

# Main Sources of Kota's Water Resources

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*Abstract*: This paper presents an overview of the main sources of Kota's water resources.

Keywords: Kuaen, pond, Bawdi, water resources.

#### 1. Introduction

Water resources are sources of water that are useful to humans or are likely to be used. Water uses include agriculture, industrial, domestic, recreational and environmental activities. Virtually all of these human uses require fresh water

The total amount of water available on the earth or reservoir is called a hydrosphere. Ninety-five percent of this earth's terrain is in the form of brackish water in the oceans and only 2.5% is sweet water, two-thirds of that is stored in glaciers and polar regions in the form of ice sheets and snow caps. Molten remaining fresh water is found mainly as water, in which only a small part of the surface water on the ground or in the air as atmospheric water.

Freshwater is a renewable resource because it is naturally purified in the water cycle, yet the sufficiency of the world's clean water is steadily declining, in many parts of the world the demand for water is already exceeding supply and as such the population is increasing at an unprecedented rate in the world, in the near future, the experience of this imbalance is expected to increase. The framework for allocation of water resources for water users (where such a framework exists) is known as water rights.

Today the scarcity of water resources, its degradation and its related tensions and conflicts are important issues in world politics and national politics. Water disputes have become important topics at both national and international levels.



Fig. 1. Surface Water (Surface Water): Nubra Valley Source: https://hi.wikipedia.org/wiki/चित्र:Nubra\_valley\_hunder.jpg

Emphasizing the importance of water has been emphasized in the ancient texts of India from the very beginning. All the ancient civilizations of the world have developed in the valleys of different rivers, in keeping with the principle of 'Jalasya Jeevanam'. [1] The main reason for this is that water has been connected to all aspects of human life. Keeping in mind the importance of water utility, human society has constructed and explored many such sources of water storage or water collection, which can solve the problems of water supply. Hadhuti has been rich with many water sources since the beginning. Due to the feeling of public welfare, the kings here built many water sources from time to time. Hadoti being the agricultural leader felt the need to irrigate agricultural land, as a result, the rulers here built many ponds, ponds and stepwells. These pools and stepwells provided potable water to the people of the state for centuries. While these water sources of Hadoti attract our attention towards the sense of public welfare of the kings here, on the other hand, they have always been fulfilling our cultural needs as well. Apart from the rich people of the society, sometimes the slaves and the less well-to-do people also built these water sources, which were made for private and public use. The stepwells built inside the urban park were for the use of bathing by the women of the producer family. The stepwells were also used by trade convoys passing through the paths with special permission. Apart from this, these stepwells, which look like an ordinary or drinking water source from outside, used to emerge in a new form in times of military operations and in emergency situations. [2] stepwells were also constructed as safe places for hunting, which are called as hunting grounds, to provide protection to the hunters coming there. Stepwells were also used for bathing after cremation, so it is authentic that the stepwells were an important link of social activities.

#### 2. Kota Water Resources

#### 1) Twelve Bivaris

95 km from Kota, were built by a baniyar during the reign of Maharaja Anand Singh in Karwar, 300 years ago. It is said that in the dream of Banyan, Shivji talked about having his idol in the river. Baniya found twelve idols and Shivling in the river. He immediately got twelve bivaris and kund built there. The tank is full of water and many bivaries are submerged in water. [63]

#### 2) Stepwell of rampura

The village was constructed 500 years ago by Kota Maharaj, 65 km away from Kota, for drinking water and bathing. This Rampura village was settled in view of the convenience of the stepwell here. This stepwell is built of stones. It is under the Bawdi Gram Panchayat.

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## 3) Ayana's stepwell

78 years away from Kota, this step-well was built 300 years ago by Nareshji Maharaj during the princely period. This stepwell is built in the middle of the village and has three floors. People worship Jinn Maharaj at this stepwell.

# 4) Chasmal ki baoli

This stepwell was constructed 250 years ago in the Ghantaghar, 3 km from Kota, by the public support of the Hamal caste. Chawmeel is Urdu word for water, this step is called Chawki Ki Baawdi. There is a square near this stepwell in which the Hamal makes a mass feast of the caste. Presently it is under the trust of Bawdi Hamal caste. [64]

# 5) Wire step

3 km from Kota, this stepwell was constructed by the Kunhadhi hideouts 307 years ago. Here, there was a cordon of the ax house wherein elephant horses were on one side and there was a forest on the other side, due to which it is located in the middle, it is called Tar Bawdi. This stepwell is under the ax house. [65]

# 6) Stepwell

People of the Nath sect built this stepwell 250 years ago in Nayagaon, 73 km from Kota. During the princely period, the Mahatma of the Nath community used to do austerities here. He built this stepwell for the water system with the help of the villagers. A samadhi sthan has been constructed in memory of those Mahatma's footsteps near Bawdi.

# 7) Baud ki baoli

200 years ago, this Bawdi was built by the people of the Tiwari caste of society in Baroda. This stepwell was built in the forest. Due to which the passersby used to drink the water of this stepwell and the animals were also given water. Currently it is said that the illnesses of the people bathing in this stepwell go away. The depth of this stepwell is 60 feet. [66]

# 8) Khari Baoli

This step- well was constructed by the Jana Hoga 200 years ago in Nanta village, 5 km from Kota. Due to the saline water of this stepwell, it came to be known as Khari Baoli. The water of this stepwell is used for irrigation and bathing.

# 9) Hada ki baawdi

Bawdi was constructed in Naiwai Nanta village 250 years ago by Hada feudatories. It is a two-storey stepwell and tibarias are built all around it. There are many paintings on the walls of the stepwell of this ancient texture. The stepwell was formerly used for bathing. It is currently a public property.

# 10) Bheruji ki baoli

This stepwell was built by the Jhala rulers in Nanta 300 years ago. It was named Bhairu Bawdi after the name of Bhairuji Maharaj. It is a double storied stepwell surrounded by Tibetans. There is also an ancient temple here. Earlier, water was supplied to the village only. Presently this stepwell has dried up.

# 11) Goruji ki baoli

This baoli was built for the convenience of water to the village by a jhala hideout in Nanta 250 years ago. Goruji Maharaj used to live in it, hence the name of this Bawdi was Goruji's Bawdi. There is an old tibara built in the middle of this bawdi and an old style door is also built in the water just below the tibari, inside this bawdi, there is also a place of Hanumanji

in the wall, its walls are in a dilapidated state. [67]

# 12) Kimchon ki baoli

Baniya society built this stepwell 400 years ago in Khicham village, 60 km from Kota. It is near the stepwell temple. The water of this stepwell was used by the Baniya community for drinking and bathing. Presently the stepwell is full of water but the stepwell is in a ruined state.

# 13) Rajput ki baoli

This stepwell was constructed by the Solanki Rajputs 350 years ago in Kheemach. This stepwell is built on the way to Kheemach. This stepwell was built for irrigation. The depth of the stepwell is 30 feet. The water of the stepwell has dried up and the stepwell is in a dilapidated state.

# 14) Chhatriwali Bawdi

Babi Goswami Ji constructed this stepwell in Kheemach about 400 years ago for drinking and bathing water of the villagers. The depth of this stepwell is 60 feet. A statue of Panchmukhi Shiva is also installed at the corner of the stepwell. There are remains of Gusai Samaj near Bawdi and 19 chhatris. 15) Fatmal ki Bawdi

In Kheemach, 200 years ago, Goswami society had constructed this stepwell for the convenience of water to the villagers. At present, this step is used for irrigation purposes. There is also a statue of a mother goddess in Bawdi. Presently, its water is getting scarce. [68]

# 16) Umbrella stand

This stepwell was constructed 700 years ago by the Rajputs in Khimki village, 80 km from Kota. Two chhatris are built on both the corners of this stepwell in which the villagers used to drink water. The depth of this stepwell is 50 feet and presently this stepwell is full of water.

# 17) Game step

This stepwell was built by Goswami Samaj 800 years ago in Pipakheri village, 80 km from Kota. The depth of this stepwell is 45 feet. There is a temple of Shivji and Ganeshji Maharaj in Bawdi. Presently, irrigation is being done with the water of this stepwell.

## 18) Water step

About 500 years ago, Chhatrasal ji built this stepwell in Pipakhedi for drinking water of the villagers. Bawdi is the personal property of Kajod ji Bairwa and is being looked after by him. At present, stepwell irrigation is coming up.

# 19) Foot step

700 years ago, Dubey Brahmin Samaj constructed this stepwell in Pipakhedi. In this step, only the people of Brahmin community used to fill water and take bath. Now this stepwell is filled with soil. Bheruji Maharaj also has a place in this Bawdi. Those who are worshiped before auspicious work.

## 20) Mahajan ki Baoli

The Mahajan's Bawdi was built by the Kota Durbar at Chechat, 70 km from Kota. It was under the court in ancient times and presently is under the authority of Medtwal society and it is useful to drink water. This stepwell is located near the temple of Gopal ji.

## 21) Vadodia ki Bawdi

This stepwell was built by Jagirdar Madansingh 300 years ago in Barodia, 25 km from Kota . People of the Meena caste lived here in ancient times. This stepwell was built for their drinking and bathing. There are three pools inside this stepwell. This stepwell is 60 feet deep and has stairs, with the help of which the stepwell is cleaned. [71]

#### 22) Banadhiya ki baawdi

400 years ago, in the village Baindhia, 48 km from Kota, Maharaja Ummed Singh had dug this stepwell for drinking water of the passers-by. The depth of this stepwell is 20 feet. Presently this stepwell is in ruins state.

## 23) Kacholia ki baoli

Kota 33 km away from the village Kcholia 215 was built in the Baoli for a permanent solution to the drinking water by the year ago Kota state. During the princely period, there was a proper arrangement in this stepwell for drinking water for the passers going to Digod-Sultanpur. The condition of Bawdi deteriorated after the princely period, but a few years ago the Bawdi has been renovated by the state government under famine relief works.

#### 24) Mudhala ki baoli

This stepwell was built by the ancestors of Nathulalji and Bhairulal Gujarati Brahmins 250 years ago in Moondala village, 19 km from Kota. The stepwell is fed to the animals and the villagers use this stepwell for bathing etc.

## 25) Bawra ki baoli

About 200 years ago, 30 km away from Kota, this stepwell was constructed by the villagers for drinking water and bathing. A kheli has been made for drinking water of animals on the stepwell and two canopies have been made on the stepwell. This stepwell has been renovated by the Gram Panchayat.

## 26) Parlia ki baawdi

In the village of Parlia, 22 km from Kota, this stepwell was constructed 250 years ago by the Parlia Seths for drinking water and for animals and for bathing. Previously there was 8 bighas of land under this stepwell, which is currently got by the local people. Water from the stepwell was filled with water for the animals. Currently, the water from this step is not of any use. *27)* Padasali ki baoli

This stepwell was built by the Raja of Kota 500 years ago in the village of Parasalya, 35 km from Kota. It looks like a stepwell tank. This stepwell used to be used for irrigation in the past and Balaji's temple is built near the stepwell. There are 2 bighas of land in the name of the stepwell around this stepwell. 28) Sunija stepi

Quota of 50 km from the village Snija 250 years ago Kota court was built in the Baoli. There is a legend about the construction of this stepwell that a princess was being hailed. When the princess felt thirsty, asked the in-laws for water, and said that her poors have not dug any water well here. This stepwell was carved at that time. Presently it is in the middle of the Bawdi pond and is filled with water around it.

## 29) Sarola Bawdi

This stepwell was constructed by Jagir Thikana ax about 200 years ago in village Sarola, 40 km from Kota. The villagers used to bathe in this stepwell. Balaji and Mahadev Ji's temple is built in the 2 bigha land located around this stepwell.

#### 30) Shishafooli baoli

In Sultanpur, about 400 years ago, this stepwell was constructed by the local vassal for the drinking water of wild animals and rural cattle on the east side of Sultanpur in the princely period. It is a legend that there was a war between the Meenas and the Rajputs here and the head of the Meenas was cut and fell here, due to which the people of the Meenas established their head near Bawdi and started offering prayers. Since then this stepwell is called Koshish Phool Ki Baoli.

#### 31) Goldsmith's well

This well was constructed in Sultanpur for drinking water arrangements during the princely period of 250 years ago. The width of this well is 15 feet and staircases have been made from top to bottom from which water was drawn. At present, this well is under the suzerainty of the goldsmiths. The well is full of water.

## 32) Dulaji's stepwell

This stepwell was built in Sultanpur by the Jagirdar during the princely period of 250 years ago. People say that in this Bawdi, the Muslim caste bridegroom Baba died after falling in this Bawdi, from which a tomb was built near the Bawdi in his name which is worshiped religiously. Presently the stepwell is in a ruined state.

#### 33) Charatarai Ji's stepwell

This stepwell was built by the local villagers in Sultanpur 350 years ago during the princely period. Charatarai Ji's temple is located near the stepwell. Water was offered to the Lord from the water of this stepwell and drinking water and irrigation was provided from the stepwell. The structure of the temple and the antiquity of the dome stepi are important examples of architecture.

## *34) Paved step*

This stepwell was built by Maharaja Chhatrasal 225 years ago in the village of Ummedpura, 28 km from Kota. It was repaired by Meghsinghji of Kota Durbar. This stepwell was renovated 100 years ago. The collapsed wall of the stepwell has been constructed by the Gram Panchayat. [72]

#### 35) Simalia ki baoli

200 years ago in Kimala, 45 km from Kota, the Kota Durbar had constructed this stepwell for drinking water and bathing. This stepwell is made of the shape of a tank. This stepwell has a curved staircase and two water-drawn dhanas. It is built in a roundness of about 50 feet.

#### 36) Samaria's great stepwell

This stepwell was built by the King of Kota about 200 years ago, 65 km from Kota. In ancient times the stepwell was used as irrigation. Due to the many trees planted around this stepwell, this stepwell is not visible from a distance. This stepwell is always full of water, but at present the stepwell is in a dilapidated condition.

#### 37) Hanuman's stepwell

200 years ago, a Seth built this stepwell in Samaria village of Kota. Regarding its construction, people say that in ancient times, a Seth was sentenced to death. While taking him to Kota, soldiers came to Hanuman's place and stopped and he saw a sculpted statue. Seth asked for a vow to Hanumaji that if he survived the execution of the execution, he would come back and build the temple and the baoli. His sentence was waived as soon as he went to Kota. He got the temple and the stepwell constructed as soon as he returned. [73]

#### 38) Digod ki baoli

This stepwell was constructed for drinking water from village Digod in the west by a king, 70 km from Kota, 500 years ago. This stepwell is made of stones only. Heavy stones have been used in this. This stepwell is built in the crematorium and is in dry condition.

In Deoli Manji, 38 km from Deoli Manji's Bawikkota, this grand stepwell was constructed 300 years ago by the King of Kota in charitable charitable arrangements for proper drinking water arrangements for the local villagers. Chhatris are built on two corners of this stepwell and Hanuman ji's ancient temple is built nearby. The ancient inscription is inscribed on this stepwell. Presently, this stepwell is the main drinking water source of the entire villagers and this stepwell is maintained by the local villagers. [74]

## 39) Bawdi of Ummedganj

13 km away from Kota, 500 years ago, Kota Durbar Shatarshal Singh built this stepwell. This stepwell is also known as Turmeric and Madhu Bavdi. There is enough water in this stepwell which the people of Ummedganj use for bathing and drinking.

## 40) Mahadev ji kund

This pond was built by Bhadunathji Yogi 600 years ago in Gonati village, 74 km from Kota. There is a Shivling installed in this tank under 27 feet of water, which is 5 feet in length. On this day water is emptied into the tank. Taking bath in this pool can cure ringworm, itching and other skin diseases. This stepwell is maintained in public. [79]

## 41) Inner tank

Quota of 10 Kota court kilometers Bitria village Ummedsinh had built this spring. The specialty of this pool is that it keeps the water cold during the summer days and stays warm during the winter days. Earlier Kota court used to visit here and take bath. The Kota Durbar had built a garden and a temple here. Both the pool and the temple are located on the banks of the Chambal river. [80]

## 42) Akorsia pool

About 200 years ago, in Akodia, 90 km from Kota, local villagers had constructed this tank for water system with mutual support. This tank is the main water source of the villagers. This pool is artistically made and is in a normal state.

## 43) Khaji ka kund

This pond was constructed for the permanent solution of drinking water in Sultanpur, 38 km from Kota, 400 years ago during the rule of Hada Rajputs. After the princely period, the Khaji of the local Muslim caste kept their suzerainty for many years, due to which this Kund is called Khaji Ka Kund. There is water in this tank and an umbrella is made and there is also a Shivamandir. The water of this tank is used to offer the Shiva lingam.

## 44) Tank of takheshwar

This natural tank is located near Takheshwar Mahadev, 8 miles from Ramganjmandi, in the middle of Nagda Kota in Kota district. The river Takhali originates from this pool. Due

to the temple of Mahadev, the water of this Kund is used for worship and archana. A fair is held here on Shravanmas and Mahashivratri. [81]

#### 45) Naravali pool

The Kund of Naharvali is located in Hingi village, 64 km from Kota. This temple was built by the local villagers to worship their deity. Whoever takes a bath in this tank, their desire is definitely fulfilled. There is never a shortage of water in this tank.

#### 46) Alkali reservoir

This pond was constructed by the Sadhus in Samaria village 200 years ago. In ancient times, there was a garden here. The sages used to stay in this garden, they had built the tank in this garden. It was used for washing and drinking baths. Stairs are built on three sides of it.

#### 47) Chittoroda kund

The kund of this ancient structure was built in the princely period 200 years ago in village Kanwas of Sangod tehsil, 60 km from Kota. In the past, the water of this tank was used for drinking and for feeding animals.

#### 48) Girdharpura reservoir

The Kund was built by the ancestors of the scholar Sarola of Kota princely state, in Girdharpura, 48 km from Kota, 250 years old. Being the main village of Kota, this Kund was built in the north of Girdharpura. Presently, the tank is empty and its water has dried up.

#### 49) Four umbrellas

In the princely period of Kota, 500 years ago, this public tank was constructed by public cooperation in Kathun, in view of the problem of water. And the land was also irrigated by it. Four umbrellas have been built on this kund which hold their important place in religious terms. [82]

#### 50) Tethered pool

12 km from Kota M The 300- year-old Kota Durbar Kund was built in distant Tathed due to water problems. The ancient style of kund is made from limestone etc. Presently, farming is being done around this pool and the tank is in a dilapidated state.

#### 51) Digod pond

This pond was built by Ummed Singh's ancestors 200 years ago in Digod, 25 km from Kota. This pond was built for people to bathe and animals. It has four ghats which are in dilapidated condition.

# 52) Big pond

400 years ago, this pond was built by the Kota Durbar in Digod to bathe and feed the animals. Two ghats have been built for bathing on the pond and three canopies have been built.

#### 53) Donor's pond

This pond was constructed for the irrigation of agricultural land, agricultural work and the use of the villagers in the donor village, 76 km from Kota. The wall of this pond is built up which is about 100 feet long and 10 feet wide.

#### 54) Haripura pond

Haripura, 42 km from Kota, has a 750- year-old pond built by Maharaja of Kota, which was constructed for arranging wild animals. This pond is located at the foot of the hill, from which the water of the entire hill comes into the pond. On the three sides of the pond is made of raw clay, and there are many trees near the pal, which makes it look very beautiful.

#### 55) Padampura pond

Quota of 45 between the created quota Principality km Pdmpura village hills This pond is located. This pond is filled with water throughout the year. There are two ghats for bathing in the pond and a mud wall is built on all three sides. There is a temple and school on the main sail of the pond. It is used to feed water to animals.

#### 56) Ramsagar Pond

Kota 43 km away Ravta village about 750 was built in the pond by year ago Kota court. This pond is built by making a paved wall between two mountains. A three-storey hunting ground has been built near it from where the kings used to hunt. Presently the water of this pond is used for feeding animals. There is also a temple of Hanumanji near this pond.

## 57) Rawatha pond

This pond was built by the Khichi kings 50 km from Kota. This pond is made of lime and mud. The sails of this pond have been broken in many parts. Presently the local villagers irrigate the pond and feed the cattle. Here Badal Mahal is built on the sails of the pond, which is in a dilapidated state.

## 58) Ranpur pond

In ancient times in Ranpur village, 20 km from Kota, this pond was constructed by the Kota Durbar to save the city of Kota from flooding. There is also a system of drinking water of animals and irrigation is also done from the water of this pond. There are also two wells in the middle of this pond. The design of this pond is ancient. This well is repaired by the villagers.

#### 59) Godalhedi pond

This 200-year-old pond, 22 km from Kota, was built by public cooperation. The soil of this pond is considered very beneficial and people here consider its water to be very sacred. This pond has been constructed from raw soil. This pond is public and all the villagers take bath in it. [83]

## 60) Prahladpura's well

The well is located 200 years ago in the village Prahladpura, 20 km from Kota. This well was built by the ancestors of Shri Pannalal Gurjar to provide water facilities to the villagers. Its water is used for irrigation. The structure of this well is of ancient style and is in a normal state.

## 61) Rajput well

Kota 22 km away in Rajpura 200 was built this well by year ago Kota King. This ancient monument was constructed to facilitate drinking water. Here the Houda is located on 200 pillars and there are curved staircases. Currently this well is in good condition.

## 62) Dev Krishna Gurjar's well

A 200- year-old god Krishna Kaur 's grandfather's well-built well is located in Kathun. This well is made of ancient texture, the water of this well was used in irrigation. At present, there is an electricity system here. Dhanes of ancient times have been built to remove water from the rhat on both sides of the well. At present, the well is in a normal state.

## 63) Drilling well

This well was built 200 years ago by the widow of Bhopa Samaj in Kathun, later this well and the land here were sold to the Muslim community. Presently, the water of this well is being used by this community for irrigation purposes. [84] *64)* Aralya's pearl well

A well-built Thakur Saheb of 450 years ago is located in Aralya. This well was built to facilitate irrigation. This well was named after his horse Moti by Thakur Saheb. Moti Kuan is currently under his descendants. There is also an electric pump in the well which is used for farming.

#### 65) Raj's well

Arjunpura, 10 km from Kota, has a 400-year-old well made of limestone. This well was built during the tenure of Ummed Singh Ji to solve the problem of water in the village. The 3 feet thick wall of this well is 57 feet deep and 24 feet in size. Currently the well is in a dilapidated state and no work is being done. The well was built by Raj Durbar 200 years ago.

85 km away from the new Kuancota of Charail. This well is built on the banks of the river, one kilometer from village Charail. Before this well, irrigation was done. This well is made in 13 feet roundness. At present, this well is shabby and drought.

## 66) Dalapura well

This well was built at the time of Maharaj 200 years ago in Dalapura, 25 km from Kota. This well is a unique example of the design of ancient times. In ancient times, water was given to humans and animals from wells. The depth of this well is 90 feet. This well has been renovated by the Department of Water Supply and it is useful for the villagers to drink water.

#### 67) Prempura well

In the Prempura village of Toran Panchayat, 41 km from Kota, this well was built 700 years ago by the Dhakad community for the relief of water problems of the villagers. Presently this well is being taken care of by Nirmal Singh of the village.

#### 68) Badli's well

This well was built by a vassal in Sultanpur during the princely period of 250 years ago. It is the main source of drinking water for the villagers and is also used as agricultural irrigation. At present, its remains are only present due to the well-being filled with soil by the local residents.

#### 69) Machine well

This well was constructed in Sultanpur for the smooth arrangement of drinking water in the princely period 200 years ago. After the princely period, the local Muslim resident Bhavarlal took this well under his control, whose ancestors had installed many irrigation machines in the village. The name of the well also fell on his name because he was known as the machine-maker.

#### 70) Ummedganj well

Kota Naresh built this well in Motipura during the princely period of 400 years ago. The structure of this well is of ancient style and the mother's tridents are mounted on it. People come from far and wide to worship him. Irrigation is done from this well. At present this well is in a dilapidated state.

#### 71) Nanta Mahal's Water Sources

About 5 kilometers from Kota is an ancient village called Nanta in the western direction. This village was the ancestral Jagiri village of the famous Diwan Jhala Jallim Singh of Kota State. The wife of Rajrana Jalim Singh Ji, who was called Godji Saheb, also dug the temple of Govind Dev Ji in the palace and a stepwell to the north of the palace and also dug a well about half a mile east of the palace. Jawai Bai, the Khawas (concubine) of Rajrana Jalim Singh Ji, built a pond about two miles to the south of Nanta. [85]

#### 72) Chambal River

The original name of the river Chambal which flows through Rajasthan and Madhya Pradesh is 'Charmanavati'. It is mentioned in the Mahabharata under the names Chambela and Gambhira. There is a story that King Ratidev performed a Mahayagya and sacrificed thousands of animals. Then there was a heavy rain and the stream of animal skin drained out of the pile and this stream was called Charmanavati (Chambal). [86]

Chambal is a tributary of Yamuna. Its origin is 854 m. In the ranges of the Vidhanchalas at the height of, it is from a place called Manpur near Mhow in Indore district of Madhya Pradesh. Its length is 960 km. is. It flows for about 320 km in the northern direction to the border of Madhya Pradesh and Rajasthan. From here it enters Rajasthan and turns right and turns after 30 km and starts flowing in the direction of North East. This river forms the heartland of Hadauti, making the border to a considerable distance in Kota Bundi districts. After flowing in the north-eastern direction for about 520 km, Kalisindh, which originates from the Malwa plateau, joins it near the village of Noner and is 251 km long. Till Rajasthan forms the boundary line of Madhya Pradesh. The Banas river, originating from the Aravalli mountain range, comes from the left side near Ramesar village and joins it. From here the Chambal river turns to the left and flows in the direction of southeast and enters Uttar Pradesh. 46 km in Uttar Pradesh After flowing, the Chambal river joins the Yamuna River near Sahn in Etawah district. [87]

Chambal's tributaries are Kalisindh, Parvati, Mage Turrell. The Chambal River flows northwards to the city of Kota. The Chambal river is famous for its vast rugged ravine.

It is believed that the rugged land of the basin has a slight lift in the present geological time and this land is found in the alluvial plain of the Yamuna where the landscape is extensively spread by other tributaries of the Yamuna to the east and west of Chambal. Is depicted in [88]

Chambal river receives 1: 41 lakh square kilometers of water. Although it is a rainy river, but during the rainy season it starts flowing 30-31 meters high and its area spreads up to 730 meters. The Chambal river project, inspired by the aim of diverting the vast waters of the Chambal river from destruction to development, is a result of the joint efforts of the Madhya Pradesh and Rajasthan governments. Irrigation and hydroelectric schemes have been developed by constructing several dams and barrages on this river, among which Gandhi Sagar, Rana Pratap Sagar, Jawahar Sagar and Kota Barrage are famous.

First of all in 1943 AD, the princely states of Kota, Udaipur and Jaipur had planned to construct a dam on Chambal near Kota to provide cheap hydroelectricity for the zinc zinc mines near Udaipur, but unfortunately it could not be completed. This plan was made again in 1945. The Chambal multipurpose project costing Rs. 100 crore was started in 1953 and completed in three phases.

1. First Phase: In the first phase, the construction work of Gandhi Sagar Dam, Gandhi Sagar Power House, Kota Irrigation Dam and canals were done on both the sides. 2. Phase II: Construction of Rana Pratap Sagar Dam, Rana Pratap Power House was completed. 3. Phase III: Under this, construction work of Jawahar Sagar Dam and Jawahar Sagar Power House was completed. Gandhi Sagar Dam and Power House: The Gandhisagar dam is the first dam of the Chambal project which was built in 1959 on the Chambal river between the Rampura-Bhanpura plateaus, about 8 km from the Chaurasigad fort in Mandasaur district. Chambal is a river whose immense water used to flow without any use before the construction of this dam. The Gandhisagar dam was first constructed on the Chambal river to use this water amount for the welfare of the nation. The benefit of which is not only available to Madhya Pradesh but also to Rajasthan. This dam is 513.5 meters long and 62 meters high. Gandhi Sagar has an area of 580 square kilometers and water storage capacity is 77460 lakh cubic meters and useful water harvesting capacity is 69200 lakh cubic meters. Five units with a capacity of 23 thousand kilowatts have been installed on this dam for power generation, whose combined generation capacity is 115 thousand kilowatts. Two canals have been drawn on each side of the Kota barrage, the lowest dam of the Chambal project, by the water coming out of the use of each turbine. The canal drawn from the right side has a water capacity of 6660 cusecs. This canal is 425 km long. 127 kilometers of this canal is in Rajasthan and the remaining 298 kilometers in Madhya Pradesh. The length of its tributaries is 560 km. The left canal flows 65 km and finally joins Meja river of Bundi district. Its water capacity is 1270 cusecs. Both these canals are irrigating about 4.5 lakh hectares of land in Kota, Bundi, Tonk and Sawaimadhopur districts . The foundation is very important in the construction of the dam and especially in the river stream where the spillway is constructed for the drainage of flood water. Therefore, by removing all the weakened rocks of the river bed, by properly grouting cement, concrete, a strong base to bear the potential pressures was created. To reduce the pressure under the dam, a "drainage gallery exit gallery" was constructed, with 7.5 to 10 cm. M 12 to 15 m in diameter. Deep and 6 m. Holes have been made at the interval of There is also a provision of drainage system under the spillway bucket. Cement, concrete along with stone masonry have also been used in the construction of Gandhi Sagar Dam's spillway. 1.7 lakh cubic meter concrete has been used in the construction of the entire dam. Iron mixed concrete has also been used to withstand different types of pressures. From the point of view of construction, this dam is a masonry dam (masonry dam), which is made of stone masonry. The main content of red cement for its construction, which is 25 percent was mixed with brick dust, went to the experiment. The creation of the "Kunu Siphon" in its structure is a significant achievement. Technically, the main part of this dam is hydroelectric power, which is 93.3 m on the right side below the dam. Long and 17.7 m. Made of wide size. It is a structure

of iron mixed concrete. The installed capacity of this powerhouse (power house) is 115 thousand kilowatts. In each 23 thousand kilowatt- 5 have gone units built. The main part of the powerhouse is the "Generator Hall", which is based on 32 iron composite concrete poles. It took three generators featuring the provision of electrical shaft system for power generation, the voltage using magnetic amplifier for regulation and neutral insoleshn. There is a provision for conventional excitation and voltage regulation for the fourth power generation unit and on the second stage the neutral is connected to the earthing transformer by the resistor to the ground. 89 Rana Pratap Sagar Dam and Power House - This dam has been built on the Chambal river in Rajasthan, 48 km from Gandhi Sagar, near Chulia waterfall in Rawatbhata in Chittorgarh district, where the river runs through a very narrow valley. The length of this dam is 1100 meters and height is 36 meters. This dam was completed in 1970 AD at a cost of 31 crores. The area of its reservoir is 113 square kilometers and the canals drawn from it irrigate about 1.2 lakh hectares of land. A hydroelectric house has been built just below the dam. In which four units of 43000 kW electrical capacity are active. Rajasthan nuclear power house is also built near it. Jawahar Sagar Dam and Power House - This dam has been constructed near the village of Borawas, 33 km north of Rana Pratap Sagar Dam in Rajasthan. This dam is 440 meters long and 45 meters high. The water released from the first two dams mainly comes into it. The power house constructed at the bottom of this dam has three units of 33-33 thousand kilowatt power capacity, with a total power generation capacity of 99 thousand kilowatts. It is a versatile project, which has been constructed to generate electricity, to control floods and to facilitate irrigation in the catchment area. The Chambal project has been of great benefit to both the states of Rajasthan and Madhya Pradesh. In this, irrigation of about 6 lakh hectares of land and 3.86 lakh kilowatts of hydropower is being produced in both the states. In this way, cities like Kota, Lakeri Sawaimadhopur, Udaipur, Chittorgarh, Jaipur, Sagar, Kishangarh, Jhalawar and Mandsaur, Ratlam, Ujjain, Gwalior etc. of Madhya Pradesh state are witnessing rapid industrial development. In addition to the above, this project is fulfilling objectives such as prevention of soil erosion, fisheries, plantation, control over malaria, facilities for drinking water. [90]

#### 73) Parvati river

The Parvati River originates from the hills southeast of Dewas in Madhya Pradesh and flows in the north direction. After flowing about 300 km in Madhya Pradesh, it enters the Kota district in the north-west of Kumbhraj. To the north of Mangrol, it joins Chambal in the south-east of Khandar in Sawaimadhopur district, forming the boundary of Rajasthan and Madhya Pradesh up to 100 km.

#### 3. Conclusion

Water is the source of the universe, water is the unique nature of nature, unique and such a life-giving wealth, in which every particle has the power of life. Where is water there is life, life is, quickening, the speed, the creation and Water Foundations of life. Where there is no water, there is no life, everything is lifeless and passive. Water is a supernatural boon form of nature, along with being indispensable for all, humans, animals and vegetation. Modern science also believes that the maximum amount of any element in the human body is water. According to Ayurveda, in our body, the blood, flesh, secretion, bone, marrow and Venus are the seven metals that hold the body. Of these, the share of water is 70 percent in total. Life and soul are safe in the five elements earth, water, fire, air and sky. As soon as the life comes out, they begin to disintegrate and all the five elements of the body merge into the Panchatantra. This is said to be the attainment of the five elements, therefore the most important element for the body is water.

Man had understood the importance of water and its necessity along with the emergence of his life. That is why he made the rest of your stay, where water was available. All the ancient civilizations of the world were inhabited by rivers or their valleys. With population growth, as settlements settled away from the river banks, humans began to find other ways of obtaining water, as well as methods of water harvesting, conservation and storage began to be developed. In a civilized life, when man started living in villages and towns in a cluster away from the naturally built reservoir, he also ensured the availability of water and accordingly, by constructing manmade reservoirs, adopting better methods of water management of the fields from the reservoirs. Irrigation, drinking water and other necessities of life met.

Today, due to environmental imbalance in the world, problems of both climate and water are beginning to take a very serious form. Concerns about potable water are increasing all over the world. Today, half the world, including India, is facing the crisis of future water crisis as a result of increasing water demand and decreasing water reserves. After a few years, a severe situation of water scarcity is going to come. As long as water is accessible to human beings, we remain unaware of its importance, its unique contribution. Their importance is understandable when they begin to be rare. Nature has given us free hands in our life, such as water and air. Therefore, we are unfamiliar with their pricelessness. But imagine that if it becomes rare even for a short time, then what will be the situation of human and animal life on this earth! Today, the whole country is engaged in thinking about the future conditions of water scarcity, on which research work is being done on a large scale. With this, the glory of water has started pouring on our psyche.

The importance of water in human life is not only for the donation of life, but history, culture and even social, economic, religious and political aspects of public life have also been affected by water. Most of the Shodas remedies we worship for the deities have to be completed by water. Water is essential in human personal and social work. Donated Aquarius filled with water, Piaui Lgwakr thirsty water Pilwana, well Bawdi engrave, are known to act by virtue of Prinde Badhavana centuries trees to hit build and birds for pets. In the sixteen rites of our life, water gives birth to them from birth to death. Our important four dhams and shrines are distinguished on the banks of the river. Looking at the history till date, it is known from time to time that there have been formidable wars for this water. While the victorious country made itself powerful by using full amount of water, in the absence of water, many countries have been deprived of power in the face of calamities like straits etc. Due to this water many barren lands became green and due to lack of water, green areas turned into dry desert. The situation of water conservation and storage in the country is worrisome. In the past decades, the water bodies in the villages, towns and cities, the stepwells, the ponds and the ponds have been ruthlessly filled with garbage and soil. There are very few areas of the country where proper water resources are maintained. Now we need to pay serious attention to traditional water sources so that rain water can be stored. The tradition of water management in Rajasthan has been practiced since time immemorial. Here, the work of construction of wells and vapis was considered to be the social and religious responsibility of the rulers. Rainwater was collected at different places in different types of water transmission structures depending on the geographical location, climate, annual average rainfall, and depth of ground water. Palar water directly from the rain which flows directly on the ground was stored in the river and the pond. The waters of the distant waters were drawn out by making wells. In addition to homes and to collect droplets of rain basin, soldering, pulse, johad or Toba, was taken into use for the year by Kdin Jalra Bawdi etc. The spirit of charitable and total gallantry performance was a major contribution behind the construction of these traditional watersheds. The tradition of engraving articles on the steps started because of the strong desire to keep this karma everlasting. These include date month, Samvat or other information available in the printed commendations, whose study provides unique content of political, social, religious, historical, artistic and literary status of the immediate time along with the time period. Today Rajasthan is the most dry province in the country, as well as the largest state in terms of area, whose area is 10.4 percent of the country's area but the available quantity of surface water is 1.16 percent and the ground water availability is also 1.7 percent. The national average of rainfall is only 531 millimeters. Rainfall is erratic, uneven and scanty. In the last 50 rains, 43 times there has been a famine in the state. Rajasthan, being a desert region, has always struggled with water scarcity. Due to severe heat, changing lifestyles, scarcity of surface water, industrial development and urbanization, less rainfall during monsoon, there has been a huge difference in demand and supply. This gap has been steadily increasing and has come to the fore today in the form of a serious water crisis. In such a situation, the horoscope of Rajasthan has been Manglik in terms of water. In view of the terrible water situation in Rajasthan, it is very important to preserve the water heritage in the future. Looking at the historical background of the tradition of water conservation in the context of Hadoti, it is known that the rulers of the state have taken steps in the direction of conserving the water and rainwater flowing through the bylaws of the Malwa plateau. Public to patronize him control the water flow and the state to provide water for centuries, ponds periodically for it, Bawdion, the message of making building Kundon years water conservation in the East at that time which is an important requirement of the present time is. These traditional watersheds

provide protection in the event of rain uncertainty and drought and during the years when there is plenty of water, they reduce the chances of flooding by filling the source and provide water to the common man. Such sources are in abundance in Bundi, Kota, Jhalawar and Bara districts of Hadauti . Hadauti region has been very fortunate from the point of view of rivers, here is the Chambal River flowing year after year. On which dams have been constructed for irrigation and power projects and other small projects like spindle and balapura are under construction for irrigation. But there is still water in the eyes of rivers, so the government is also making efforts to make Hadoti rivers Sadaniira. The plans of the state government to revive the rivers have subsided the rivers Kalisindh, Aru, Ujad, Parvan, Amjhar, Parvati and Ahu. Anicuts have been made on these dry rivers and their fill capacity has been increased by increasing the height of the anicuts. Through these Bhagiratha efforts, Panchayats which have come into the dark zone are being pulled out from the danger, while the fading rivers are being made Sadanira, efforts are also being made to raise the ground water level and recharge and conserve rain water. Efforts are being made to provide water for farming and drinking water by constructing anicuts on these rivers. They can be made the medium of irrigation by digging wells at water leaking places in the land around these anicuts. Public participation and cooperation of private organizations have also been found in these water conservation works, which augurs well for the future. Hadhuti region of Rajasthan has been an area of water heritage since the beginning. The hard-working rulers and people of Hadauti never cursed this curse and destiny of nature, but faced this challenge by considering this curse as a boon and developed a grand tradition of treating these nectar particles of rain. The city of Bundi, which has been famous since ancient times in the name of Chhoti Kashi, is called the city of steps because of its artistic steps, ponds and ponds. Geographical factors such as erratic and low rainfall, inadequate water in rivers and lack of rivers flowing throughout the year are also a major reason for their construction. People Hadhuti ' Jlsth Jivnm' ' theory has a build multiple sources of keeping water accumulation or storage in mind the usefulness of all water adhering. In which problems of water supply can be solved. Here, the water is used for the whole year and even more with the help of large masses by making kunds, stitches and stepwells etc. to collect the drops there. The construction of the ponds has been done with prior scientific view keeping in mind the natural flow of water and the sources of water that the water flows from the plateau is preserved in these ponds and its velocity will gradually decrease. Protected Kota from the strong flow of water coming from the plateau, these ponds are also the sites of folk and cultural consciousness of that time. Looking at water, the primary requirement of city construction, we find that adequate importance was given to the construction of cities near rivers. Many towns of Hadauti have been built on the banks of rivers. Chandravati, the legendary city of Jhalrapatan, was built by King Durgana on the banks of the Chandrabhaga River. Hadhuti other cities Krishnavilas (luxuriant river), Manohar Thana, Bimgdh, Shergarh (Prvn river), atru (Parvati river), Aslpur (gray river), Akelgdh (Chambal river), the gangdhar

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#### 4. Suggestion

In Rajasthan, which is suffering from constant famine and drinking water crisis, the imperative of making a comprehensive law for the protection of water heritage, surface and ground water management and water regulation is being felt, in the country and the state after independence, dozens of laws have been made. But all these laws are superficial. Knowledge of the importance of these laws, their active implementation and awareness about them is the biggest need of the day. There is a need to find out a simple way that the common man should be aware of the legal provisions related to participation, conservation, use, management, water transmission of water resources. According to these laws, action is being taken, but along with its review, the difficulties faced in implementing them should also be resolved.

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- 65. ABOVE, PART-C
  66. ABOVE, PART-D
- [3] 67. ABOVE, PART-F
- [4] 68. ABOVE, PART-G
- [5] 69. ABOVE, PART-H
- [6] 70. ABOVE, PART-J
- [7] 71. ABOVE, PART-N
- [8] 72. ABOVE, PART-T
- [9] 73. This fact was based on the legend
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