum Production	100.07
B.	Maximum Production	166.00
C.	Average Production	128.97
3	Production of water from existing sources and Melamchi water	
A.	Minimum Production	146.02
B.	Maximum Production	218.46
C.	Average Production	175.02
3	Supply (considering 20% real losses)	
A.	During month of Minimum Production	116.82
B.	During month of Maximum Production	174.77
C.	Average Supply	129.63



Month-wise Average Daily Water Production (Source Based) for F.Y. 2079/80 (Million Liters per Day)

Month	Existing Sources			Melamchi			Total
	Surface	Ground	Total	Available to KUKL	Testing and Commissioning Works By PID	Total	
Shrawan	95.18	54.71	149.89	-	-	-	149.89
Bhadra	102.51	43.51	146.02	-	-	-	146.02
Ashwin	100.63	65.37	166	-	-	-	166.00
Kartik	97.6	54.36	151.96	-	-	-	151.96
Mangsir	84.61	50.67	135.28	22.76	5.23	27.99	158.04
Paush	79.81	46.54	126.35	131.34	39.23	170.57	296.92
Magh	71.01	43.55	114.56	128.21	38.30	166.5	281.06
Falgun	69.91	41.79	111.7	131.35	39.23	170.58	282.28
Chaitra	63.95	46.44	110.39	132.07	39.45	171.52	281.91
Baishakh	61.73	39.87	101.6	131.46	39.27	170.73	272.33
Jestha	64.08	35.99	100.07	71.31	21.30	92.61	192.68
Asadh	86.91	48.45	135.36	40.45	12.08	52.53	187.89
Average Production	81.53	47.58	129.11	98.48	29.23	127.71	175.02



Branch Based Month-wise Average Daily Water Production (MLD) for F.Y. 2079/80

Months	Branch Name									Total
	Bhaktapur	Thimi	Baneshwor	Chettrapati	Kirtipur	Lalitpur	Tripureshwor	Mahankalchaur	Maharajgunj	
Shrawan	5.25	11.03	4.18	0.95	4.63	18.50	8.29	56.00	41.06	149.89
Bhadra	5.25	10.26	4.18	1.00	4.63	18.50	7.66	56.00	38.55	146.03
Ashoj	5.15	10.74	4.18	1.00	4.52	17.50	7.66	56.00	59.25	166.00
Kartik	5.03	9.98	4.18	1.00	4.58	17.00	7.65	56.00	46.54	151.96
Mangsir	4.65	9.00	4.18	1.00	4.78	16.80	7.65	48.00	39.21	135.28
Poush	3.89	6.07	3.24	0.77	4.04	16.60	7.65	48.00	36.09	126.35
Magh	3.49	6.11	3.24	0.75	3.35	16.60	7.65	40.00	33.37	114.56
Falgun	2.94	5.57	3.24	0.75	3.35	16.60	7.30	39.00	32.95	111.69
Chaitra	2.48	7.49	3.24	0.72	3.15	16.60	6.94	35.00	34.77	110.39
Baishak	2.47	7.72	3.24	0.70	3.15	16.25	4.26	35.00	28.82	101.60
Jestha	2.67	6.95	3.24	0.68	3.15	14.20	7.58	38.00	23.61	100.07
Ashad	4.47	7.32	3.24	0.70	3.33	12.50	8.15	52.00	42.06	133.77
Average Production	**3.98**	**8.19**	**3.63**	**0.84**	**3.89**	**16.47**	**7.37**	**46.58**	**38.02**	128.97

Average Daily Production from Bode Water Treatment Plant (Million Liters per Day)

Month / Year	2075/76	2076/77	2077/78	2078/79	2079/80
Shrawan	11.36	11.63	11.2	12.28	11.03
Bhadra	9.78	11.5	11.63	11.7	10.26
Ashwin	9.17	11.8	11.54	11.48	10.74
Kartik	9.28	11.8	11.8	11.77	9.98
Mangsir	10	10.9	11.44	11.78	9.00
Paush	8.82	9.17	10.89	8.97	6.07
Magh	9.67	10.37	10.76	8.96	6.11
Falgun	10.31	10.17	11.8	9.21	5.57
Chaitra	9.79	9.92	10.84	9.45	7.49
Baishakh	11.05	10.35	10.48	9.2	7.72
Jestha	11.36	11.2	10.68	7.85	6.95
Ashad	10.58	11.64	11.65	9.93	7.32
Daily Average	**10.09**	**10.87**	**11.25**	**10.21**	**8.20**

Average Daily Production from Bansbari Water Treatment Plant (Million Liters per

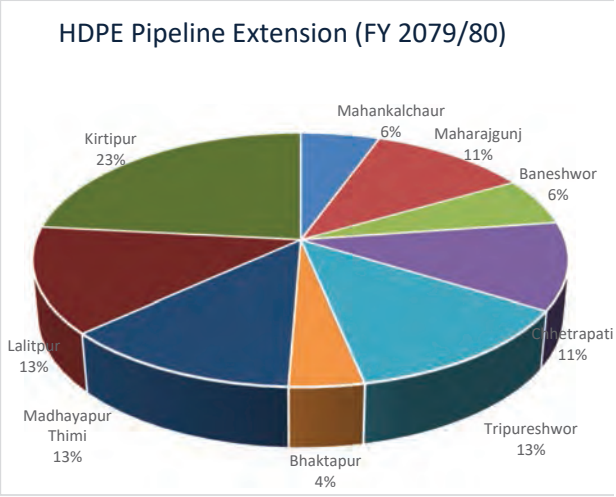
Month / Year	2075/76	2076/77	2077/78	2078/79	2079/80
Shrawan	20.21	19.83	16.85	20.05	11.40
Bhadra	20.85	19.71	16	18.95	19.15
Ashoj	20.25	18.61	15.64	19.24	18.17
Kartik	13.07	15.09	11.17	16.48	14.23
Mangsir	9.76	10.5	7.52	8.75	8.44
Poush	7.41	8.01	5.04	6.26	4.90
Magh	6.92	6.93	3.87	4.52	3.08
Falgun	6.87	6.89	2.84	4.28	3.14
Chaitra	6.43	6.5	2.6	2.79	2.21
Baisakh	5.77	5.84	3.41	3.11	3.01
Jestha	6.1	6.94	3.76	4.3	2.25
Asar	9.36	15.01	11.43	11.78	10.54
Average Production	**11.08**	**11.66**	**8.34**	**10.04**	**8.38**

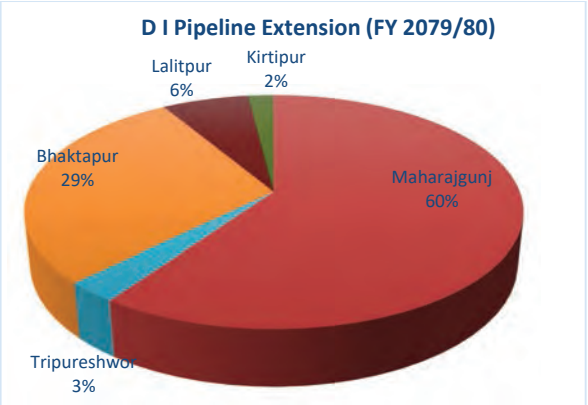
Average Daily Production from Bhaktapur Bansbari Water Treatment Plant (Million Liters per Day)

Month/Year	2075/76	2076/77	2077/78	2078/79	2079/80
Shrawan	1.76	3.1	3.27	3.29	4.50
Bhadra	1.88	3.32	3.32	3.39	4.50
Ashwin	1.81	3.61	3.61	4.8	4.40
Kartik	1.72	2.92	2.92	4.55	4.28
Mangsir	1.65	3.74	3.74	4.55	3.90
Paush	1.4	3.06	3.14	4.39	3.20
Magh	1.45	3.62	3.17	4.37	2.80
Falgun	1.31	3.7	3	3.33	2.25
Chaitra	1.16	3.47	2.43	2.61	1.80
Baishakh	1.3	3.97	1.91	2.69	1.80
Jestha	1.19	4.97	1.71	3.2	2.00
Ashad	1.21	5.13	3.06	2.58	3.80
Average Daily Production	**1.49**	**3.73**	**2.93**	**3.64**	**3.27**

Average Daily Production from Other Water Treatment Plants (Million Liters per Day)

Month/Year	Sundarijal	Sundarighat	Mahankalchaur	Bhaisepati
Shrawan	0.00	6.87	56.00	10.50
Bhadra	0.00	6.48	56.00	14.00
Ashwin	0.00	6.48	56.00	12.50
Kartik	0.00	6.47	56.00	12.40
Mangsir	22.76	6.47	48.00	12.00
Paush	170.57	6.47	48.00	12.50
Magh	166.50	6.47	40.00	12.00
Falgun	170.50	6.17	39.00	12.00
Chaitra	171.52	5.86	35.00	12.50
Baishakh	170.73	3.28	35.00	11.00
Jestha	92.61	6.41	38.00	9.00
Ashad	52.53	6.84	52.00	8.00
Average Daily Production	81.53	6.19	46.58	11.51





Distribution of Water by Tanker (F.Y. 2079/80)

Month	Capacity (5000 Litres)			Capacity (6000 Litres)		
	Private trips	Public Trips		Private trips	Public Trips	
		Fully Subsidized	40% Subsidized		Fully Subsidized	40% Subsidized
Sharwan	310	25	46	568	114	80
Bhadra	347	41	37	584	98	76
Ashoj	342	22	33	545	101	66
Kartik	252	19	39	578	110	75
Mangsir	255	28	33	494	72	73
Poush	225	17	29	455	46	60
Magh	215	8	22	418	57	54
Falgun	354	54	31	278	17	54
Chaitra	378	55	21	272	20	53
Baisakh	237	28	25	504	49	51
Jestha	558	37	35	720	43	63
Ashad	307	22	35	621	61	65
Total	3780	356	386	6037	788	770

Month	Capacity (6000 Litres)			Total trips		Total of Private and Public Trips
	Private trips	Public Trips		Private trips	Public Trips	
		Fully Subsidized	40% Subsidized			
Sharwan	575	45	13	1453	323	1776
Bhadra	643	32	11	1574	295	1869
Ashoj	520	24	13	1407	259	1666
Kartik	576	33	14	1406	290	1696
Mangsir	466	32	13	1215	251	1466
Poush	376	27	7	1056	186	1242
Magh	373	31	7	1006	179	1185
Falgun	591	47	2	1223	205	1428
Chaitra	401	29	5	1051	183	1234
Baisakh	289	17	5	1030	175	1205
Jestha	604	27	9	1882	214	2096
Ashad	503	25	6	1431	214	1645
Total	5917	369	105	15734	2774	18508

Pipeline Extension Works By Branches (F.Y. 2079/80)

Pipe Material (Ductile Iron)	Pipeline Diameter (mm)								Total
	100	150			200		250	400	
Branch	Lalitpur	Tripureswor	Maharajgunj	Kirtipur	Bhaktapur	Maharajgunj	Bhaktapur	Maharajgunj	
Length (M)	500	220	4000	148	683	500	1503	20	7074
Benefitted Households (Nos)	70	150	1300	1000	425	600	425		3900
Benefitted Population (Nos)	1152	1600	7000	6000	1700	920	1700		18920

Pipe Material HDPE	Pipeline Diameter (mm)							Total
	20 & 25	40	40	50	63	63	63	
Branch	Mahankalchour	Madhyapur Thimi	Kritipur	Bhaktpur	Maharajgunj	Baneshwor	Kritipur	
Length (Meter)	140	394	525	150	2000	1285	1665	6159
Benefitted Households (Nos)	60	54	160	160	1200	150	485	2269
Benefitted Population (Nos)	300	320	960	960	6880	1500	2910	13830

Pipe Material HDPE	Pipeline Diameter (mm)							Total
	63	63	63	63	63	63	90	
Branch	Madhyapur - Thimi	Bhaktapur	Chhetrapati	Tripureswor	Mahankalchour	Lalitpur	Mahangkalchaur	
Length (Meter)	4730	2050	1030	68	1650	1100	160	10788
Benefitted Households (Nos)	367	1000	500	20	800	100	160	2947
Benefitted Population (Nos)	1651	4000	5000	400	4000	1560	800	17411

Pipeline Extension Works By Branches (F.Y. 2079/80)

Pipe Material HDPE	Pipeline Diameter (mm)							Total
	90	90	90	90	90	90	90	
Branch	Maharajgunj	Baneshwor	Chhetrapati	Tripureshwor	Bhaktpur	Madhyapur Thimi	Lalitpur	
Length (Meter)	1500	2062	6615	4395	370	3157	9108	25707
Benefitted Population (Nos)	485	250	2500	1000	45	276	451	4522
Benefitted Population (Nos)	1500	2500	20000	10000	180	1521	6765	40966

Pipe Material HDPE	Pipeline Diameter (mm)							Total
	90	110	110	110	110	110	110	
Branch	Kirtipur	Maharajgunj	Mahankalchaur	Maharajgunj	Baneshwor	Chhetrapati	Tripureshwor	
Length (Meter)	1829	800	2150	4200	1081	1515	1010	10756
Benefitted Population (Nos)	215	200	1440	870	200	400	200	3310
Benefitted Population (Nos)	1290	950	5600	1362	2000	4500	2500	16912

Pipe Material HDPE	Pipeline Diameter (mm)							Total
	110	110	110	110	150	160		
Branch	Bhaktpur	Madhyapur Thimi	Lalitpur	Kritipur	Kritipur	Madhyapur Thimi	Mahankalchaur	
Length (Meter)	180	1742	1177	2078	4796	570	500	10863
Benefitted Population (Nos)	62	35	412	350	2500	145	620	4062
Benefitted Population (Nos)	240	217	6180	2100	21000	871	3000	33368

Pipeline Extension Works By Branches (F.Y. 2079/80)

Pipe Material HDPE	Pipeline Diameter (mm)					Total
	160	160	160	200	300	
Branch	Baneshwor	Chhartrapati	Maharajgunj	Kritipur	Mahangkalchaur	
Length (Meter)	690	200	900	48	70	1908
Benefitted Population (Nos)	25 nos of Ministries/ Departments	100	600	50	50	750
Benefitted Population (Nos)		1200	1200	300	350	2700

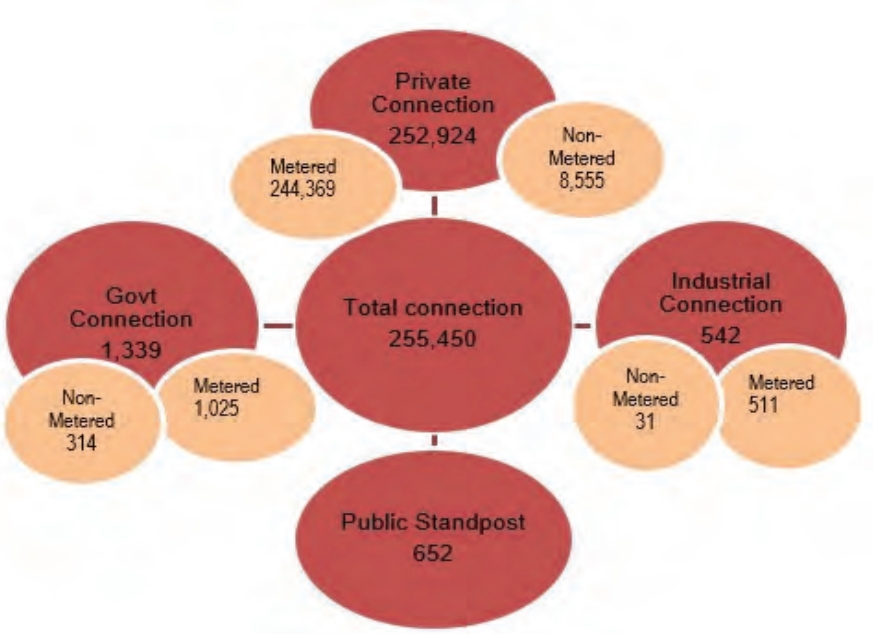
Pipe Material GI	Pipe Diameter (mm)	Total
	50	
Branch	Kritipur	
Length (Meter)	138	138
Benefitted Population (Nos)	20	20
Benefitted Population (Nos)	120	120

Activities of Service Improvements By Branches (F.Y. 2079/80)

S.N	Branch Name	Installation of Injection Points	Installation of Polythene Tanks	Leak Identified	Leak Repaired	Installation of New Water Meters	Meter Repaired
1	Baneshwor	0	0	1673	1484	922	447
2	Bhatkpur	0	0	712	698	1220	500
3	Madhyapur Thimi	4	0	1594	1546	1821	1006
4	Mahangkalchaur	5	0	1953	1886	2880	1248
5	Maharajgunj	0	3	1922	1887	1367	142
6	Lalitpur	0	3	1980	1863	2692	257
7	Chhetrapati	1	4	1832	1798	1527	135
8	Tripureshwor	0	0	1070	812	1741	440
9	Kritipur	0	0	425	384	1365	350
	Total	10	10	13161	12358	15535	4525

Consumer Water Connections (F.Y. 2079/80)

A. Total Connections till end of F.Y. 2079/80



B. New Connections in F.Y. 2079/80

HIGHLIGHTS OF ACTIVITIES OF KUKL IN FISCAL YEAR 2079/80

1. Customer Relation Section

The Customer Relations Section, as part of its responsibilities, maintains a record of customer complaints related to various aspects of water distribution. These complaints encompass issues such as non-scheduled water distribution, incidents of meter theft, untimely meter readings, instances of excessive billing, and unavailability of meters. The section ensures diligent tracking and updates on each customer's concerns to address and resolve these issues promptly and efficiently.

In the fiscal year 2079/80, the recorded number of complains in each branches of KUKL summarized in table below:

S.N	BRANCH	NO. OF COMPLAINS	UNSOLVED	SOLVED
1	BHAKTAPUR	11	10	1
2	LALITPUR	24	13	11
3	MADHYAPUR THIMI	8	4	4
4	MAHANKALCHAUR	22	8	14
5	KIRTIPUR	4	2	2
6	MAHARAJGUNJ	36	28	8
7	BANESHWOR	22	11	11
8	CHHETRAPATI	5	4	1
9	TRIPURESHWOR	11	9	2
10	OTHERS	8	2	6
	TOTAL	151	91	60

2. Bhaktapur Branch

- **Pipeline Extension Works**

10" dia pipeline laying works at Jagati

8" dia pipeline laying works at suryabinayak

3. Baneshwor Branch

➢ Rehabilitation of Water Treatment Plant at Singhadurbar

This project includes the rehabilitation and periodic maintenance of existing conventional type water treatment plant constructed at Singhadurbar for treating ground water. Removal of Sludge, Paving of Tiles on Aerator, replacement of filter media and applying water proof color are the major activities carried out.

Aerator before installation of tiles

Aerator after installation of tiles

➢ Leakage Maintenance Work at Bhakti Thapa Sadak.

The work includes the replacement of damaged 200mm dia CI Sluice Valve.

Pavement Cutting Work using Cutter for Replacement of 200mm dia CI Sluice Valve

Replacement of 200mm dia CI Sluice Valve

➢ Protection and rehabilitation of Narephant Pump House

Compound Wall Before construction

Compound Wall After construction

- **Leak maintenance work at Tinkune, Koteshwor**

Leak Maintenance on 350mm dia UPVC Transmission Main at Tinkune

Leak Maintenance on 350mm dia UPVC Transmission Main at Tinkune

4. Tripureshwor Branch

- **Interconnection and Pipeline Extension Work**

Interconnection work at Karkhusi

90 mm HDPE Pipeline Extension work at Shivnagar,KMC-14

- **Rehabilitation of treatment plant**

RCC Floor Construction at Sundari Ghat Water Treatment Plant

Gabion Wall Construction at Nakkhu Intake

5. Chhetrapati Branch

Monitoring and Controlling of Illegal connection from Direct Pump line at Kanya mandir.

Capacity Enhancement of Dallu Treatment Plant.

Capacity Enhancement of Khusibu Treatment Plant

Thanks giving program organized by Siddharth Tole sudhar samiti-Kimdole for getting water after a long time

6. Lalitpur Branch

➢ Pipeline Improvement and extension work

500 mm, 200 mm, 350mm, 300mm and 110 mm pipeline improvement and interconnection from Ghantaghar to Medicity hospital.

Pipeline interconnection work at Ghantaghar

Pipeline interconnection work at medicity

Pipeline extension work at Shreejanshil Marga

Pipeline extension work at Shreejanshil Marga

➢ Leakage repair and maintenance work at various places.

Leakage repair and maintenance work has carried out by Lalitpur branch different places within the premises of its commanding area for the better supply of drinking water and effective use of available water resources.

Leak maintenance at Bagdol Marga

Leak maintenance at Kalika Marga

➢ Replacement of Filter Media at Bhaisepati Treatment plant

Replacement of the Filter media at the filter at Bhaisepati Water treatment plant for the effective and efficient filter of the water from the sources.

Replacement of filter media at Bhaisepati Water Treatment plant

7. Kirtipur Branch

➢ Pilot Project of Non-Revenue Water Determination

Pilot Project of Non-Revenue Water work was done Raniban in other to find the Non-Revenue Water at Machhegaun which covers 200 household. The project was done for the one-month time period. The Non-Revenue Water was observed be 29.77% after the pipeline improvement work.


Installation of flowmeters and construction of flowmeter chamber

➢ Extension of 150mm dia HDPE Transmission Pipeline Mains

It includes extension and improvement of pipeline from New Kirtipur SRT to Jakha Tank. It helps to add the treated water in Jakha Tank and about 10 to 15% customer of Kirtipur Branch get benefited. Moreover, it assures the reliable water supply in different area.

Laying and Jointing of 150mm dia HDPE transmission mains from Kirtipur SRT to Jhaka Tank

Butt Weld Jointing Work of 150mm dia HDPE transmission mains

8. Madhyapur Thimi Branch

➢ Construction of Mechanical Pressure Filter and Service Reservoir at Natyashwari

The Mechanical Pressure Filter and reservoir can serve Natyashwari, Indrakamal and Tersetar areas.

Pressure Filter at Natyashwari.

Semi-underground water tank of 115 cum.

➢ Construction of shallow wells at Manohara River

Four numbers of shallow wells are constructed to increase the quantity of water at existing dug wells.

Addition of shallow wells at Manohara Dug wells.

Site visit at Manohara Dug wells and shallow wells area.

9. Mahankalchaur Branch

➢ **Pipeline Extension Works**


Pipeline Extension work at Jorpati Basukichowk

➢ **Pipeline and PCC work**


Pipeline and PCC work at Jorpati

10. Maharajgunj Branch

➢ Pipeline Extension Works

Pipeline laying work at Tokha-6,Dhapasi

Pipeline laying work at Tokha-11,Gongabu

➢ Repair Works

Leakage Repair work at Lainchaur in 400 mm pipeline

Leakage repair work in Lainchaur in 400 mm pipeline

Safety work before commencement of repair work in pipeline

Leakage repair work in Baniyatar, Tokha-8 (200 mm pipe and 100 mm pipe connection)

11. Waste Water Operation Division

The Wastewater Operation Division of Kathmandu Upatyaka Khanepani Limited (KUKL) in the Kathmandu Valley is responsible for managing and overseeing various aspects related to the treatment and disposal of wastewater.

In the fiscal year 2079/80 Waste Water Operation division was successful to lay total 8.67 km of pipeline covering areas of Kathmandu, Lalitpur and Bhaktapur from which total population of 47,300 was benefitted. Similarly, total numbers of 40 and 23 new connection of service sewer pipe was done in Kathmandu and Lalitpur respectively. Other works include repair and maintenance of manholes, sewerage and cleaning of sewer pipes by jetting machine.

Photographs of activities of Wastewater operation division in fiscal year 2079/80

Sewer Maintenance work at Ramshahpath, Singhadurbar

Cleaning of manhole at Buddhanagar area

12. Electromechanical Section

The Electromechanical Branch, situated in Sundarighat, Kirtipur, specializes in a broad range of electrical and mechanical tasks within the service area of KUKL. Functioning under the Support division, the branch undertakes various responsibilities, including the drilling of new deep tube wells, conducting groundwater potential surveys, rehabilitating and operating old deep tube wells, and handling the repair and maintenance of all pumping stations (covering boosting, transmission, and distribution). Additionally, the branch is responsible for the upkeep of water treatment plants and dosing stations.

In addition to these routine tasks, the Electromechanical Branch oversees the operation of bulkmeter and water testing stations (Meter test bench), pump test bench, and a 680.4 KW solar plant situated at Dhobighat, Lalitpur. It also provides heavy equipment support for other branches and extends technical assistance for the design, construction, and operation of deep tube wells for various governmental and non-governmental organizations. The branch further manages video surveillance cameras for deep tube wells with a capacity of up to 300 meters depth, conducts commercially water meter tests, and offers technical support for different organizational requests.

Major achievements in fiscal year 2080/81 includes:

1. Drilling new deep tube wells at five different locations in the Kathmandu Valley is expected to increase water production by 4.84 MLD. The selected sites include Koteshwor-Mahadevsthan, Buddhanilkantha-4, Buddhanilkantha-7, Teaching Hospital Compound, and Tarkeshwor-11.
2. The drilling of three shallow tube wells in the Bode Dug well area aims to augment water production by approximately 1 MLD.
3. The well development and rehabilitation of 20 old deep tube wells across the Kathmandu Valley are anticipated to result in a 3 MLD increase in total water production.
4. The construction of sump wells (boosting stations) at BB-0 (Bansbari SRT), Khumaltaar SRT, and Bhajangaal (Kirtipur SRT), with the installation of transformers, pumps, and accessories, is intended to improve the equitable distribution of Melamchi water in their respective service areas.
5. The installation of ultrasonic digital flowmeters at four different locations in the water treatment plants of KUKL (Bansbari Water Treatment Plant, Sundarijal WTP, Bode WTP) is part of the enhancement plan.
6. The installation of digital sensors for real-time data monitoring and recording systems for water quality parameters, equipped with a display unit compatible with mobile applications, is planned for three major treatment plants: Mahankalchour, Bansbari, and Bode.
7. A data recovery and recording system, including a display unit, will be installed at the 680.4 KW Solar Plant in Dhobighat, donated by JICA, with temperature, wind, and other sensors.
8. The development of a communication mobile application in Android version, to be followed by availability on app stores in the current fiscal year, will facilitate complaint management for the regular faults in the repair and maintenance of various pumping stations, tube wells, and other accessories.
9. The installation of different VCBs and protection systems at Mahankalchour WTP is part of the ongoing improvement initiatives.
10. The installation and development of dosing systems for chlorine, PAC, and lime at various treatment plants, including major treatment plants, are being undertaken.
11. Backwash and electrification work are being carried out in different treatment plants to enhance overall efficiency and functionality

Well development by DTH (30 Bar) Compressor at Madhyapur Thimi, Gathaghar, Bhaktapur

Drilling of new deep tubewell at Tarkeshwor Municipality-11, Kathmandu.

13. Information Technology (IT) section

The IT section is responsible for managing Information Technology (IT) related activities of KUKL. Various applications of ICT are being Implemented by KUKL which is being managed by the IT Section. Some ICT related applications are already in the implementation phase, and some are under the development phase which are shown in tables below.

ICT Module Currently in Operation and in Development Phase	
Customer Billing Application	Inventory and Asset Management System
New Connection Management Application	Ledger Management System
Financial Accounting Management Application	E- Attendance Device (Piloting)
Grievance Handling Management Application	Queue Management System
Human Resource Management System	Network, system, and server management
CCTV surveillance Management	

14. Training Section

During the fiscal year 2079/80, the Training and Research Section made significant efforts to enhance the skills and knowledge of our internal staff through various training programs. These initiatives were aimed at strengthening their capabilities and fostering professional growth. The trainings offered encompassed a wide range of subjects, including on-the-job training, Training of Trainers, Basic Training, and skills development.

The topics covered in these trainings were diverse and catered to the needs of our organization. They included technical aspects related to water supply systems, Geographic Information Systems (GIS), financial management, non-revenue water management, water quality, gender equality, and finance.

A total of 128 officers and 91 non-officer staff members benefited from these capacity-building trainings. Additionally, as part of our commitment to international collaboration and knowledge exchange, 28 staff members had the opportunity to visit Japan, while 7 staff members had the privilege of visiting Sri Lanka to participate in various capacity development programs.

Training Abroad

Practical (OJT) Training

Training at Nagarkot

15. Internal Audit and Inspection Division

Internal Audit Status 2079-80		
SN	Name of Office	Status
1	Head Office (Operational Level)	Completed
2	Wastewater Operation Division	Completed
3	Water/Wastewater Quality Control Division	Completed
4	Tripureshwor Branch	Completed
5	Chhetrapati Branch	Completed
6	Maharajgunj Branch	Completed
7	Mhankalchaur Branch	Completed
8	Baneshwor Branch	Completed
9	Madhypur Thimi Branch	Completed
10	Bhaktapur Branch	Completed
11	Lalitpur Branch	Completed
12	Kritipur Branch	Completed
13	Tanker Section	Completed
14	Sundarijal Water treatment Plant	Completed
15	Electromechanical section	Completed
16	Head Office (Central Level)	Not Completed
17	Employee Welfare Fund	Not Completed

16. Water/Waste Water Quality Assurance Division

The Water/Waste Water Quality Assurance Division within KUKL plays a pivotal role in overseeing and managing the quality of water produced and distributed by the company. Collaborating closely with various branches of KUKL, the division ensures that the water supplied meets the required standards. To achieve this, water samples are systematically collected from multiple points spanning from the reservoir to taps, providing a representative overview of the entire distribution network. KUKL operates four laboratories dedicated to water quality assessment which are Central Laboratory at Mahankalchaur, New Sundarijal WTP Laboratory, Bode WTP Laboratory, Bansbari WTP Laboratory.

All of these laboratories conduct routine monitoring of water quality, scrutinizing various physico-chemical and microbiological parameters. Regular analysis of these parameters is crucial for ensuring that the water supplied by KUKL meets the necessary standards for consumption and public health. The systematic approach, involving multiple sampling points and dedicated laboratories, reflects KUKL's commitment to delivering high-quality water to its consumers.
Various physico-chemical and microbiological parameters are analyzed on routine basis and water quality reports are uploaded in KUKL's website on monthly basis.

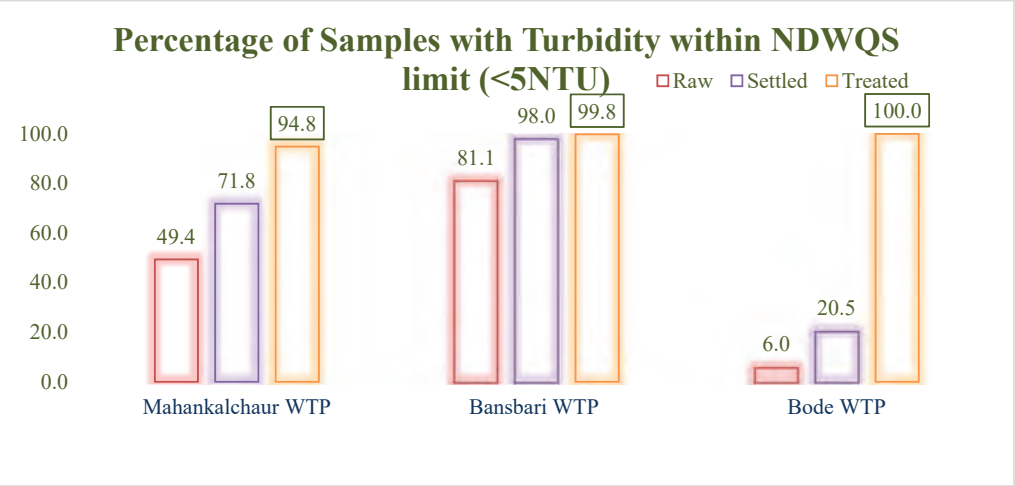
Additionally, the central laboratory assesses the quality of chemicals used in Water Treatment Plants, the quality of water, waste/water on request of general public, and also provides platform for learning the water treatment process and water analysis methods by means of field visit in water treatment plant and laboratory. Students from various faculties that have incorporated water treatment facility and water quality testing in their course works come to visit treatment plant and laboratory facilities. A nominal cost of Rs. 200 per student is collected from the institute as a consultant fee. During fiscal year 2079/80, a total number of 1906 students and in this fiscal year a total of 865 students have visited Central Laboratory as well as Water Treatment Plant at Mahankalchaur. In addition, this division also provide laboratory support to students from different institutes for their thesis works and internship.

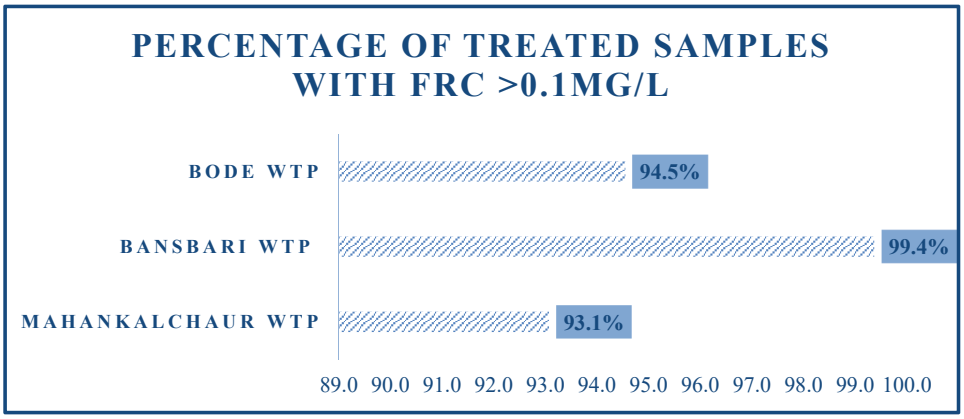
The total number of water samples tested at three laboratories is as follows:

Total Number of Water samples tested at three laboratories

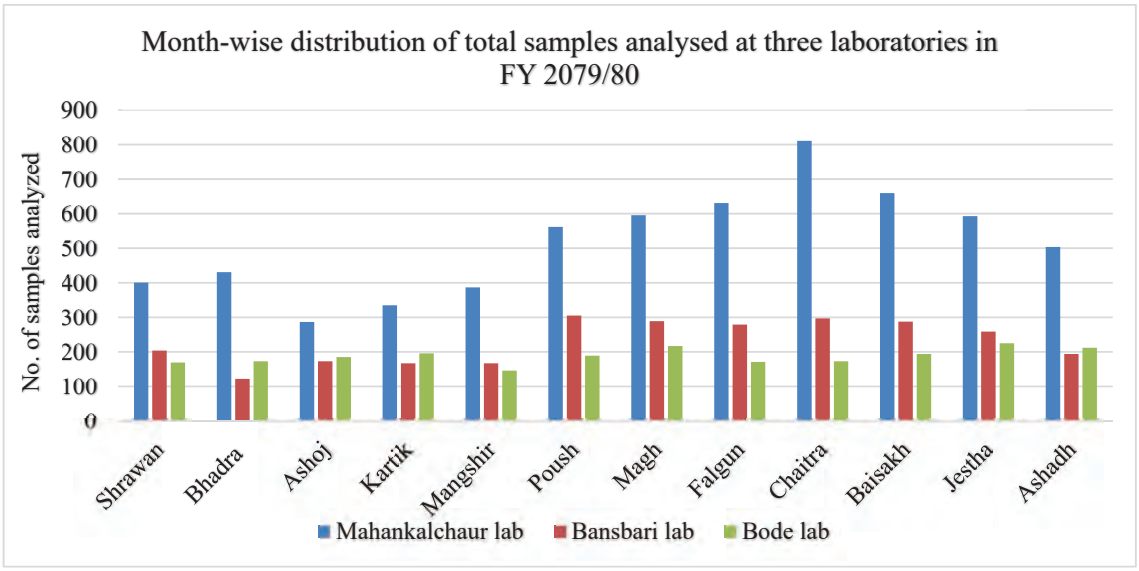
Year	Total number of customer's sample tested at Water Wastewater Quality Assurance Division	Water Wastewater Quality Assurance Division	Lab At Bansbari Water Treatment Plant	Lab At Bode Water Treatment Plant
FY 2079/80	3257	6198	2744	2250

The following two graphs show the turbidity removal efficiency and chlorination condition of Mahankalchaur, Bode and Bansbari WTP.





The following figures display the month-wise distribution of total number of water samples analyzed at three laboratories, Mahankalchaur, Bansbari and Bode in the year 2079/80 respectively.



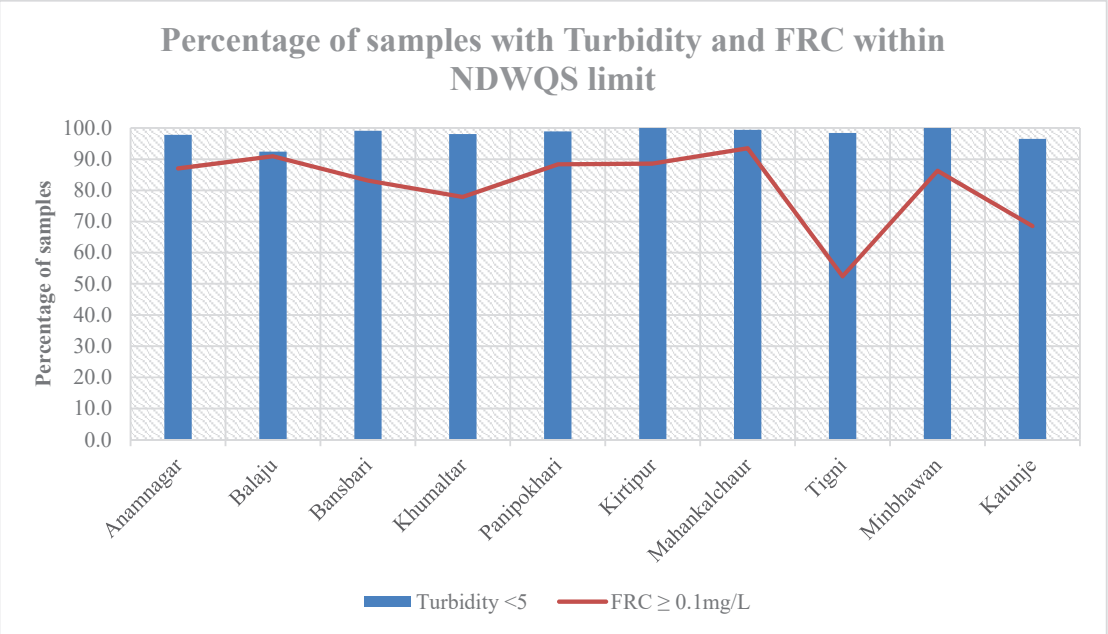
Analysis of water Supplied From Melamchi (New Sundarijal WTP)

Melamchi water was supplied in Kathmandu valley for eight months (Mangsir to Ashadh) in FY 2079/80. During that period, a total of 1963 samples were collected from 10 different reservoirs and analyzed for their physiochemical and microbial parameters.

SRT-wise distribution of Melamchi water samples tested

SN	SRT	Total tested	Within NDWQS limit (No.)	Within NDWQS (%)
1	Anamnagar	139	121	87.05
2	Balaju	66	56	84.85
3	Bansbari	338	281	83.14
4	Khumaltar	104	79	75.96
5	Panipokhari	274	242	88.32
6	Kirtipur	105	93	88.57
7	Mahankalchaur	538	501	93.12
8	Tigni	124	66	53.23
9	Minbhawan	131	113	86.26
10	Katunje	143	96	67.13
	Total	**1963**	**1648**	**83.95**

Graph showing the percentage of samples with Turbidity and FRC within NDWQS limit



Trainings

I. OJT and Technical Guidance Training on how to operate Residual chlorine meter and Turbidimeter and test FRC and Turbidity of water samples.

II. Orientation Training on Water Quality Management and Laboratory test for newly recruited laboratory personnel.

17. BDS Activities Under Production Division

BDS Leak Repair Work at Baba Chowk and Chabahil Chowk

18. Activities of Project Implementation Directorate (PID)

Currently, PID is working on the development of bulk distributions networks to deliver drinking water from Sundarijal to service reservoirs located at different locations in Kathmandu Valley. Likewise, distribution networks within Ringroad and Mandikhatar, Chabhil, Kapan area of outside Ringroad are being implemented in the first phase and preparing the projects for implementation outside Ringroad in Kirtipur, Bhaktapur, Madhyapur Thimi and Bouddha, Jorpati and Chabhil area under Second Kathmandu Valley Water Supply Improvement Project.

The initial phase involves establishing distribution networks in with ADB loan and GoN funding. Further plans are in progress for the implementation of projects beyond the Ringroad, with execution tailored to the available sources of funding.

A. Water Supply Infrastructure Component

PID scope under Kathmandu Valley Water Supply Improvement Project (KVWSIP) covers development of infrastructure, that includes laying pipelines for bulk water transmission to household connection and meter installation (free of cost to the public). Similarly, pipe laying works for distribution network within the Ring Road under the first phase have been completed and testing and commissioning is halfway and likely to be completed and come into operation by mid-July 2024. PID has handed over completed BDS packages with Service Reservoir Tanks constructed to KVWMB for the operation of diverted 170 MLD water from Melamchi. Likewise, the completed District Metering Areas (DMAs) out of 32 DMAs under distribution network system have been gradually handed over to KVWMB and consequently to KUKL for operation. Another important package is for Supervisory Control and Data Acquisition (SCADA) system with centralized monitoring and control system has been adopted for efficient management of the water supply distribution in the Kathmandu Valley.

Major Works performed and their status under the PID are summarized here in the tables:

- Major Works Under Water Supply Infrastructure Component

S.N.	Description	Activities
1	Bulk Distribution System Network (BDS)	Includes construction of total 77.00 kilometers of D.I. Pipeline aiming to convey water from Sundarijal WTP to 10 newly constructed and 5 existing Service reservoirs located at different places in Kathmandu Valley.
2	Service Reservoirs	New 10 Service Reservoirs with total capacity of 74500 cubic meters is constructed at 9 locations of Kathmandu Valley to facilitate the supply of water to distribution network.
3	Distribution Network Improvement (DNI)	About 1010 Kilometers of Distribution network within Ring Road is constructed based on 32 district metering area (DMA) in the first phase with ADB loan to facilitate the water distribution and reduce the NRW. Contract of Distribution network Improvement for remaining part within Ring Road including Mandikhatar and Kapan area outside the Ring Road using the government fund for 800km is under construction and 613km pipe laying work is completed.
4	Consumer connections	About 145000 consumer connections will be made for supplying water to the households.
5	Automation System (SCADA)	Automation System (SCADA) installation work is under construction for controlling remotely the major valves in service reservoirs and distribution network. The equipment for reservoir management units is already installed and are ready for commissioning.

- Progress of Water Supply Infrastructure Component

I. Distribution Network Improvement Packages under ADB Loan

Package Name/ Number	Length of Pipeline (KM)	Number of House Connections	Length of Pipeline Completed (KM)	Number of House Connections with meter Completed	Progress %	Included Works
4 contracts of DNI Package 1,2,3,4	1010	84125	1008	39940	95.35 (91-99.4)	Primary Pipelines from Service Reservoir, Distribution Pipelines and Reticulation Pipelines, and Consumer Connections.

II.Distribution Network Improvement Packages with Government Fund

Package Name/ Number	Length of Pipeline (KM)	Number of House Connections	Length of Pipeline Completed (KM)	Number of House Connections Completed without meter	Progress %	Included Works
5,6, 9a Mandikhatar and 9a Kapan (DNI packages)	796.195	58459	613	33682	75.81 (60.74 - 83.47)	Primary Pipelines from Service Reservoir, Distribution Pipelines and Reticulation Pipelines, and Consumer Connections.

- Bulk Distribution System Construction Packages under ADB Loan

Package Name/ Number	No. of Service reservoir and Capacity	Length of Pipeline (KM)	Progress %	Included Works
5 BDS Packages 0,1,2,3,4	10	75.81	100	Service Reservoirs and Bulk Water Conveyance pipelines from Sundarijal WTP to the Service Reservoirs

- Bulk Distribution System Construction Packages under Government Fund

Package Name/ Number	No. of Service reservoir and Capacity	Length of Pipeline (KM)		Progress %	Included Works
		Total	Completed		
BDS Package 5	0	10.84	3.32	20.46	Under Construction

III.Construction Packages of Service Reservoir Tanks

Package Name/ Number	No. of Service reservoir and Capacity	Progress %	Included Works
SRT 06A	Two Service Reservoir Tanks at Kirtipur (6000 cum) and Mahankal (8500 cum)	61.31	Construction of Service Reservoirs Tanks at Mahankal and Kirtipur
SRT 06B	Two Service Reservoir Tanks at Balaju (5000 and 12000 cum	1.26	Construction of Service Reservoirs Tanks at Balaju

- Testing and Commissioning of Pipelines

Testing and commissioning of the DNI's first phase is progressing after arrival of 170 MLD Melamchi water since December 2022. Out of 1,010 KM of pipelines laid under the first phase, Functional Guarantee Test of 429 km with 14 DMAs have been completed so far. Regular water supply has already been started through the FGT completed 14 DMA's. PID recently handed over the

ownership of four DMAs namely DMA 2.4, DMA 3.5, DMA 9.1 and DMA TU under Distribution Network Improvement (DNI) worth Rs 401.4 million to the KUKL via Kathmandu Valley Water Supply Management Board (KVWSMB). The total length of the DNIs handed over to KVWSMP is 71.72 km out of a total of 1,010 km.

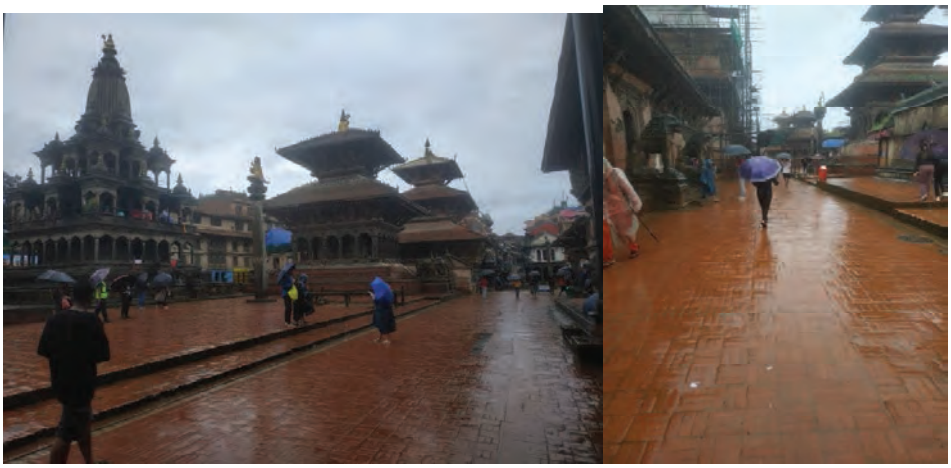
B. Wastewater Infrastructure Component

The swift and haphazard urbanization in the Kathmandu Valley has led to severe pollution of the Bagmati River and its tributaries. More than 60% of the river lengths crosses through urban settlements, and the sewage generated from the settlements is being directly discharging to the rivers. Consequently, the rivers have essentially transformed into sewer drainage.

In response to the prevailing conditions, the Kathmandu Valley Wastewater Management Project (KVWMP) was launched in 2013 with the objective of restoring the rivers' aesthetic appeal by ensuring the discharge of only treated water. Under the KVWMP, PID's scope encompasses the construction and rehabilitation of five Wastewater Treatment Plants (WWTP) at Guheshwori, Sallagari, Balkumari and Dhobighat and two Decentralized Wastewater Treatment Plants (DEWATS) located at Gokarna and Hanumanghat of Bhaktapur in the Kathmandu Valley. In alignment with this scope, PID has developed 'The Sewer Network Master Plan' within the KVWMP, outlining the construction of Intercepting Sewers (IS) along rivers such as Hanumante, Manohara, Khasyang Khusung, and the rehabilitation of the Sewer Network in Lalitpur Metropolitan City (LMC), Gokarna Municipality, and the core area of Kathmandu Metropolitan City.

In terms of progress, the Guheshwori Wastewater Treatment Plant (32.4 MLD) has been successfully completed and operational since October 2020. Meanwhile, the construction of WWTP at Dhobighat (37 MLD) is completed and ready for testing and commissioning. One major contract for the construction of WWTPs at Sallaghari, Balkumar and Dhobighat was terminated due to the Non-performance of the contractor and re-bidding was initiated for the remaining works under the contract. Additionally, Decentralized Wastewater Treatment Plants (DEWATS) at Gokarna (3 MLD) and Hanumanghaat (1 MLD) are currently in the implementation phase.

Patan Durbar Square relieved from seasonal waterlogging- A SUCCESS STORY



Patan Durbar Square relieved of seasonal waterlogging

The core city area of Patan, especially Patan Durbar Square, a UNESCO World Heritage Site, is finally relieved from seasonal waterlogging triggered by poor drainage. PID, in collaboration with Lalitpur Metropolitan City (LMC), has completed major part of the SN03 last fiscal year 2079/80, including the Patan Durbar Square area. This contract SN03 has a 2.8 km sewer rehabilitation work in the core city area of LMC (SN03), particularly from Lagankhel Bus Stand to Sankhamul via Patan Durbar Square under ADB Loan 3000. SN03 is a complicated project that needed to be executed extra cautiously because sewer pipes had to be laid through the core monument site, a living museum of numerous hundred-year-old historical monuments. However, PID handled it skillfully to get the desired outcome without any impact on the sensitive historical monuments. Furthermore, expediting construction work on heritage sites was a risky task and this was most probably the ADB's first project on a World Heritage Site.

Hence, ADB conducted a Heritage Impact Assessment and discovered that the contract would pose some risks to the heritage assets of the project area, mostly the sub-surface archaeology, fragile earthquake-damaged buildings, and disruption of religious and sociocultural practices in both the core monuments zone and the buffer zone.

Besides that, Government funded Baluwatar Stormwater Management Work (SW01) was completed within the stipulated timeframe (June 2023) relieving the Baluwatar area, including the official residence of the Prime Minister, of waterlogging and inundation. This was a 15-month long project that kicked off on March 2, 2022.

➢ Major Works Under Wastewater Infrastructure Component

SN	Description	Activities
1	Wastewater Treatment Plants	Construction of Wastewater Treatment Plants at Guheswori, Sallaghari, Balkumari (Kodku) and Dhobighat with total Treatment capacity of about 138 million litres per day
2	Interceptors along the Banks of Rivers	Interceptors along the Manohara, Hanumante and Khasyang-Khusung River/ Stream of length about 30 kilometers is completed aiming to intercept the wastewater disposing directly to the river/stream
3	Sewer Network Rehabilitation and Construction	Rehabilitation and construction of sewer networks in Patan and Gokarna, and a storm water network at Baluwatar was completed on the previous fiscal year.
4	Decentralized Wastewater Treatment Plants (DEWATS)	Construction of two DEWATS at Gokarna (4 MLD) of Gokarneshwor Municipality and Hanumanghat of Bhaktapur Municipality (1 MLD)

Progress of Packages under Wastewater Infrastructure Component

➢ Wastewater Treatment Plant Construction Packages

<table>
<tr><th>Package Number</th><th>Major treatment units included / Location</th><th>Capacity</th><th>Progress %</th><th>Information about water quality after Treatment</th></tr>
<tr><td>WWTP Package 1</td><td>Grit Chamber/ Equalization/ Primary Sedimentation/ Aeration Tank (Biological treatment), Secondary Clarifier/ Disk Filter/Chlorination Unit/ Digester/ Power Generation Unit etc at Guheshwori</td><td>32.4 MLD</td><td>Completed and in Operation</td><td rowspan="4"><table><tr><th>Parameter</th><th>Allowable</th></tr><tr><td>pH</td><td>6.5 - 8</td></tr><tr><td>BOD5</td><td>< 10 mg/l</td></tr><tr><td>TSS</td><td>< 10 mg/l</td></tr><tr><td>COD</td><td>< 250 mg/l</td></tr><tr><td>Oil & Grease</td><td>< 10 mg/l</td></tr><tr><td>Residual Chlorine</td><td>1 (maximum Instantaneous) mg/l</td></tr><tr><td>Coli forms</td><td><500 MPN/100ml</td></tr><tr><td>Fecal Coliforms</td><td><100 MPN/100ml</td></tr><tr><td>Ammoniacal Nitrogen</td><td><500 mg/l</td></tr></table></td></tr>
<tr><td rowspan="3">WWTP Package 2</td><td>Grit Chamber/ Equalization/ Primary Sedimentation/ Aeration Tank (Biological treatment), Secondary Clarifier/ Chlorination Unit/ Disk Filter etc at Sallaghari</td><td>14.2 MLD</td><td rowspan="3">Terminated and Re-bidding in progress</td></tr>
<tr><td>Grit Chamber/ Equalization/ Primary Sedimentation/ Aeration Tank (Biological treatment), Secondary Clarifier/ Chlorination Unit/ Disk Filter etc at Balkumari</td><td>17.5 MLD</td></tr>
<tr><td>Grit Chamber/ Equalization/ Primary Sedimentation/ Aeration Tank (Biological treatment), Secondary Clarifier/ Disk Filter/ Chlorination Unit/ Digester/ Power Generation Unit etc at Dhobighat</td><td>37 MLD</td></tr>
</table>

Package Number	Major treatment units included / Location/ Capacity	Capacity	Progress %
WWTP Package 3	Grit Chamber/ Equalization/ Primary Sedimentation/ Aeration Tank (Biological treatment), Secondary Clarifier/ Disk Filter/ Chlorination Unit/ Digester/ Power Generation Unit etc at Dhobighat	37 MLD	91.2 % (Civil construction and Installation of Mechanical Equipment is completed and ready for Testing and Commissioning)
DEWATS-01	Grit Chamber/ Equalization/ Primary Sedimentation/ Aeration Tank (Biological treatment, MBBR), Secondary Clarifier/ Chlorination Unit etc at Dhobighat	Gokarna 3 MLD and Hanumanghat 1 MLD	Under Construction

- Inceptors Construction Packages

Package Name/ Number	Completed Length Of Sewer Line and Size	No. of Manholes	Progress %	Included Works
Interceptor Package 1	16.81 (Size 400mm-1000 mm)	402	47.80	Section 1: Interceptor from Chokanchilla to Hanumanghaat at the right bank of Hanumante River, Ghattekhola brige to Hanumanghat at the left bank of Ghattekhola, from Hanumanghat to Sallaghari at the both banks of Hanumante Section 2: Interceptor from Sallaghari to Manohars Confluence at the bothside of Hanumante river
Interceptor Package 2	6.053 (Size 600mm – 1400 mm)	158	47.16	Interceptor from Dibyashwori Planning to Balkumari WWTP at the both side of Manohara and Bagmati river
Interceptor Package 3	7.1 (Size 500 mm – 600 mm)	182	Completed	Interceptor at the both side of Kasankhusi river up to Sallaghari WWTP
WW/SN-03	2.37 (Size 200mm - 1400 mm)	118	72.39	Combined sewer from Lagankhel to Shankhamul through Patan Durbar Square
WW/SW-01	1.8 (Size 1000 mm – 1400 mm)	34	Completed	Storm Water Sewer line from Gate No. 1 of Prime Minister's Residence at Baluwatar to Tukucha khola at Sakuna Marga
WW/SN-04	0.82 (Size 200 mm-800 mm)	158	7.9	Sewer Network at ward no 4 of Gokarneshwor Municipality to feed sewage to Gokarna DEWATS

- Safeguard Activities

The Project Implementation Directorate (PID) employs a comprehensive Safeguard Management System to ensure compliance with environmental and social parameters during the execution of contracts. Separate units, such as DSC and CASSC, regularly monitor and implement social safeguards. The team collaborates with construction supervision to mitigate adverse impacts, employing measures like traffic management plans, barricading, road diversion boards, and reflective tapes.

Before initiating construction contracts, contractors prepare Site-Specific Environmental Management Plans (SEMP) approved by the employer based on recommendations from the design and supervision consultant. These plans address location-specific environmental issues. An Occupational Health and Safety (OHS) plan is also submitted alongside SEMP, ensuring a safe working environment. Integrating SEMP and OHS into contracts provides better tools for safeguard management.

Contractors failing to comply with environmental and safety requirements may face compensation deductions from submitted payment certificates. A scoring system measures compliance, and a score below 70% triggers compensation. Social safeguards cover compensation, resettlement, and rehabilitation for those affected by construction activities.

A Grievance Redress Mechanism (GRM) manages concerns raised by locals, landowners, or affected parties. CASSC assists PID in addressing grievances, ensuring adherence to ADB's Safeguard Policy and Nepal's safeguards frameworks. The GRM, involving PID, DSC, CASSC, contractors, and TLO members, facilitates the resolution of social and environmental concerns. A Community Issue Resolution Team (CIRT) handles field-level grievances. There are four levels in the GRM, with unresolved cases proceeding to court as a final resort. The system aims to provide a trustworthy environment for addressing affected people's concerns

JICA CAPACITY BUILDING PROGRAM ACTIVITIES

As a part of project on Capacity Development of KUKL to Improve Overall Water Supply Services in Kathmandu Valley the Japan International Cooperation Agency (JICA) played a crucial role, in addition to offering technical assistance through various training programs, JICA also generously provided a range of electronic devices to both the head office and branch offices of KUKL. These electronic devices were specifically aimed at enhancing the collection of GIS data on new customers and detecting leaks in pipelines. Among the devices provided were Aneroid Tablets, which are designed to facilitate efficient data collection and analysis.

By equipping KUKL with these advanced electronic devices, JICA has contributed significantly to the overall improvement of water supply services in the Kathmandu Valley. The enhanced GIS data collection and leak detection capabilities will undoubtedly lead to more effective and efficient operations, benefiting our customers. 25 nos of android tablets were provided to different branches for usage in entering coordinates, location and various details of new connection.

JICA Support through providing tools, equipment and hardware:

- Portable Test Meters were provided to all 9 branches.
- GIS PC and RTK-GNSS Equipment were provided to Mahankalchaur, Maharajgunj, Tripureshwor, Lalitpur, Baneshwor Branches and the Head Office. With the PC, GIS Engineers of the Branch Offices can update the field information in the GIS Software and periodically update in the GIS Server. RTK GNSS Equipment will be used by the GIS Engineers to collect the location data from the field.
- Installation of the GIS Server at the Server room of the Tripureshwor Branch. GIS Engineer at the Head Office will regulate and monitor the activities conducted by the Branch Offices and maintain the data in the server with collaboration with the IT Section.
- Wireless Printer were provided to 6 Branches namely: Mahankalchaur, Maharajgunj, Tripureshwor, Lalitpur, Baneshwor and Chhetrapati. The Supervisors can fill in the New Connection form in the Android Tablet and Print from the printers to get approval from the respective Branch Managers.

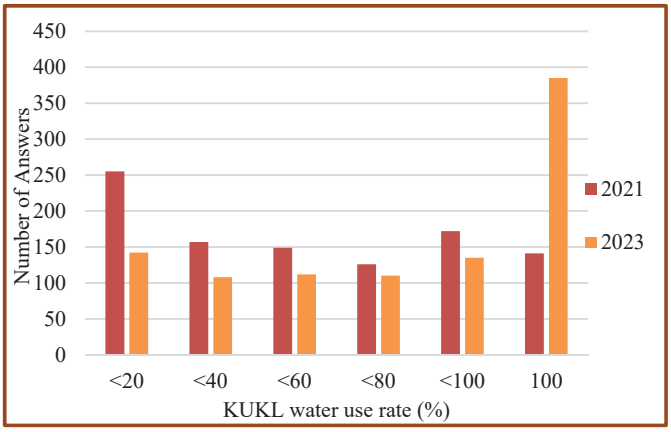
Intensive Training in Nagarkot (NWSSTC)

Training on Customer Satisfaction Analysis

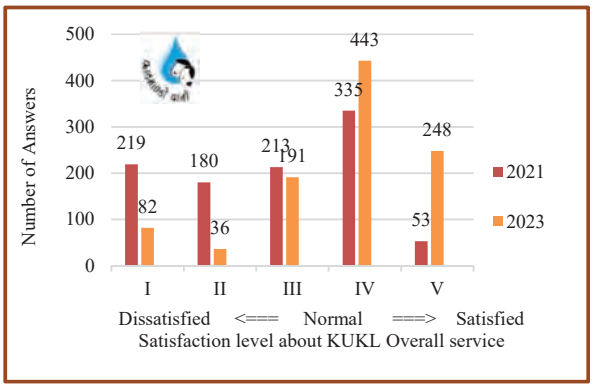
Patrol Training in KUKL Branches

Customer Satisfaction Survey by JICA Capacity Building Program

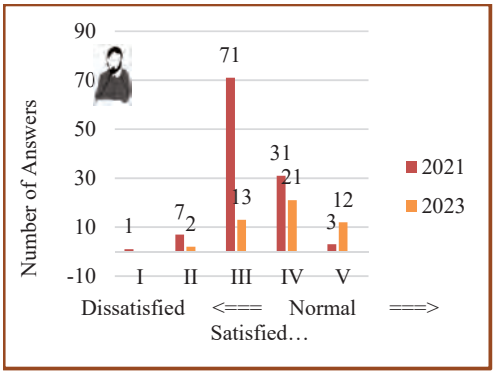
JICA capacity building program conducted survey about water usage rate and customer satisfaction and the response of the customer are presented in the graphs below:



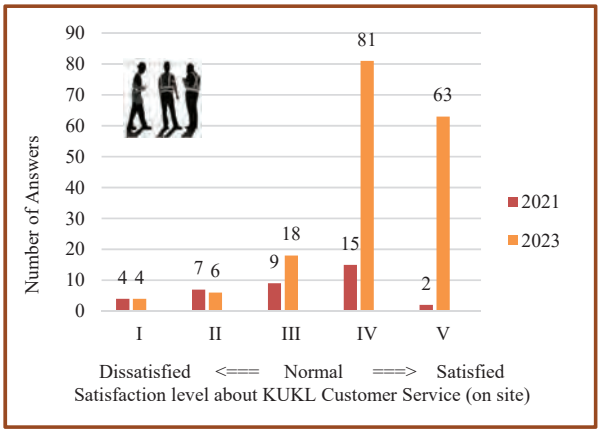
Water Usage Rate of Water Distributed by KUKL



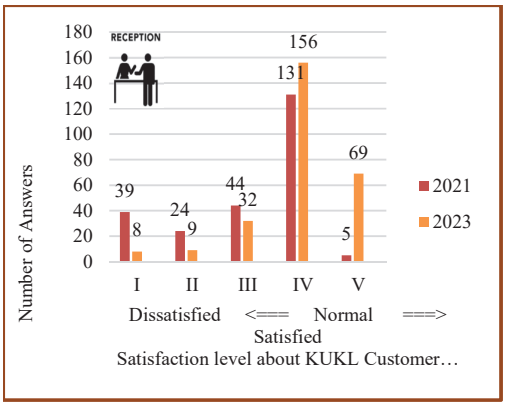
Customer Satisfaction with KUKL as a whole



Customer Satisfaction with customer service



Customer Satisfaction with customer service (on site)



Customer Satisfaction with customer service (at the site)

CHALLENGES FOR KUKL IN DELIVERING THE SERVICES AND APPROACHES TO OVERCOME THESE CHALLENGES

While delivering the services of water supply and wastewater services, KUKL has faced various challenges and obstacles that can impact their efficiencies and effectiveness. Some of the common challenges include population growth, aging infrastructure, water scarcity, water quality, urbanization and land use changes, financial constraints, political and regulatory issues, community engagement, climate change impact, wastewater management.

In the context of KUKL ,the challenges and strategies to overcome these challenges are as following;

A. Challenges faced by KUKL

i. Expansion of Water Supply
ii. Fair and systematic water distribution
iii. Appropriate management and updating of water pipe information
iv. Establishment of management and monitoring system for NRW ratio
v. Water Quality Management in accordance with standard operating procedures (SOP)
vi. Water treatment in accordance with SOP
vii. Improving customer satisfaction and expanding revenue
viii. Build a sustainable human resource development system within the organization

B. Strategies to overcome the challenges

i. Infrastructure Upgrade and Expansion
ii. Smart Water Management
iii. GIS-Based Information System
iv. Non-Revenue Water (NRW) Reduction Initiatives
v. Water Quality Management
vi. Customer Engagement and Education
vii. Diversification of Revenue Streams
viii. Employee Training and Development
ix. Performance Monitoring Systems
x. Regulatory Compliance

In conclusion, the challenges faced by KUKL can be effectively mitigated through a holistic approach. By combining infrastructure upgrades, smart technologies, community engagement, and strategic planning, water supply management can overcome obstacles and thrive in providing reliable and sustainable services to communities. The implementation of these strategies will not only address immediate challenges but also contribute to the long-term resilience and effectiveness of water supply and wastewater systems.

Australian Water Partnership Program

An Australian Water Operators Partnership with KUKL was initiated in April 2017 to assist KUKL in improving water supply and sanitation services by sharing knowledge with Australian water utilities. Water Services Association of Australia is the primary organization in this partnership and KUKL is having water utility operators partnership with Hunter Water Corporation(HWC) and Logan City Council(LCC) in this partnership.

Visit by Australian Water Partnership Program Counterparts to KUKL and KVWSMB

TARIFF RATE

Piped Water Connection

S.N.	Connection Size (inch)	Minimum Consumption (Liters)	Metered		Unmetered
			Minimum Charge (NRs.)	Additional Charge Per 1000 Liters (NRs.)	Monthly Fixed Charge (NRs.)
1	1/2"	10,000	100	32	785
2	3/4"	27,000	1,910	71	4,595
3	1"	56,000	3,960	71	9,540
4	1 1/2"	1,55,000	10,950	71	26,280
5	2'	3,20,000	22,600	71	5,42,55
6	3"	8,81,000	62,240	71	1,49,415
7	4"	18,10,000	1,27,865	71	3,06,880
Sewerage service charge				50% of water bill	

Supply by Tankers

S.N	Quantity of Water (Liters)	Rate (NRs.)
1	5000	1995
2	6000	2300
3	8000	2860
4	9000	3155
5	10000	3435
Payment at Delivery Place		Extra Charge of 10%

Water and Wastewater Quality Analysis

S.N.	Analysis Type	Rate (NRs.)
1	Physico-chemical Analysis	495.00
2	Bacteriological Analysis (Total coliform, Fecal coliform, E. coli, Vibrio cholerae, Salmonella and Shigella)	300 each
3	Arsenic Test	300.00

Sewer Cleaning by Jetting Machine

S.N.	Description	Rate (NRS)
1	Cleaning of sewer Upto 100 ft length	1000
2	Cleaning of sewer more than 100 ft length	1500

Sundarijal Water Treatment Plant

Treatment Components:	Pre and Post Chemical Dosing Unit/ Coagulation-Flocculation Unit/ Sedimentation Basin, Rapid Sand Filter, Disinfection by Chlorine Gas, Slugde Drying Beds
Treatment Capacity:	170 MLD
Water Source:	Melamchi River, Bagmati River
Reservoir Capacity:	2 Reservoirs with total 20000 cubic meters
Funded by:	JICA and ADB
Branch/Section:	Sundarijal Water Treatment Section
KUKL Operation Commencement:	Phagun 23, 2079

Birds Eye View of WTP

Flocculation and Sedimentation Unit

Administrative Buiding with Chlorine Dosing System, Laboratory & Chemical Storage and Mixing Unit

Rapid Filtration Unit

Chlorine Dosing Unit

SCADA Room

PHOTOGRAPHS

KUKL Management Team

Front Row (From Left to Right): Er. Purna Bahadur Kuwar (Asst. Manager), Mr. Chet Raj Bajgain (Asst. Manager), Mr. Bir Bahadur Chand (Asst. Manager), Er. Ila Bhatta (Deputy Manager), Ms. Chapala Dhakal (Asst. Manager), Er. Bina Khanal (Asst Manager), Er. Umesh Marhatta (Deputy Manager), Mr. Yogendra Bahadur Bam (Asst. Manager), Mr. Raju Koirala (Account Officer)

Back Row (From Left to Right): Er. Ujjwal Shrestha (Deputy Manager), Mr. Prakash Kumar Rai (Manager), Mr. Gyanendra Bahadur Karki (CEO), Mr. Dipendra Bahadur Oli (Asst. Manager), Er. Ramesh KC (Deputy Manager).

Sixteenth Anniversary Organizing Committee

Mr. Gopal Singh Dhami, Mr. Dipak Shrestha, Ms. Sharada Kadayata, Mr. Madan Khadka, Mr. Chet Raj Bajgain Er. Purna Bahadur Kuwar, Mr. Bir Bahadur Chand, Er. Ujjwal Shrestha, Er. Ramesh KC, Ms. Chapala Dhakal, Er. Ila Bhatta, Er. Bina Khanal, Mr. Dipendra Bahadur Oli, Er. Umesh Marhatta, Mr. Yogendra Bahadur Bam, Er. Garima Gauli, Mr. Raju Koirala, Mr. Nawal Singh Saud, Mr. Keshav Adhikari

Annual Report Editorial Sub Committee	Annual Function Sports Sub Committee	Annual Function Oratory Sub Committee

ADDRESS AND CONTACT DETAILS

KUKL Offices		Location	Contact Number	
Head Office		Tripureshwor Marga	1-4117356	1-4117358
Divisions	Wastewater Operation Division	Jawalakhel	1-4332803	1-4352115
	Water/ Waste Water Quality Assurance Division	Mahankalchaur	1-5210534	1-5210538
Distribution Branches	Maharajgunj	Pani Pokhari	1-4418793	1-4411194
	Mahankalchaur	Mahankalchaur	1-5210357	1-5210335
	Lalitpur	Jawalakhel	1-5527268	1-5521723
	Madhyapur Thimi	Madhyapur Thimi	1-6635987	1-6630296
	Kritipur	Kritipur Road	1-4330545	1-4332855
	Baneshwor	Minbhawan	1-4107912	1-4107915
	Bhaktapur	Nagarkot Road	1-6610235	1-6610979
	Chettrapati	Gangalal Marga	1-4251815	1-4252326
	Tripureshwor	Tripureshwor Marga	1-4101246	1-4101006
Other Sections	Electromechanical Section	Sundarighat	1-4331148	1-4352115
	Sundarijal Water Treatment Plant Section	Sundarijal	1-5919925	1-5919926
	Tanker Section	Mahankalchaur	1-5210019	1-5210351

To commemorate the Sixteenth Anniversary of Kathmandu Upatyaka Khanepani Limited, we express our dedication to enhancing the efficiency and reliability of our service delivery to our valued consumers.

Kathmandu Upatyaka Khanepani Limited

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