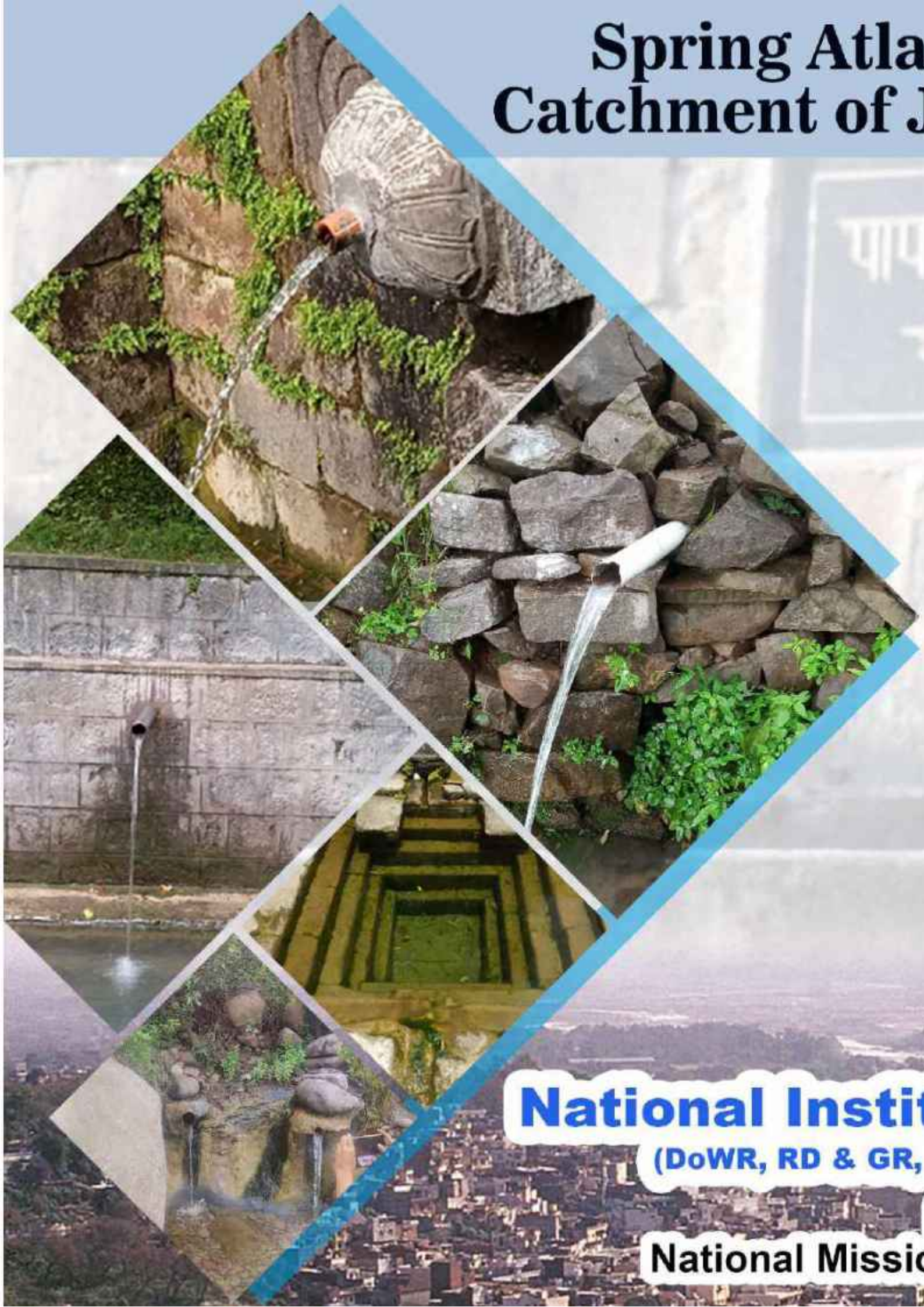


Spring Atlas of Tawi River Catchment of Jammu & Kashmir



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Developed Under
National Mission on Himalayan Studies (NMHS)

आपो हिष्ठा मयोभुवस्था न ऊर्जे दधातन महे रणाथ चक्षसे ॥१॥

....ऋग्वेद

हे जल! आपकी उपस्थिति से वायुमंडल बहुत तरोताजा है, और यह हमें उत्साह और शक्ति प्रदान करता है।
आपका शुद्ध सार हमें प्रसन्न करता है, इसके लिए हम आपको आदर देते हैं।

*O Water, because of your presence, the atmosphere is so refreshing, and imparts us with vigour and strength.
We revere you who gladdens us by your pure essence.*

Spring Atlas of Tawi River Catchment of Jammu & Kashmir

Sponsored By



**National Mission on Himalayan Studies (NMHS)
G B Pant National Institute of Himalayan Environment (GBPNIHE)
Ministry of Environment, Forest and Climate Change (MoEFCC)**



**NATIONAL INSTITUTE OF HYDROLOGY
Department of Water Resources, River Development & Ganga Rejuvenation
Ministry of Jal Shakti, Govt. of India**

July 2023

Foreword



It gives me immense pride and pleasure that the 'Spring Atlas of Tawi River Catchment of Jammu & Kashmir,' a seminal work is brought forth by the dedicated efforts of the National Institute of Hydrology (NIH). This invaluable compilation, which embodies the tireless commitment of team NIH to advancing the understanding of hydrological systems and water resources management.

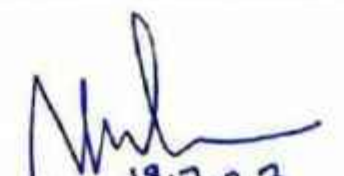
Springs are the lifeline of the people residing in the mountainous regions of our country and approximately 200 million Indians, constituting around 15% of the country's population, depend on springs for their daily water needs. These springs are widely distributed across the expansive mountainous areas, nourishing countless small and large streams that support the growth of civilization, agriculture, industry and economic activities in our nation. The Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD&GR), Ministry of Jal Shakti is striving to collect comprehensive information on springs across the country which will aid in revival of these vital water resources.

Hydrology lies at the heart of sustainable water management, and the significance of this atlas cannot be overstated. The Tawi River Catchment, situated in the breathtaking landscape of Jammu & Kashmir, is not only a lifeline for the local communities but also a critical resource that demands our utmost attention. Understanding the intricate hydrological processes governing this region is essential for effective decision-making, safeguarding ecosystems, and ensuring the equitable distribution of water resources.

The 'Spring Atlas of Tawi River Catchment of Jammu & Kashmir' is the result of extensive research, data analysis, and collaborative efforts. It provides an in-depth exploration of the springs that dot the landscape, shedding light on their characteristics, spatial distribution, and hydrological behaviour. This atlas serves as a comprehensive guide for policymakers, researchers, water resource managers, and all stakeholders involved in shaping the future of this region.

As we confront the challenges posed by a changing climate and growing water demands, this atlas, published by the NIH, Roorkee under National Mission of Himalayan Studies (NMHS) project holds immense significance serves as a beacon of knowledge and a call to action. It is a testament to our commitment to excellence in hydrological research and a reflection of our unwavering dedication to fostering sustainable water practices.

I extend my heartfelt appreciation to the entire team at NIH, whose unwavering dedication and expertise have made this endeavour possible. I hope that the insights and knowledge presented in this atlas inspire not only further research but also robust policies that safeguard our precious water resources for generations to come.



(Subodh Yadav)
Joint Secretary





Foreword

In the Indian Himalayan Region (IHR), habitations located at the hill slopes or near the ridges are mostly dependent on natural springs to cater the drinking, other domestic, and agricultural water needs. Moreover, these springs also contribute to the sustenance of numerous rivers during the lean season. Thus, springs are truly the lifeline of mountain people.

Recognizing the importance of springs for water supply as well as ecological security, the Government of India has placed the highest priority on protecting these precious water source in the IHR. The National Mission on Himalayan Studies (NMHS), a Central Sector Grant-in-aid Scheme under Ministry of Environment, Forest and Climate Change (MoEF&CC), therefore, targets to provide much needed focus, through holistic understanding of springs and their aquifer systems. It aims at addressing the key issues related to conservation and sustainable management of this important natural resource in the IHR, by protecting and reviving the local springs to ensure long-term water and ecological security for the country. Therefore, the development of a scientific study database, along with monitoring of local springs, becomes imperative for managing water requirements for various developmental and household needs.

This publication which provides the detailed inventory of springs of Tawi River catchment in Jammu & Kashmir comprising various characteristic of springs viz., Spring Nature & Discharge, Spring's water quality, dependent village(s), households and population, dependency level, threat & stressor, vulnerability etc. is an attempt to understand the present status of springs in Tawi Catchment. This work, an outcome of the NMHS funded project on 'Web-enabled Inventory of Natural Water Springs of Tawi River Catchment of Jammu and Kashmir State of India for Vulnerability Analysis and Developing Adaptive Measures for Sustaining Tawi River', provides essential baseline information on the spring status for future comparisons and management planning of water resources in the Himalayas.

I appreciate the efforts of the entire project team for the development of such informative document under NMHS sponsored project.



(Kireet Kumar)

Scientist-'G' & Nodal Officer, NMHS-PMU

G.B. Pant National Institute of Himalayan Environment (NIHE)

Kosi-Katarmal, Almora, Uttarakhand



डा. सुधीर कुमार
निदेशक
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National Institute of Hydrology
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(An ISO 9001 : 2015 Certified Organization)



Preface

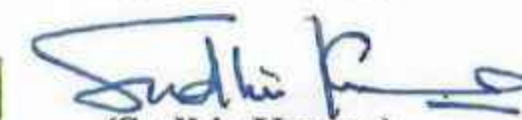


Springs, the visible manifestation of groundwater on the earth's surface, serve as the primary source of water for millions of inhabitants in the mountain ranges across the country. A gross estimate of nearly 200 million Indians depend on spring water across the country – mainly in the Indian Himalayan Region, Western Ghats (Sahyadri mountain range, traversing the states of Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu), Eastern Ghats (Northern Odisha, Andhra Pradesh, and Tamilnadu) and Central India (Satpura and Vindhya mountains). However, over the past few decades numerous springs have either dried-up or became seasonal due to unfavourable anthropogenic activities, and the adverse effects of rising air temperature and erratic rainfall patterns. Therefore, rejuvenating the springs has become a pressing need, necessitating scientific studies that complement local knowledge of this invaluable resource.

The National Institute of Hydrology, a Research and Development (R&D) organization under the DoWR, RD&GR, Ministry of Jal Shakti, Government of India, has identified over 35 parameters crucial for the successful implementation of a springshed programme. To facilitate data collection, a digital system utilizing open-source technology was employed for geotagging and surveying springs using mobile devices. Spring mapping of high social relevance areas was performed in different catchments of Western Himalayan region. To provide detailed information about the Tawi River catchment of Jammu & Kashmir, web-GIS portal named ISHVAR (Information System of Himalayan Springs for Vulnerability Assessment and Rejuvenation) has been developed by the Institute. Such web-GIS based spring inventory holds immense importance in safeguarding springs and their springshed during various developmental activities and to formulate effective springshed development programme. Further, the available information will be helpful for the state and central government agencies in prioritizing their springshed programs in both space and time.

To ensure water security and source sustainability in the hilly regions of the country, it is high-time to launch concentrated efforts for spring management and rejuvenation drives. However, these efforts require basic database to devise appropriate measures and planning relevant scientific investigations. Consequently, scientists at the NIH are striving to develop such type of spring atlases for hydrologically important catchments. Such atlases will greatly aid in the planning of new springshed management projects and assessment of the impact of springshed programs. Needless to say, that besides helping in initiating location-specific solutions to develop impactful conservation and management strategies for different regions of the country, such database will play crucial role in policy planning to ensure the water security at various levels.

I congratulate to our Institute Scientists Dr. Soban Singh Rawat, Scientist 'F' and Dr. Deepak Singh Bisht, Scientist 'C' and the other team members of the project for their commendable efforts in developing this informative and readily usable database for implementing agencies. Their dedication and hard work have resulted in a valuable resource that will significantly contribute to the conservation and sustainable management of springs in our country.


(Sudhir Kumar)

Director
NIH, Roorkee

Acknowledgement

The financial support provided by the National Mission on Himalayan Studies (NMHS) program of Ministry of Environment, Forest & Climate Change (MoEF & CC), New Delhi for conducting this research is duly acknowledged. The authors are grateful to Er. Kireet Kumar, Scientist G and Nodal Officer, NMHS for providing timely guidance and advice during the project. The authors sincerely thank Director, NIH, Roorkee for providing laboratory facilities and field instruments for conducting various project activities.

The continuous guidance and support provided by Dr. MK Goel, Scientist G, Head & Coordinator, Western Himalayan Regional Centre (WHRC), Jammu and Dr. PG Jose, Scientist E and Incharge, WHRC, Jammu are remarkable. The help extended by the Department of Soil and Water Conservation, Jammu & Kashmir, specially by Sh. Sanjay Kotwal, District Soil Conservation Officer, Udhampur in the formulation of project and its implementation are appreciable. The authors wish to acknowledge the cooperation and assistance provided by the village people of Tawi River catchment for providing qualitative information on springs during the field survey.

The support provided by each and every staff of the project is invaluable. The efforts and hard work of Sh. Ajay Kumar are appreciable for conducting field surveys and collecting various information and samples for chemical analysis. Sh. SP Kotwal provided support in field instrumentation. Sh. Drona Khurana and Sh. Dinesh Rai performed the chemical analysis of the collected samples and provided useful information about the chemical properties of spring water. The support provided by the staff of the Nuclear Hydrology lab, Sh. Vishal Gupta, Sh. Vipin Agarwal, Sh. Yadhveer Singh Rawat, Sh. Mayank, and Sh. Chaudhary, is also commendable.

The authors express their sincere gratitude to Er. Suman Gurjar, Former Scientist 'C', NIH, for her invaluable contribution and innovative thinking in the development of the NIH ISHVAR Web-GIS portal. This portal is undeniably one of the significant achievements of this study and has been praised at various forums. Additionally, the authors would like to extend their thanks to Sh. Sanjeev Kumar, Resource Person, for diligently maintaining the NIH ISHVAR portal. We are thankful to Sh. Varun Kumar, Resources Person (Senior), for his sincere efforts and hard work in designing this document.



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Introduction



Springs are the primary and dependable source of drinking water of more than 40 million habitants of Himalayan region as evidenced by villages clustered around these natural water sources. Springs being naturally occurring formations are commonly held water resources of local communities. In addition to this, springs feed several rivers in the Shiwaliks and Lower Himalayas, hence, they are the lifeline of several micro-habitats of the river system. Jammu & Kashmir is bestowed by nature with widespread water bodies viz. lakes, rivers, springs, ponds, etc. Quality and quantity of water bodies like major lakes e.g., the Dal, Nigeen and Wular, Mansar, Surinsar and Sanasar, as well as rivers e.g., Jhelum, Sindh, Lidder, Tawi, Chenab, Dewak, Ujh, Basantar, etc. are monitored and analysed by different departments on regular basis. Besides these major water bodies, there are innumerable springs existing throughout the length and breadth of the State. These springs serve as major sources of drinking water, irrigation, and other human needs in rural areas, fulfil the water needs of local fauna and play a vital role in maintaining various ecosystems of the region. However, these springs could not get the much-needed attention partially due to the lack of awareness partially due to scarcity of manpower.

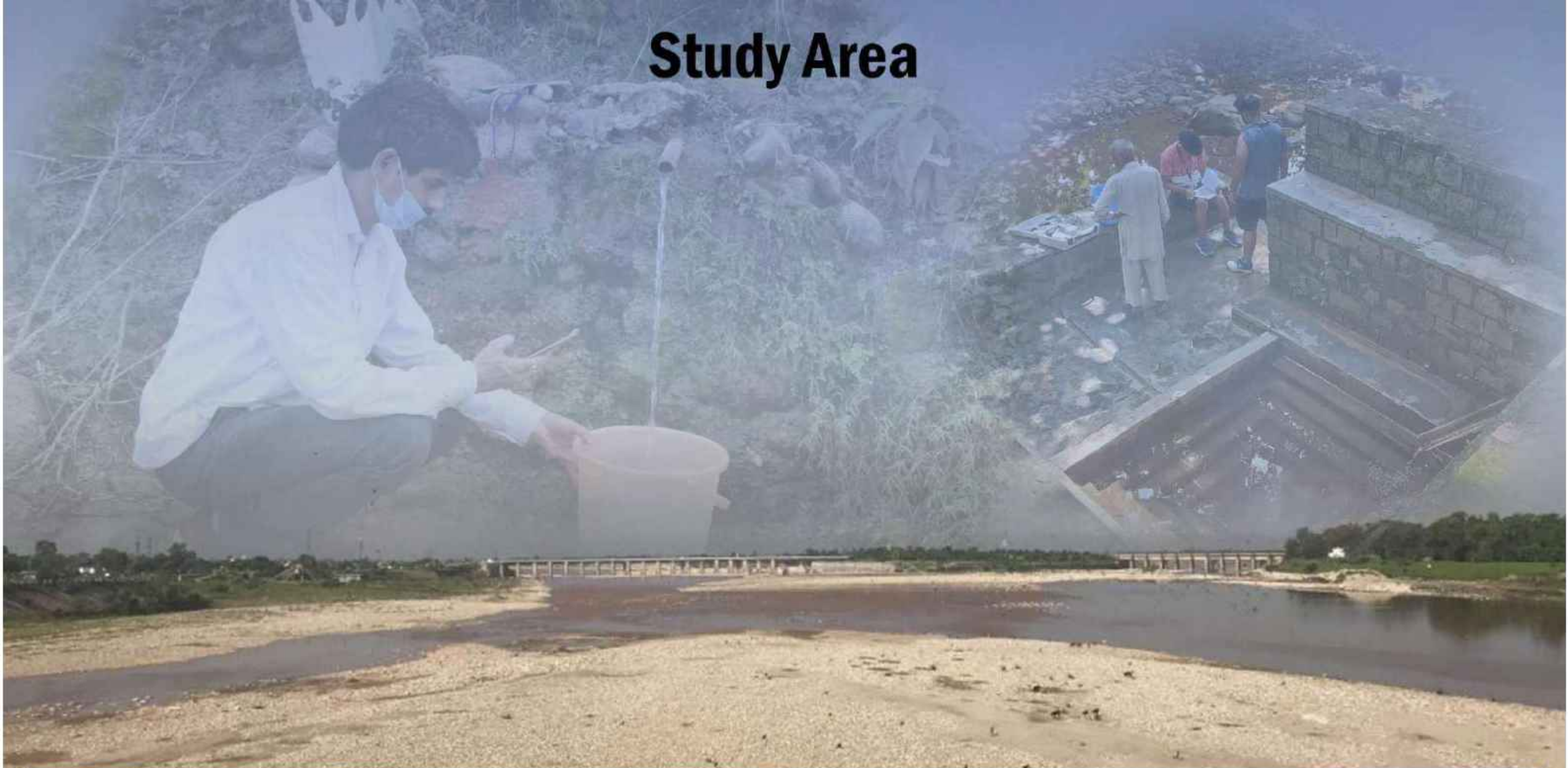
Purpose and Scope



The main aim of the study is to ensure the availability of database for policy makers for developing adaptive measures for ensuring sustainable water availability for the communities residing in the Tawi catchment, which depend on mountain springs for their various water uses. Towards this end, systematic survey to inventorize springs in the catchment and characterise them based on discharge type, seasonal/perennial nature, usage of spring water, meteorological factors and water quality indicators is envisaged using springshed development approach. This Atlas is one of the outcomes of the 'Web-enabled Inventory of Natural Water Springs of Tawi River Catchment of Jammu and Kashmir State of India for Vulnerability Analysis and Developing Adaptive Measures for Sustaining Tawi River'.

Springs, the key natural resources in mountainous region, are rapidly deteriorating due to dramatic increase in unplanned urban development in the region over the last few decades. Changes in the land use land cover pattern has also resulted in altered recharge areas of several springs. Consequently, spring flows tend to diminish and ultimately many of them are likely to get dried. Long queues of women and children to collect potable water depicts the acute shortage of water across the IHR. It has been observed that women and children spend half the day for fetching head loads of water in these mountainous regions. Thus, protection and proper management of this natural resource is essential to maintain its quality and quantity especially for the period when water availability is less.

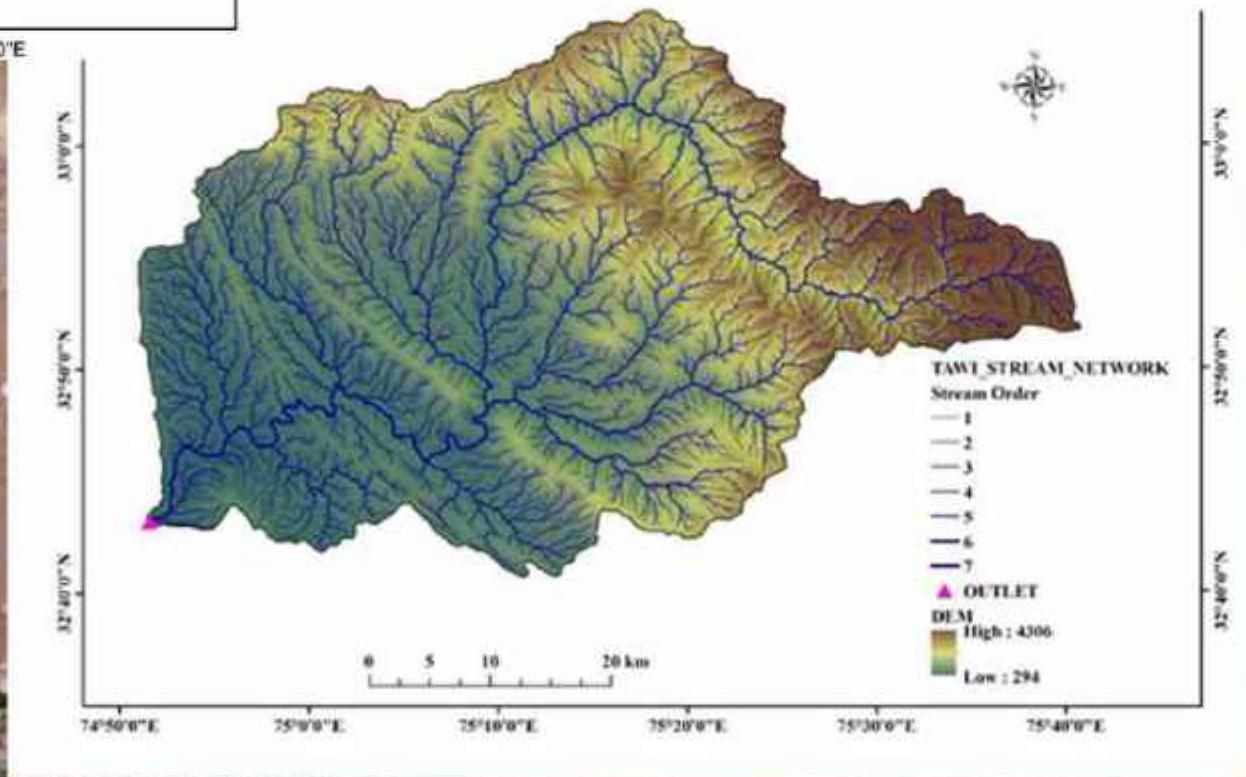
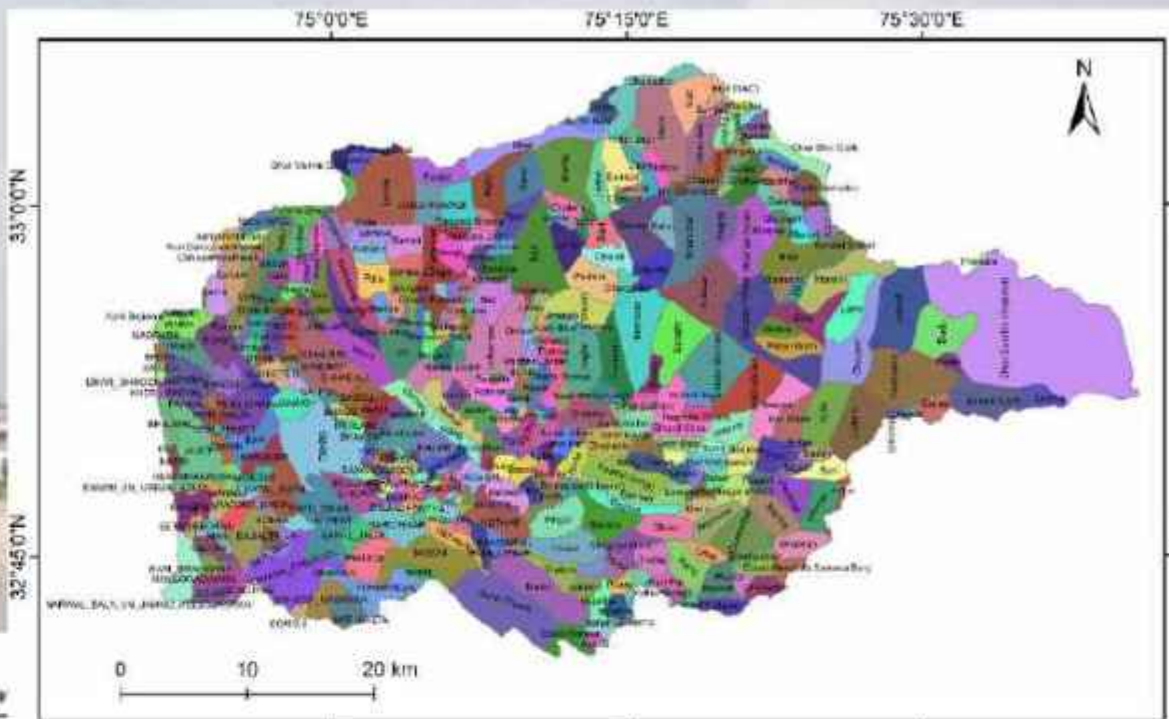
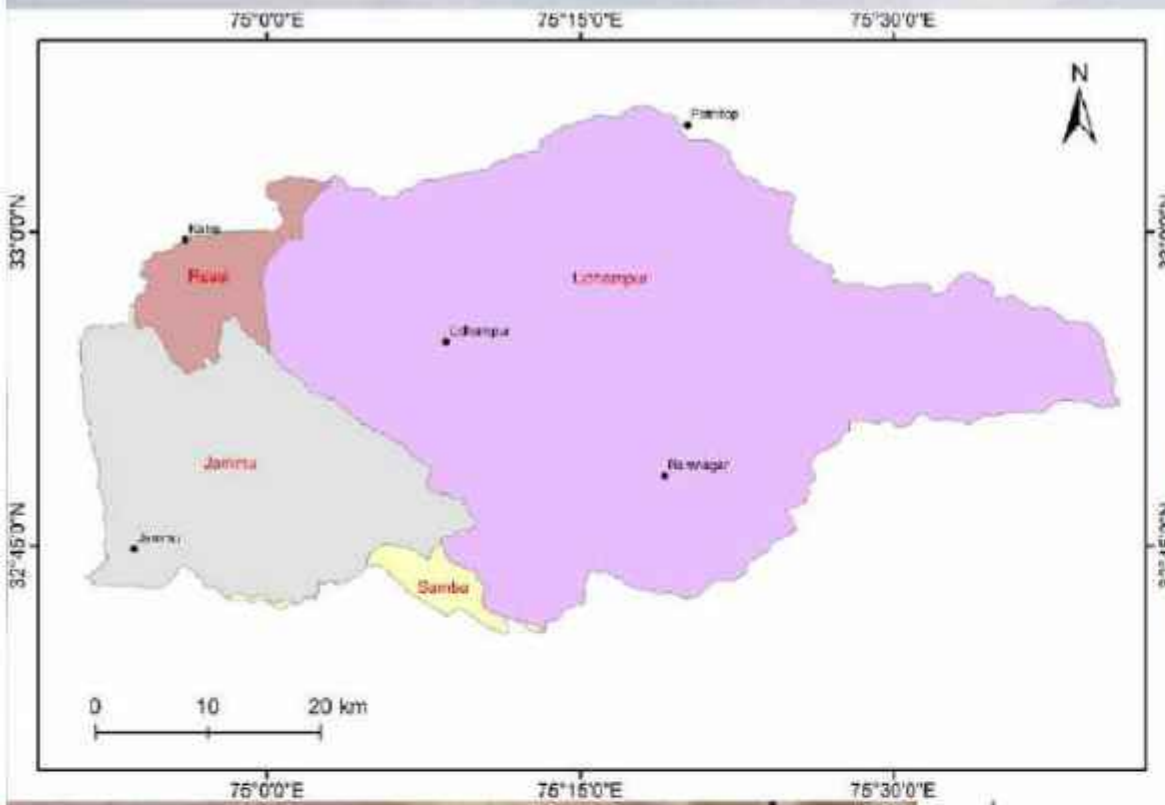
Study Area



River Tawi is one of the major rivers in Jammu region. Considering its significance in sustaining the most populous cities in the region i.e., Jammu and Udhampur, Tawi River catchment was selected as study area. Approximately 250 villages of four districts i.e., Jammu, Udhampur, Reasi, and Samba fall in the catchment of Tawi River. These villages heavily depends on Tawi River and springs in its catchment for meeting their drinking as well domestic water needs. Water demand in the catchment is on the rise due to rapid urbanization and high population growth (20% per decade). However, there is hardly any water flowing in River Tawi during lean season and the people of the area face acute shortage of water impacting their very livelihoods. As per the SOI toposheets more than 350 major springs emerge from Tawi catchment and are responsible for maintaining the base flow of the river during lean season. The lean season discharge is important for sustaining the artificial lake and Tawi Riverfront Development Project, which are under construction.

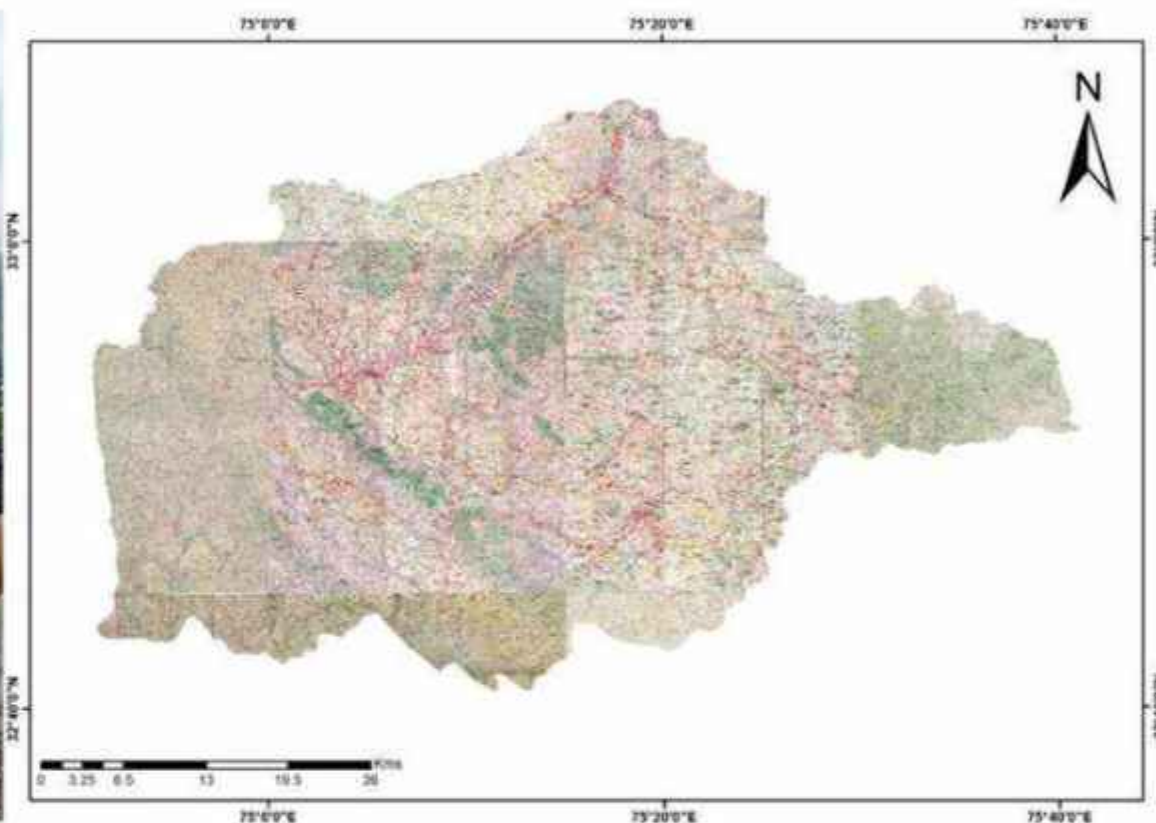
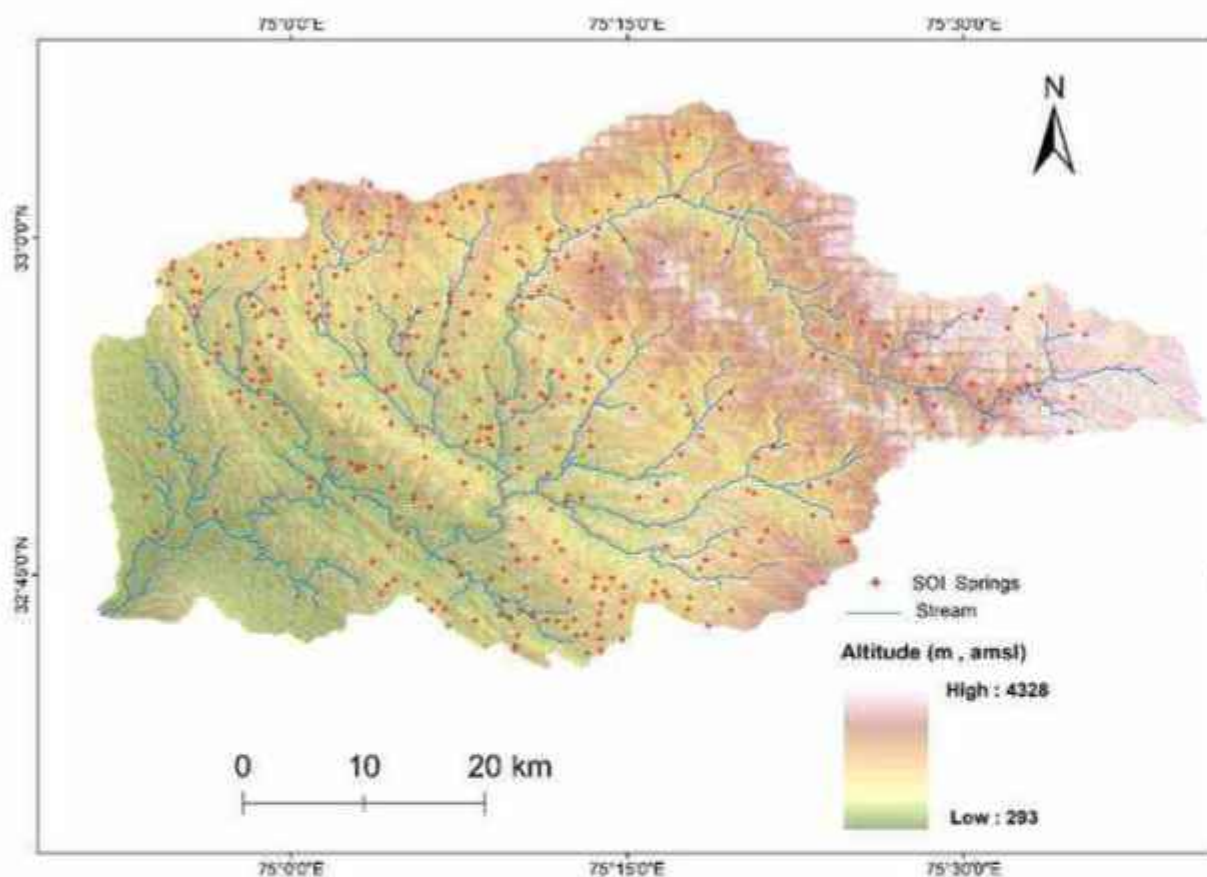
In view of the cultural, social and hydrological importance of Tawi River catchment and lack of base data on springs, a study entitled 'Web-enabled Inventory of Natural Water Springs of Tawi River Catchment of Jammu and Kashmir State of India for Vulnerability Analysis and Developing Adaptive Measures for Sustaining Tawi River' is carried out by National Institute of Hydrology, Roorkee in January, 2019 under National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest and Climate Change, Government of India. Department of Soil & Water Conservation, Government of Jammu & Kashmir is the partner department in the present study.

Preparation of Baseline Data



The Tawi River is an important river of Jammu division of Jammu and Kashmir. With a catchment area of approximately 2156 Sq.km, it is situated between 32.67875°N to 33.10125°N latitudes and 74.849584°E to 75.681251°E longitudes. The altitudinal range of the catchment varies from 293 to 4308 meters above mean sea level. Tawi River, also called the lifeline of the two major districts (Jammu and Udhampur) of Jammu region, is the left bank tributary of river Chenab originating from the lapse of Kali Kundi spring area southwest of Bhadarwah in Doda district. After originating from the Doda district of Jammu region it enters the Udhampur district where it flows for its maximum length and enters Jammu district and finally merges with river Chenab in Pakistan. Catchment area of the Tawi River lies in the four most populous districts of Jammu division after originating from Doda district i.e., Jammu (21.56% area of Tawi catchment), Udhampur (71.6%), Reasi (4.8%) and Samba (1.7%).

Digitization of Springs from SOI Toposheet



The SOI toposheets are used as the base map to digitize the drainage line in the catchment. The toposheets were also utilized to locate the springs present in the catchment to assess the status of springs during field visits and further planning. A total of eight toposheets of 1:50,000 scale viz., 4304, 4308, 43L13, 43P5, 43P9, 43L14, 43P2 and 43P6 were first geo-referenced and mosaicked in ArcGIS 10.7 followed by delineation of drainage and springs present in the catchment. A total of 357 springs were identified and digitized from all the four districts. Spring map derived from Sol toposheets immensely helpful for understanding the pattern of spread of springs in the catchment and planning of efficient survey work in the catchment.

Field Survey Using Electronic Data Collection Approach

For collecting the data for creating spring inventory a survey form covering questionnaire to various parameters pertaining to springs were created. These parameters were recorded during field visit along with the geo-tagged photo of springs. A total of 35+ parameters were recorded in field which pertain the information on spring description, general physical characteristics of spring, ownership of spring and LULC upstream of spring, major stressor and threats, spring usage, dependent population. Entire spring data sheet was transformed in digital format employing open source technology. 'KoBo Collect' an open source android application that is part of the KoboToolbox ecosystem was selected after reviewing several other available options due to its user-friendly interface, offline data collection capabilities, and other extensive features. By leveraging KoboToolbox's features, data collection process could be streamlined while overcoming the challenges posed by the pandemic. The platform allowed the field staffs to collect data electronically, eliminating the need for physical forms and enabling real-time data updates. It also provided offline data collection capabilities, which were crucial in areas with limited or no internet connectivity.

A series of seven screenshots from the KoBo Collect app, showing various data collection screens for a spring survey. The screens include sections for spring description, general physical characteristics, ownership, LULC upstream, major stressor and threats, spring usage, and dependent population. The interface is in Hindi and includes fields for text, numbers, and dates.

Screenshots of developed electronic data collection system through KoBo Tool

Water body mapped as Spring

spring is a focused discharge of naturally occurring groundwater on the Earth's surface. They may be either free flow or seep type.



Free flow spring



Seep Spring

First it has to be clear that which water body is to be considered a spring during springs mapping in Tawi catchment of Jammu & Kashmir.

Not all naturally occurring groundwater flows with diffuse discharge can be classified as springs. For example:

Seepage:

This refers to cases where a discrete discharge point cannot be determined, such as the oozing of groundwater from the banks of a river, lake, or stream, resulting in the creation of a wet and marshy area.



Water logging due to seepage



Swampy wetland

Wetlands:

In areas where the water table is near the surface, groundwater discharges diffusely, giving rise to swampy or marshy ecosystems that support unique plant and animal life.

Wetlands:

In areas where the water table is near the surface, groundwater discharges diffusely, giving rise to swampy or marshy ecosystems that support unique plant and animal life.

Spring inventory should not include ponds and artificial situations, viz. dug wells, artesian wells, and groundwater that appears in excavations.



Pond



Dug well



Artesian well

Natural springs that have pipes installed at their outlets to direct/guide their flow should be included in the mapping of springs and should not be mistaken for piped water supplies.



Springs with piped outlet

However, the following should be excluded:

- Pipes connected to artificial tanks and pumping schemes.
- Pipes drawing water from adjoining or nearby streams,

rivulets, or nallahs. In addition to free-flowing springs, which are characterized by oncentrated flow, there are small and localized groundwater seeps that occur through permeable sediments or fractures in rock, resulting in the formation of pools of water known by different names in local areas, viz. Naula in Uttarkhand, Baowli in Himachal Pradesh, and Bowli/Baowri in Jammu & Kashmir should also be covered in the spring inventory. It is important not to confuse these with other larger structures like step wells during spring mapping (e.g., Agrasen Ki Baoli in New Delhi, Rani ki Vav in Gujarat, etc.).



Bowli/Baowri in Udhampur district of J&K

Analysis of Spring's Water



The ions present in the water in significant concentration are considered as major ions. These include both anions and cations, i.e., Fluoride (F^-), Chloride (Cl^-), Sulphate (SO_4^{2-}), Phosphate (PO_4^{2-}), Nitrite (NO_2^-), Nitrate (NO_3^-), Sodium (Na^+), Potassium (K^+), Ammonium (NH_4^+), Magnesium (Mg^{2+}) and Calcium (Ca^{2+}). The samples were analysed using Ion-Chromatograph (DIONEX ICS-500) in NIH lab.



Identification of Vulnerable Springs

During the study of the Tawi River basin, a comprehensive assessment of springs was conducted, revealing a significant number of spring occurrences, specifically 471 springs. Given this large number, it becomes essential to identify springs that hold high importance or are susceptible in nature. This identification is crucial to ensure effective allocation and utilization of funds, as well as timely implementation and monitoring of necessary work. To achieve this, a method was devised to determine the vulnerability or criticality of springs based on relevant indicators. These indicators encompassed several factors related to springs, including:-

- (a) spring discharge magnitude
- (b) year-round availability of spring water
- (c) population dependent on the spring
- (d) level of dependence on the spring
- (e) availability of alternative water sources
- (f) variability of spring water flow
- (g) measurement of Total Dissolved Solids
- (h) pH level. Each of these indicators carries a varying level of importance.

However, integrating the information from these indicators to establish a suitable index for categorizing a specific spring as low, moderate, or highly vulnerable requires the appropriate assignment of weights to each indicator. By considering these indicators, assigning appropriate weights, and establishing vulnerability criteria, a comprehensive assessment of spring vulnerability was achieved. This methodology allows for a systematic evaluation of springs, enabling the identification of high-priority springs and informing decision-making processes related to resource allocation and management in the Tawi River basin study area. A total of 51 springs were identified as Highly Vulnerable while 419 were identified moderately vulnerable in Tawi catchment.

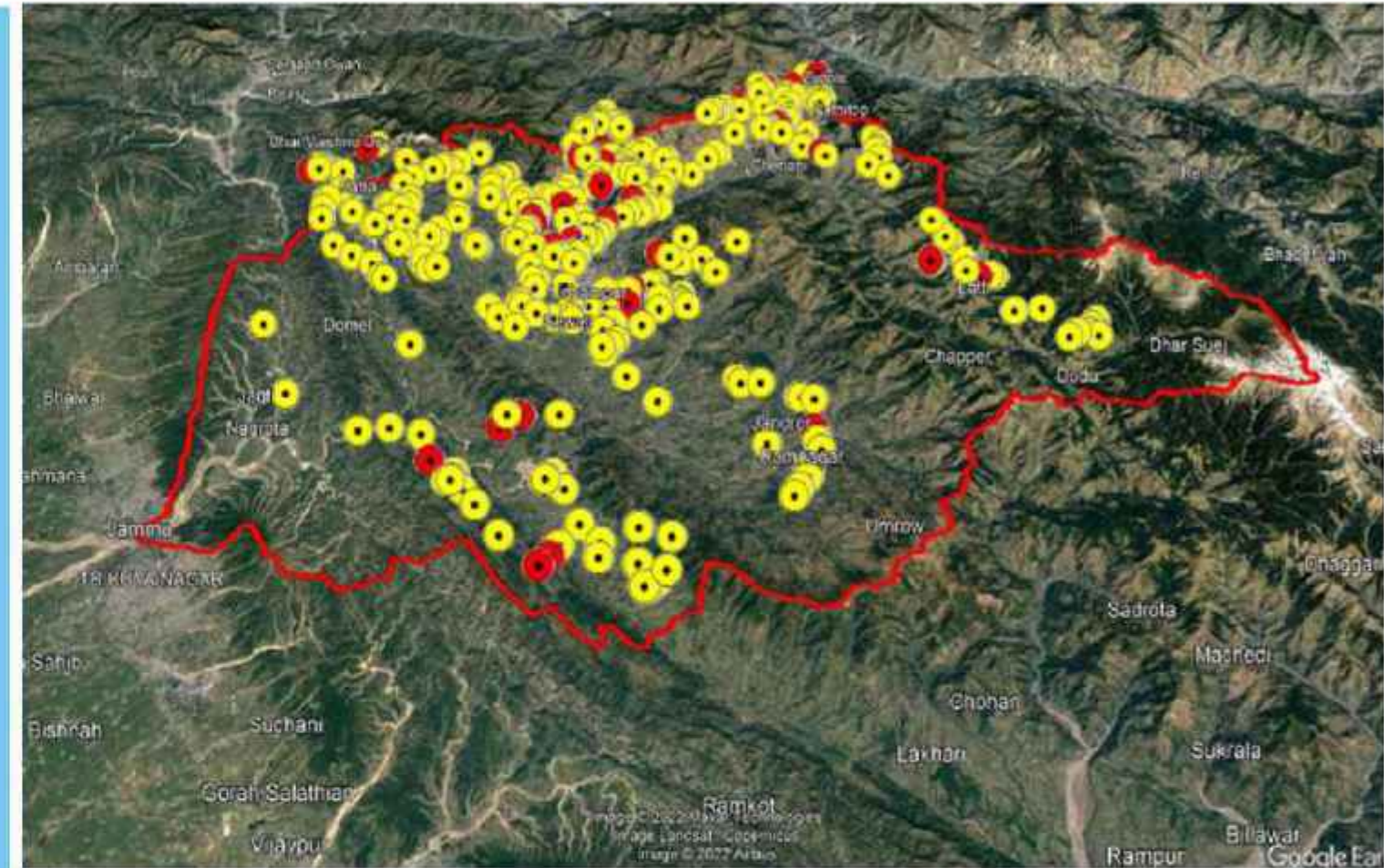


Figure depicting the highly vulnerable (red colour) and moderately vulnerable springs (yellow colour) in Tawi catchment



Dried Spring

Web-GIS based Spring Information System

"Developed under sponsored project by National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest and Climate Change, Govt. of India"



राष्ट्रीय जलविज्ञान संस्थान, रुड़की, भारत
National Institute of Hydrology, Roorkee, India
ISO 9001:2015
Ministry of Jal Shakti, Department of Water resources, River Development and Ganga Rejuvenation



NMHS

Information System of Himalayan Springs for Vulnerability Assessment and Rejuvenation (ISHVAR)

Home About Project Project Team Infographic Gallery

Layers

Open Street Map layer
India Boundary
Tawi Catchment
Geo-tagged Spring

Measure Tool

Get Feature Info Tool

Get Spring Info



Spring Id :TS137

Date of Survey :2020-10-28T12:56:00.000+05:30

Discharge (lpm) :45.7



Spring Detailed Information :

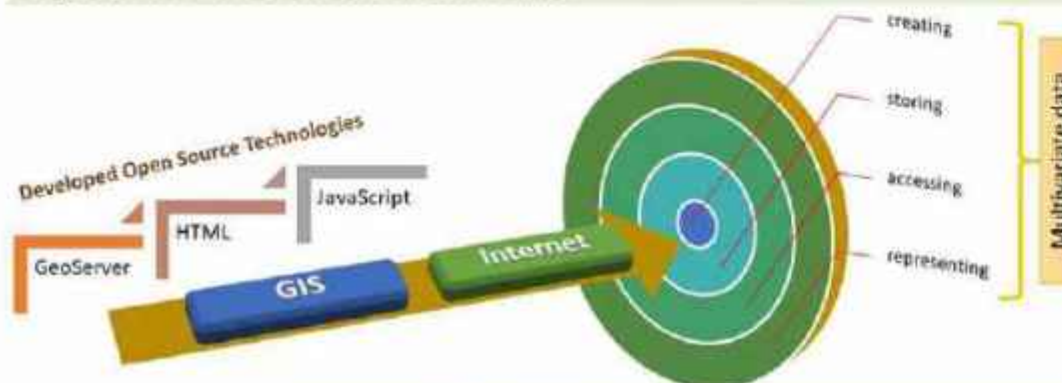
General Information:

Spring Name : Hem Raj Nadu
Type of Spring : Chasma/Nadu/Naag
Nature of Spring : Perennial
Number of Spring Outlet : NA
Landmark : Near waterfall
Latitude (Decimal Degree) : 32.88089056
Longitude (Decimal Degree) : 75.52383604
Elevation (m, amsl) : 1943
Village/ Locality : Pader
Gram Panchayat : NA
Tehsil : Jatti marothi

(NIH-ISHVAR)

NIH - Information System of Himalayan Springs for Vulnerability Assessment & Rejuvenation

Web-based Geographic Information System for **Storing, accessing** and **managing** bulky dataset which is also geospatial in nature are crucial and often complex

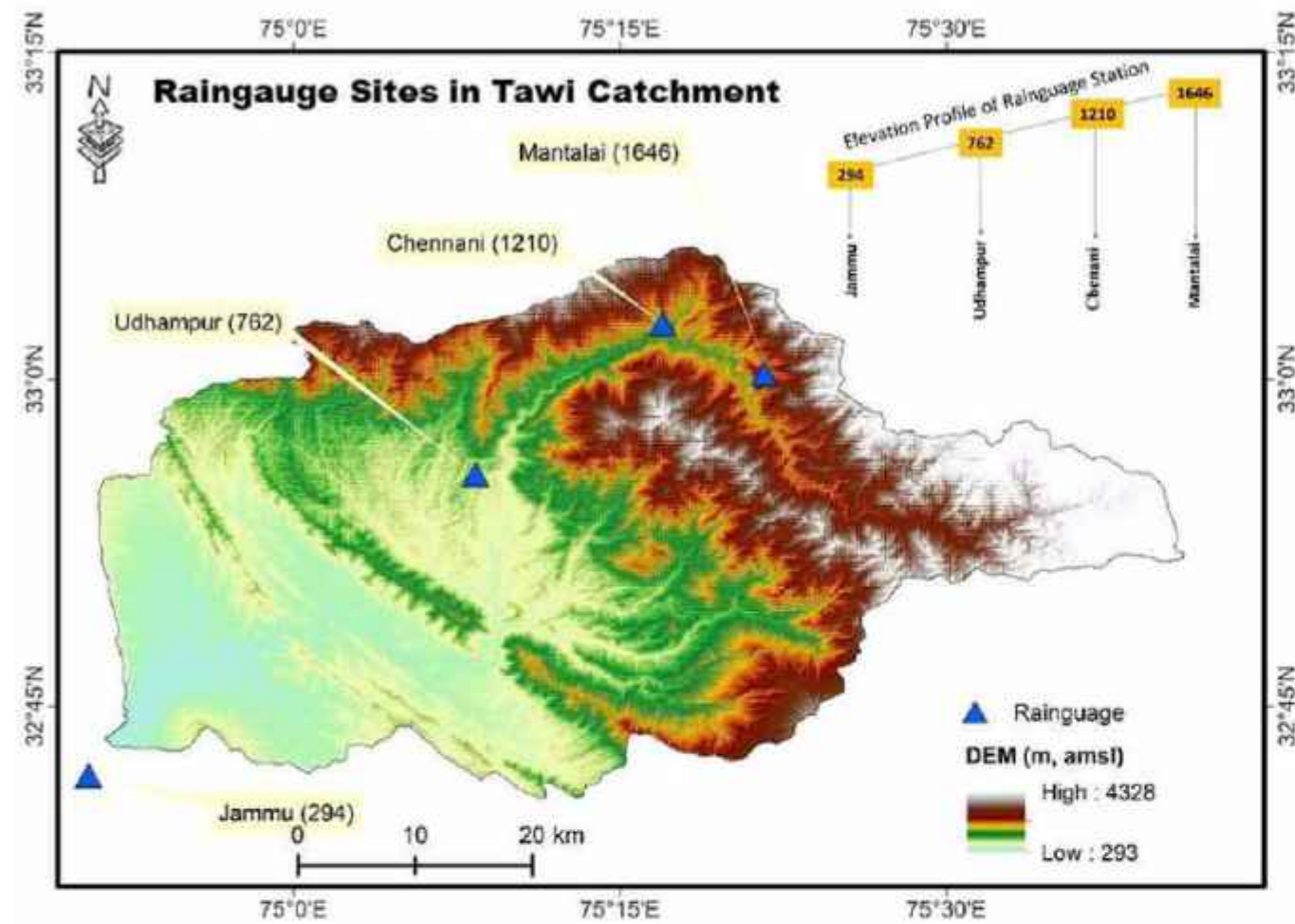


enables effective communication between
- different stakeholders, citizens, and decision makers
- from both the public and private sectors

The various methods and solutions were studied regarding how the spring information which is geographically referenced data with attributes, can be best displayed, stored, disseminated, and utilized. One of the scientific approaches to disseminate such information is through Web-GIS dashboards. This provides a successful end user experience with better visual representation in form of 2D mapping, animation, spatial annotation, drill down graphical illustrations and reporting of spring parameters datasets with user friendly interfaces and intuitive set of tools available to user for reaching decision in timely and prompt manner.

The spatial dataset of springs is hosted in a Web-GIS enabled portal named, NIH-Information System of Himalayan springs for Vulnerability Analysis and Rejuvenation (ISHVAR). This web-portal provides the information about 35 various parameters of springs viz., general information, demographic information, and water quality information of springs.

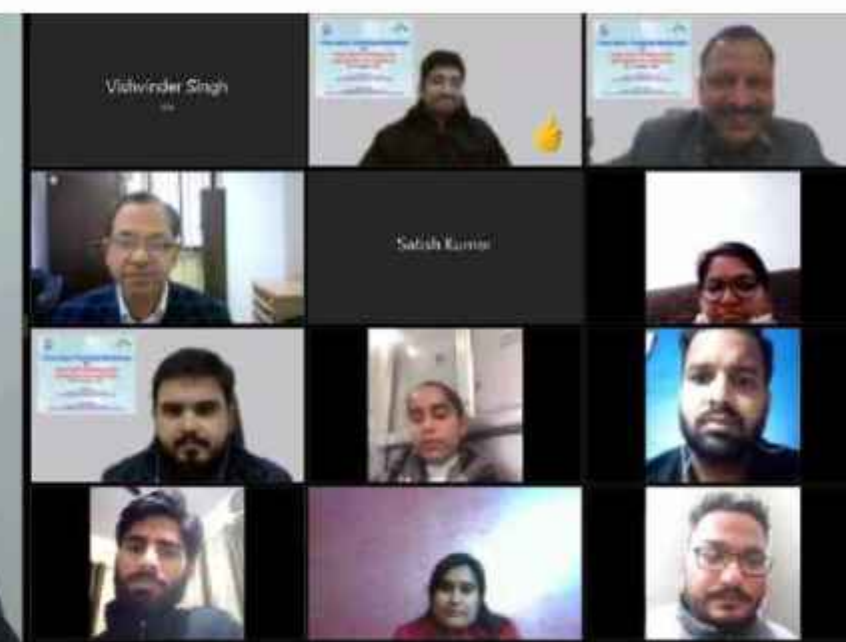
Instrumentation in the Catchment



Rainfall is one of the most important components of hydrological cycle. Springs get recharged from the rainfall and discharges throughout the year. Therefore, measurement of rainfall and its sample for isotopic analysis should be the utmost priority to understand the behavior of springs in different parts of the catchment. Hence, Ordinary Raingauge (ORG) stations at four different altitudes viz. Jammu (294 m amsl), Udhampur (762 m amsl), Chennani (1210 m amsl) and Mantalai (1646 m amsl) were installed for measuring the amount of rainfall and to collect the rainwater samples for isotopic analysis. Two Automatic weather stations at Udhampur and Mantalai were installed to collect the daily meteorological parameters of the catchment. Discharge of the selected springs were collected manually using volumetric method.



Training and Mass Awareness Activities



The outcome of the projects was shared with the stakeholders of Tawi catchment through conducting training programme and various mass awareness activities periodically. A two days training programme titled "Tools and Techniques for Springshed Management" was conducted online during 06-07 January, 2022 for the persons working in the domain of water resource, environment, soil & water conservation, forestry, hydrology, irrigation, social sciences and allied fields within the catchment of Tawi River that primarily comprises officials of the government departments of Jammu and Udhampur districts. A one-day training workshop titled "Tools and Techniques for Springshed Management" was also organized on 03 September, 2022 in offline mode for the rural youths at Government Degree College, Udhampur. In addition to this information regarding the importance of springs in sustaining the water demand, supporting ecosystem and regional biodiversity and the current status of springs in the Tawi river catchment were shared with the villagers through various activities.



कार्यशाला में सिखाया जल स्रोतों का प्रबंधन

जम्मा | एडिट करवाउनुहोस्

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NIH WHRC Jammu organises two-day online training workshop

■ **STATE TIMES NEWS**

JAMMU: The National Institute of Hydrology (NIH), Western Himalayas Regional Centre (WHRC), Jammu organized a two day's online training workshop on "Tools and Techniques for Springfed Management" under a project study sponsored by National Mission on Himalayan Studies (NMHS).

The training workshop was inaugurated online by Hamesh Manchanda, Chief Engineer (CE), Irrigation and Flood Control, Jarami Division.

In his inaugural speech Manchanda spoke about the importance of springs in ensuring the water security in the region while mentioning various government initiatives in similar direction viz., Jal Jeevan Mission.

Prof. Pyush Mahariya, Head, Department of Environmental Sciences, University of Jammu in his address on the Guest of Honour emphasized on the need of Sprinkled management and rejuvenations in Himalayan regions.

stakeholders of Tawi River catchment in Jammu Division.

In the two days' workshop the participants were exposed to various concepts of spring genesis and types, data collection and analysis, electronic data collection using mobile application, hydro-meteorological instrumentation, water conservation measures, spring vulnerability analysis, geological investigation of springs etc.

The workshop was attended by the officials from the office of Chief Conservator of Forests, Department of Soil and Water

Conservation, Irrigation and Flood Control department, Rashtriya Irrigation supplies, Academics, PhD Scholars and Masters Students from different universities namely, University of Jammu, Central University of Jammu, SQUAST-Jammu, Baba Ghulam Shah Badshah University, Rajouri, Purnima University Patinda, Gurukul Kangri University Haridwar, Uttarakhand Open University, and Kumaun University Uttarakhand also participated in the workshop in online

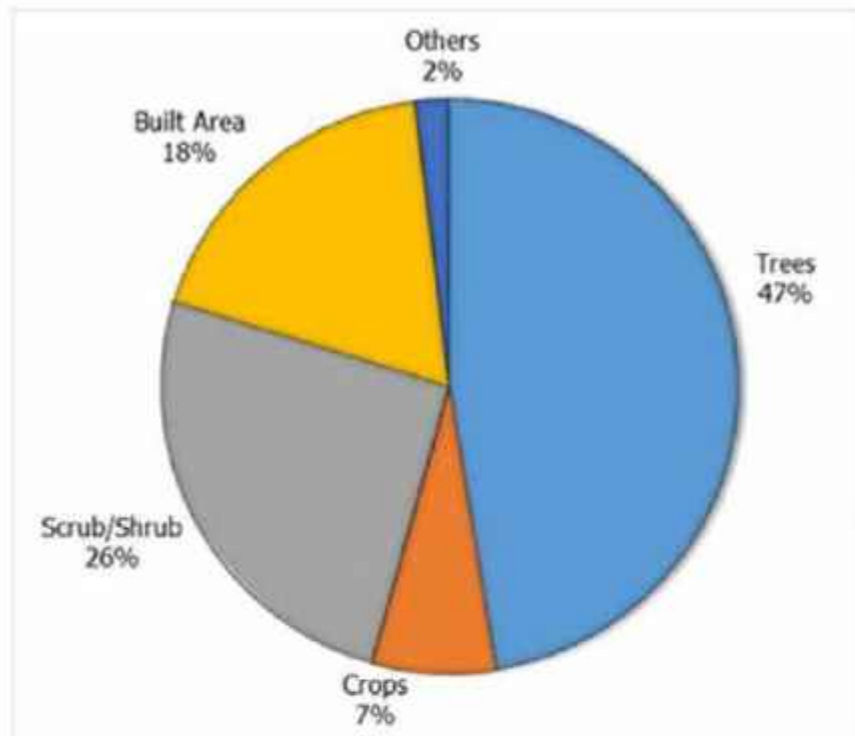
parents dealing with springs in ten different sessions.

In the workshops, Dr. SSS Rawat demonstrated the webGIS based spring inventory ISHVAR (Information System of Himalayan Springs for Vulnerability Assessment and Rejuvenation) created for Tosi and Ravi river catchment to the participants. Dr. TS Ashok Kumar (IPSI), Director, Soil and Water Conservation

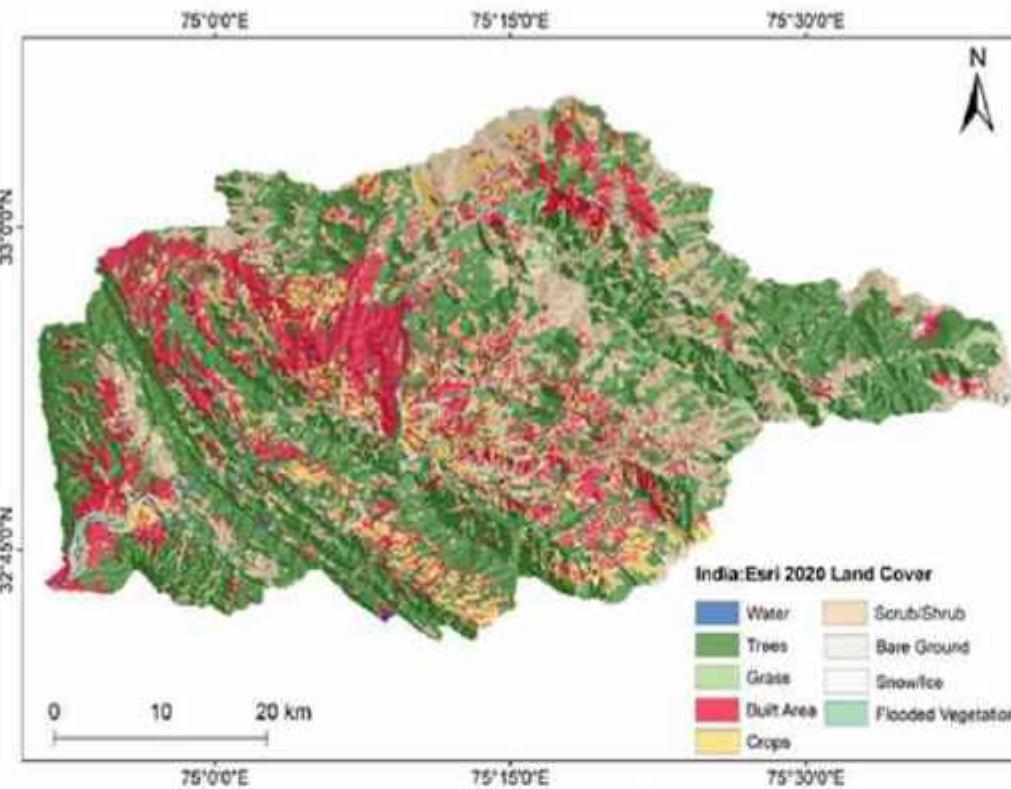
Dr. Mammoohan Goel, Head & Coordinator, NII WEIR, Jamnui, assured the participants for extending the necessary support in springing development program while improving upon the



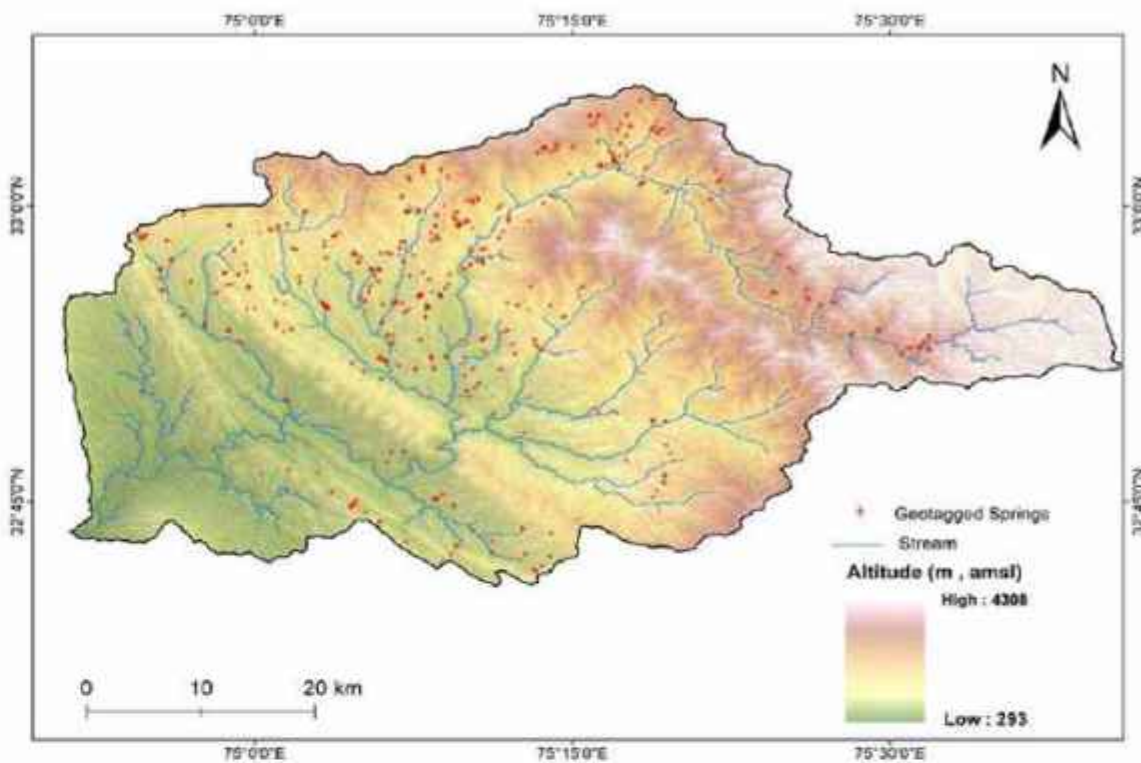
Tawi River Catchment



Landuse landcover pattern of Tawi River catchment



Landuse land cover map of Tawi River catchment



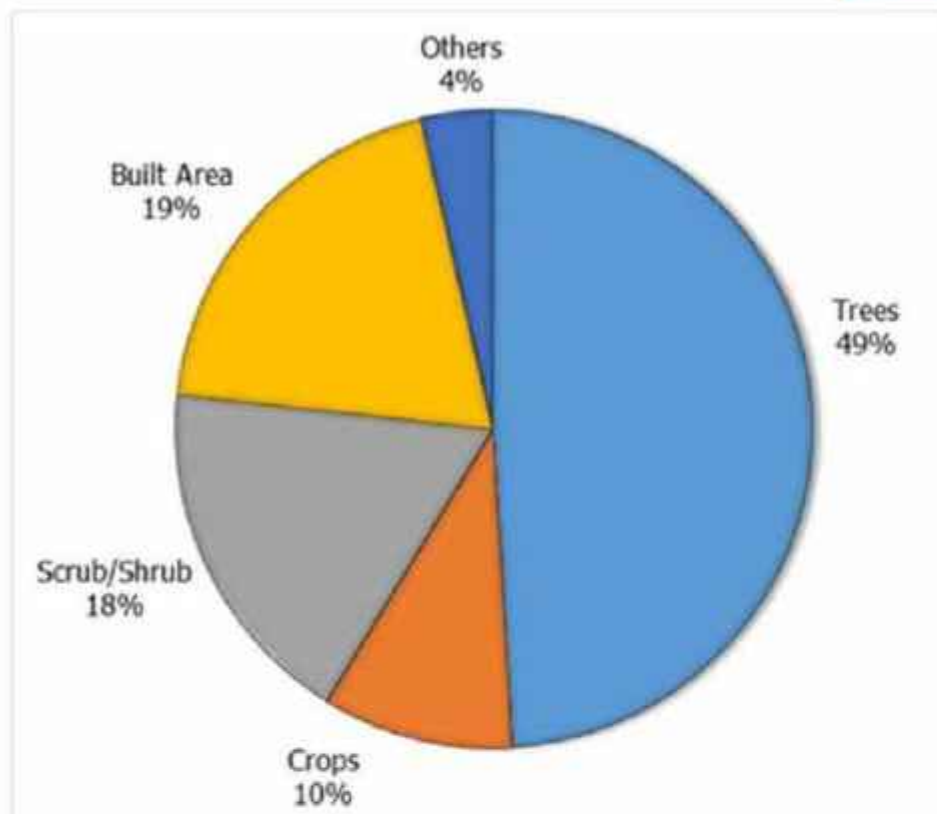
Topographic map of Tawi River Catchment

The Tawi River is an important river of Jammu division of Jammu and Kashmir. With a catchment area of approximately 2156 sq. km, it is situated between 32.67875°N to 33.10125°N latitudes and 74.849584°E to 75.681251°E longitudes. The altitudinal range of the catchment varies from 293 to 4308 meters above mean sea level. A remarkable feature of the Tawi River Catchment is the abundance of natural springs. A total of 470 springs spread across 18 blocks in 04 districts of the Jammu division were geo-tagged. Out of these 18 blocks, 02 blocks are located in Jammu district, 01 block in Samba district, 02 blocks in Reasi district, and 13 blocks in Udhampur district. This abundance of springs makes the Tawi River Catchment an important source of freshwater for the region and a significant area of study for hydrological research.

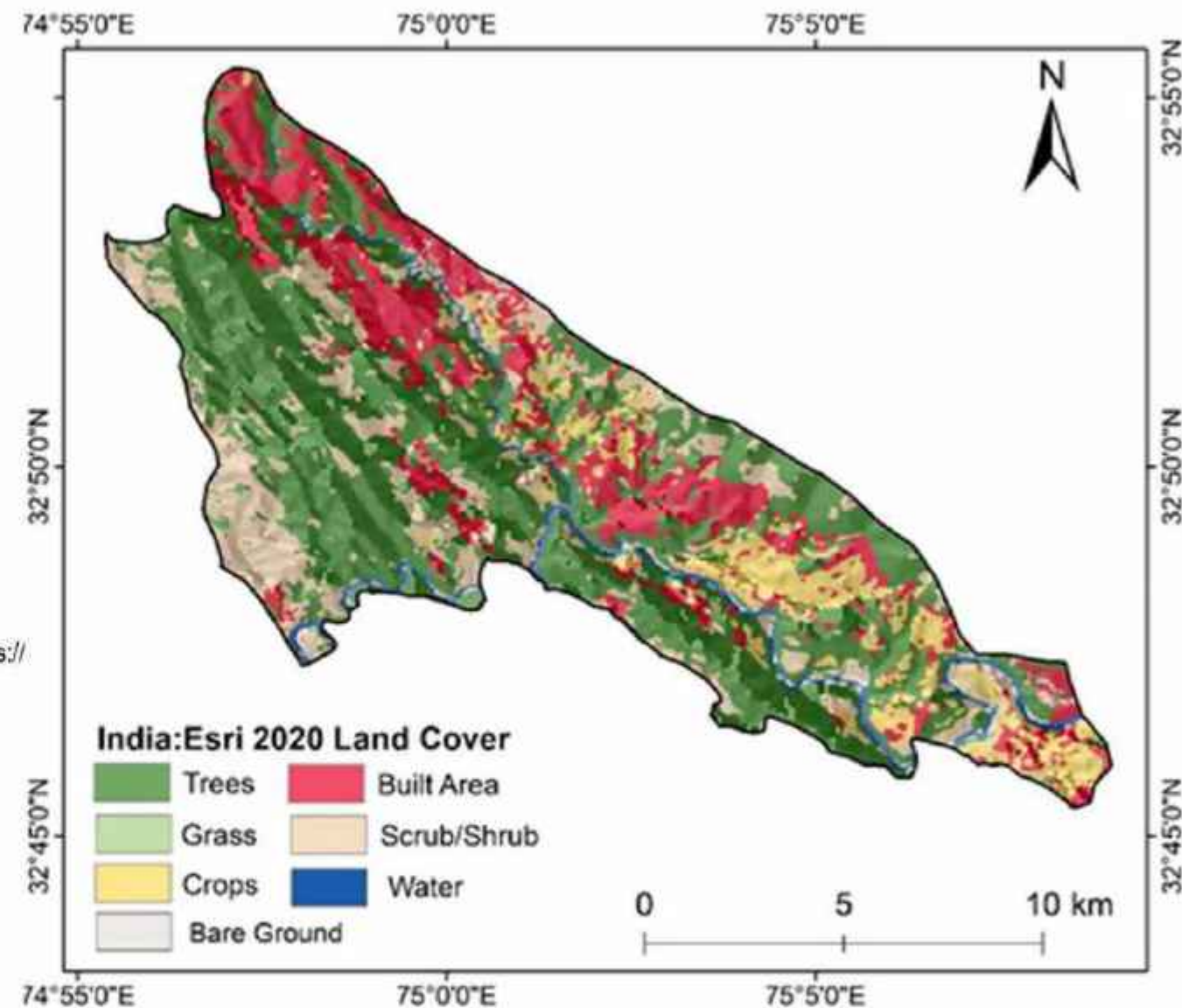


Tawi River Catchment

Dhansal Block, Jammu

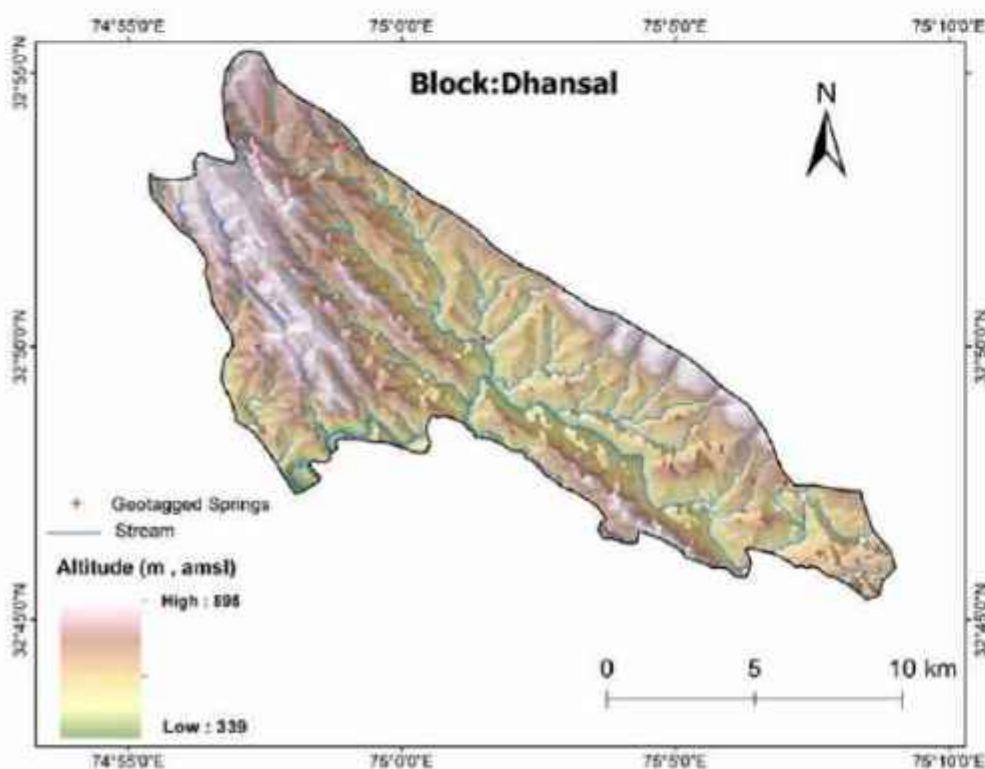


Landuse landcover pattern of Dhansal block



Landuse land cover map of Dhansal block

With an area of approximately 143.68 sq.km, the latitudinal extent of the Dhansal block ranges from 32.756339°N to 32.923311°N, while the longitudinal extent ranges from 74.922933°E to 75.150281°E. In the Dhansal block of the Jammu district, 14 springs were geotagged, covering various villages. The altitude in this block varies from 339 to 895 meters above mean sea level.



Topographic map of Dhansal block

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS108	Dhani Bawli	Perennial	
Latitude	Longitude	Altitude	
32.79196 ° N	75.10717 ° E	480 m (a.m.s.l)	
Discharge	pH	EC	
30 lpm	7.2	622 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS108 [mapped on 2020-07-21 12:28:17]			
Village	Gram Panchayat	Tehsil	District
Kongesa	Bethyari	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 300	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS109	Sirel	Perennial	
Latitude	Longitude	Altitude	
32.79306 ° N	75.10444 ° E	467 m (a.m.s.l)	
Discharge	pH	EC	
33 lpm	7.7	686 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS109 [mapped on 2020-07-21 13:00:50]			
Village	Gram Panchayat	Tehsil	District
Bethyari	Bethyari	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 1500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS110	Negali - 1	Perennial	
Latitude	Longitude	Altitude	
32.79178 ° N	75.11709 ° E	456 m (a.m.s.l)	
Discharge	pH	EC	
-	7	771 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Muddy in Season	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS110 [mapped on 2020-07-21 14:16:54]			
Village	Gram Panchayat	Tehsil	District
Khadta	Krishanpur Kharta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 350	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS111	Negali - 2	Perennial	
Latitude	Longitude	Altitude	
32.79175 ° N	75.11706 ° E	456 m (a.m.s.l)	
Discharge	pH	EC	
-	7	769 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Muddy in Season	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS111 [mapped on 2020-07-21 14:17:19]			
Village	Gram Panchayat	Tehsil	District
Khadta	Krishanpur Kharta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 350	Medium	No Change	Spring

Spring R/R of Tawi River Catchment

Spring ID	Spring Name	Nature
TS112	NA	Seasonal
Latitude	Longitude	Altitude
32.79158° N	75.11686° E	452 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS112 [mapped on 2020-07-21 14:16:54]			

Village	Gram Panchayat	Tehsil	District
Khadta	Krishanpur Kharta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 350	Medium	Decreased	Spring



Spring R/R of Tawi River Catchment

Spring ID	Spring Name	Nature
TS115	NA	Seasonal
Latitude	Longitude	Altitude
32.79157° N	75.11682° E	452 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS115 [mapped on 2020-07-21 14:17:19]			

Village	Gram Panchayat	Tehsil	District
Khadta	Krishanpur Kharta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 350	Medium	Decreased	Spring



Spring R/R of Tawi River Catchment

Spring ID	Spring Name	Nature
TS114	NA	Perennial
Latitude	Longitude	Altitude
32.8556° N	75.02516° E	394 m (a.m.s.l.)
Discharge	pH	EC
5.6 lpm	8.2	746 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High



Spring : TS114 [mapped on 2020-07-21 15:27:33]

Village	Gram Panchayat	Tehsil	District
Salahi	Krishanpur Kharta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 250	Medium	No Change	Spring



Spring R/R of Tawi River Catchment

Spring ID	Spring Name	Nature
TS115	NA	Perennial
Latitude	Longitude	Altitude
32.85577° N	75.0248° E	400 m (a.m.s.l.)
Discharge	pH	EC
9.1 lpm	7.3	693 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
NA	NA	High

			
Spring : TS115 [mapped on 2020-07-21 15:39:55]			

Village	Gram Panchayat	Tehsil	District
Salahi	Krishanpur Kharta	Dansal	Jammu

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Low	Decreased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS195	Naara	Perennial	
Latitude	Longitude	Altitude	
32.90012° N	74.96051° E	532 m (a.m.s.l.)	
Discharge	pH	EC	
96 lpm	7.9	802 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	High	
Spring : TS195 [mapped on 2020-12-25 12:58:54]			
Village	Gram Panchayat	Tehsil	District
Chhurta	Chhurta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS215	Jakar Nahu	Perennial	
Latitude	Longitude	Altitude	
32.89894° N	74.96047° E	495 m (a.m.s.l.)	
Discharge	pH	EC	
240 lpm	7.5	496 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS215 [mapped on 2021-01-22 15:50:00]			
Village	Gram Panchayat	Tehsil	District
Chhurta	Chhurta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Piped water Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS214	Chhurta Baw	Perennial	
Latitude	Longitude	Altitude	
32.8947° N	74.98008° E	524 m (a.m.s.l.)	
Discharge	pH	EC	
4 lpm	7.2	744 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Medium	Moderate	
Spring : TS214 [mapped on 2021-01-22 14:29:00]			
Village	Gram Panchayat	Tehsil	District
Chhurta	Chhurta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

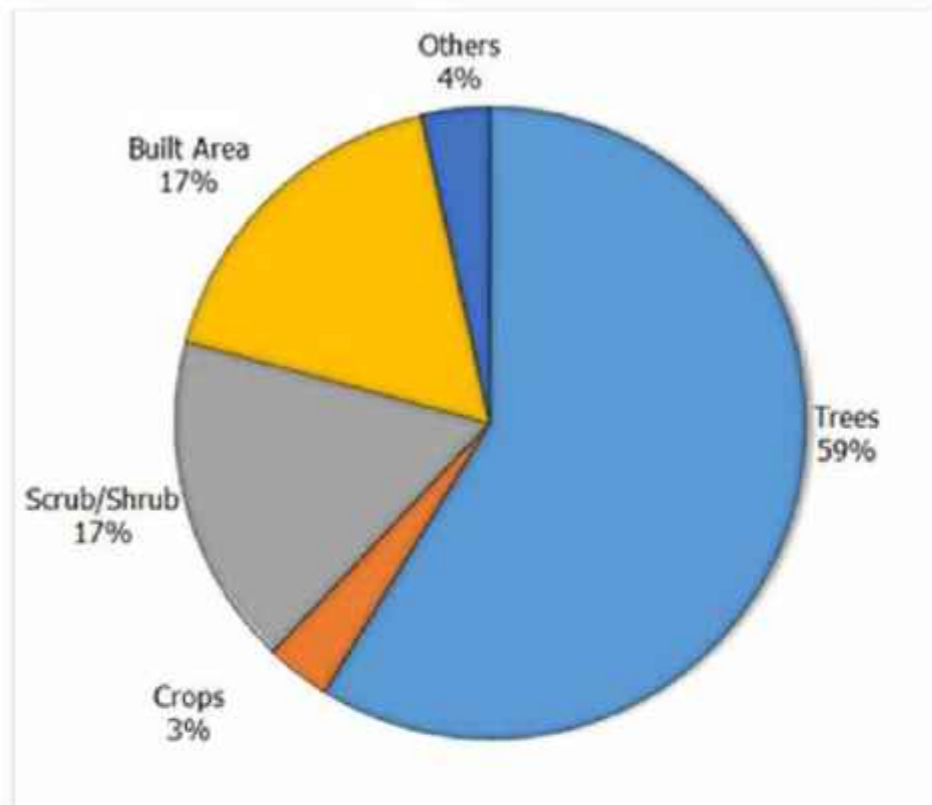
Spring ID	Spring Name	Nature	
TS215	Baw	Perennial	
Latitude	Longitude	Altitude	
32.89428° N	74.97859° E	480 m (a.m.s.l.)	
Discharge	pH	EC	
2.7 lpm	7.2	880 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Muddy	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	None	High	
Spring : TS215 [mapped on 2021-01-22 14:40:00]			
Village	Gram Panchayat	Tehsil	District
Chhurta	Chhurta	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring ID	Spring Name	Nature	
TS216	Nada	Perennial	
Latitude	Longitude	Altitude	
32.88505 ° N	74.98804 ° E	460 m (a.m.s.l)	
Discharge	pH	EC	
156.3 lpm	7.5	790 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS216 [mapped on 2021-01-22 15:56:00]			
Village	Gram Panchayat	Tehsil	District
Mand	Mand	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Spring Piped water

Spring ID	Spring Name	Nature	
TS217	Bavli	Perennial	
Latitude	Longitude	Altitude	
32.88565 ° N	74.99145 ° E	475 m (a.m.s.l)	
Discharge	pH	EC	
0.4 lpm	7.5	670 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	Medium	Moderate	
Spring : TS217 [mapped on 2021-01-22 15:42:00]			
Village	Gram Panchayat	Tehsil	District
Mand	Mand	Dansal	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

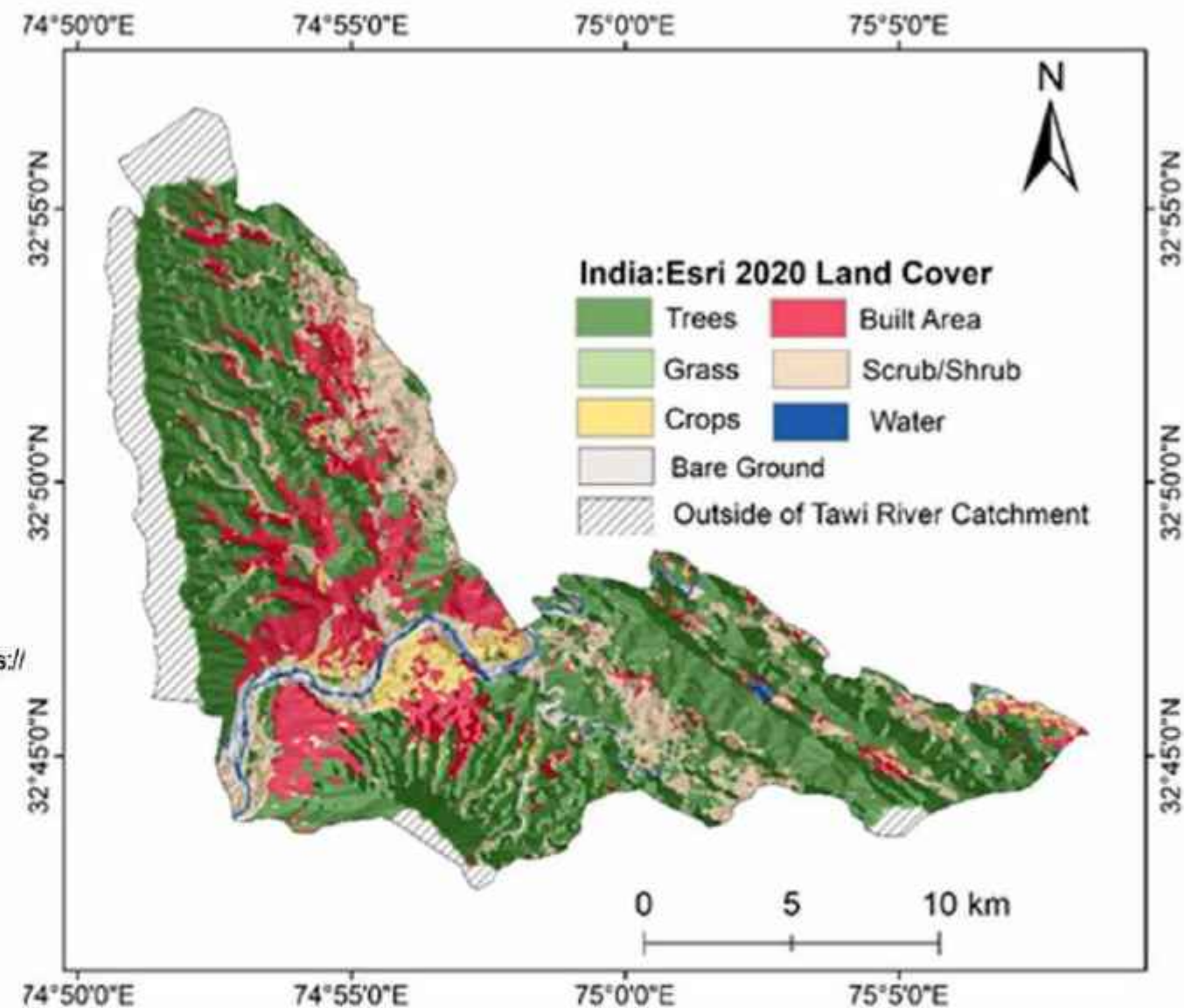
Tawi River Catchment

Nagrota Block, Jammu

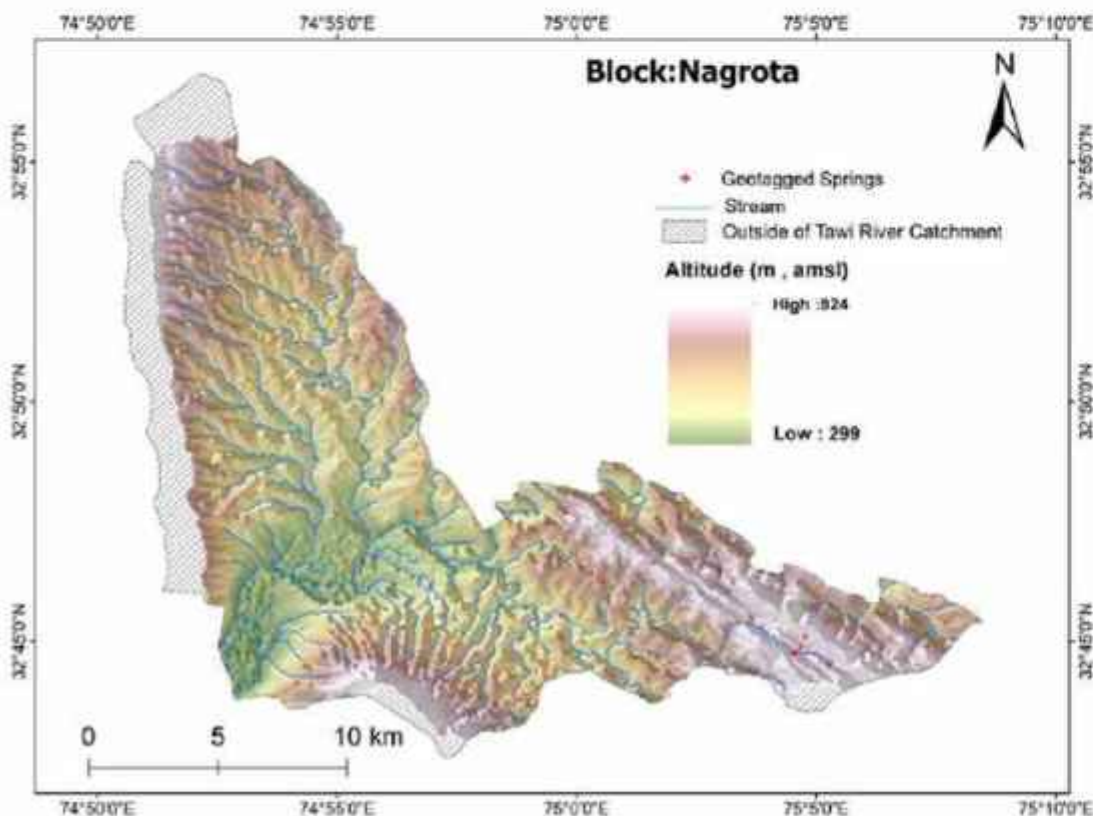


Landuse landcover pattern of Nagrota block

Source: <https://>



Landuse land cover map of Nagrota block



Topographic map of Nagrota block

With an area of approximately 256.99 sq. km, the latitudinal extent of the Nagrota block ranges from 32.714753 °N to 32.926547 °N, while the longitudinal extent ranges from 74.849592 °E to 75.140936 °E. 91.49% of the total area falls within the Tawi River catchment. In the Nagrota block of the Jammu district, 12 springs were geotagged, covering various villages. The altitude of the study area in this block varies from 299 to 824 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS365	Bhovia Bawli	Perennial
Latitude	Longitude	Altitude
32.79474° N	74.94506° E	285 m (a.m.s.l.)
Discharge	pH	EC
1.7 lpm	7.2	650 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS365 [mapped on 2021-09-29 17:52:00]

Village	Gram Panchayat	Tehsil	District
Katal Batal	Katal Batal	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	No Change	Piped water Stream/ Nallah Tubewell

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS364	Nadu	Perennial
Latitude	Longitude	Altitude
32.84285° N	74.91113° E	556 m (a.m.s.l.)
Discharge	pH	EC
2.5 lpm	6.5	456 (µS/cm)
Taste	Colour	Odour
Objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	High



Spring : TS364 [mapped on 2021-09-29 18:21:00]

Village	Gram Panchayat	Tehsil	District
Majra Kotli	Majra Kotli	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS375	Bawli	Perennial
Latitude	Longitude	Altitude
32.77443° N	75.04981° E	536 m (a.m.s.l.)
Discharge	pH	EC
2.6 lpm	7.6	595 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	High

			
Spring : TS375 [mapped on 2021-10-05 9:57:00]			
Village	Gram Panchayat	Tehsil	District
Blahad	Pounthal	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 12	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS376	Baw	Seasonal
Latitude	Longitude	Altitude
32.75814° N	75.06081° E	575 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	High



Spring : TS376 [mapped on 2021-10-05 10:18:00]

Village	Gram Panchayat	Tehsil	District
Kanhal	Pounthal	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 8	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3377	Shival di Baw	Perennial
Latitude	Longitude	Altitude
32.74576 ° N	75.07524 ° E	620 m (a.m.s.l)
Discharge	pH	EC
4.6 lpm	7.3	504 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	Moderate

			
Spring : T3377 [mapped on 2021-10-05 10:37:00]			

Village	Gram Panchayat	Tehsil	District
Sangoor	Sangoor	Nagriota	Jammu

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3378	Baw	Perennial
Latitude	Longitude	Altitude
32.74594 ° N	75.07584 ° E	605 m (a.m.s.l)
Discharge	pH	EC
1 lpm	7.3	481 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	High



Spring : T337E [mapped on 2021-10-05 10:43:00]

Village	Gram Panchayat	Tehsil	District
Sangoor	Sangoor	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3379	Baw	Perennial
Latitude	Longitude	Altitude
32.74688 ° N	75.0778 ° E	605 m (a.m.s.l)
Discharge	pH	EC
1.7 lpm	7.4	485 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : T3379 [mapped on 2021-10-05 10:50:00]

Village	Gram Panchayat	Tehsil	District
Sangoor	Sangoor	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3380	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.75165 ° N	75.07972 ° E	626 m (a.m.s.l)
Discharge	pH	EC
5.7 lpm	7.2	480 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	Moderate



Spring : T3380 [mapped on 2021-10-05 11:08:00]

Village	Gram Panchayat	Tehsil	District
Jhandu	Sangoor	Nagriota	Jammu

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 45	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS381	Bawli	Perennial
Latitude	Longitude	Altitude
32.74815 ° N	75.07857 ° E	607 m (a.m.s.l)
Discharge	pH	EC
2 lpm	7.4	560 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	High	Moderate

			
Spring : TS381 [mapped on 2021/10/05 11:30:00]			

Village	Gram Panchayat	Tehsil	District
Sangoor	Sangoor	Nagriota	Jammu

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 30	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS382	Masro bawli	Perennial
Latitude	Longitude	Altitude
32.74162 ° N	75.08756 ° E	644 m (a.m.s.l)
Discharge	pH	EC
2.4 lpm	7.6	386 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS382 [mapped on 2021/10/05 11:35:00]			

Village	Gram Panchayat	Tehsil	District
Sangoor	Sangoor	Nagriota	Jammu

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	No Change	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS456	Mohalla Kot	Perennial
Latitude	Longitude	Altitude
32.77359 ° N	75.00927 ° E	536 m (a.m.s.l)
Discharge	pH	EC
12 lpm	7.2	540 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	High

			
Spring : TS456 [mapped on 2019/12/18 12:19:12]			

Village	Gram Panchayat	Tehsil	District
Aitham	Aitham	Nagriota	Jammu

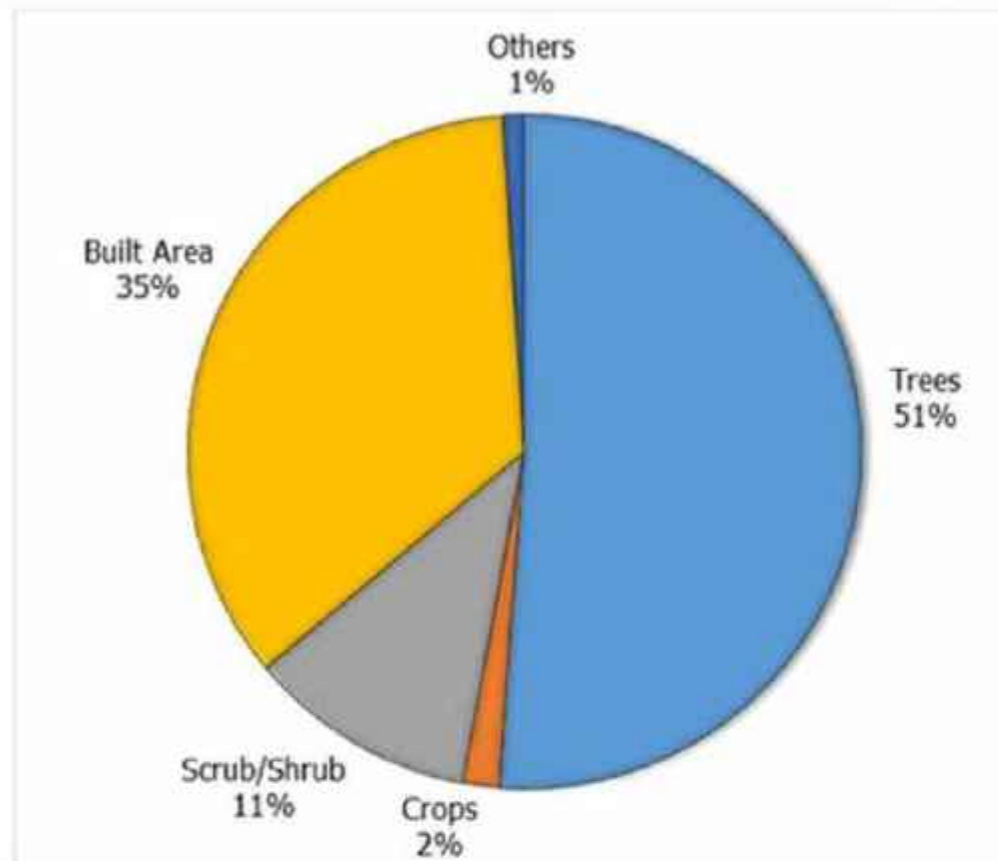
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 800	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

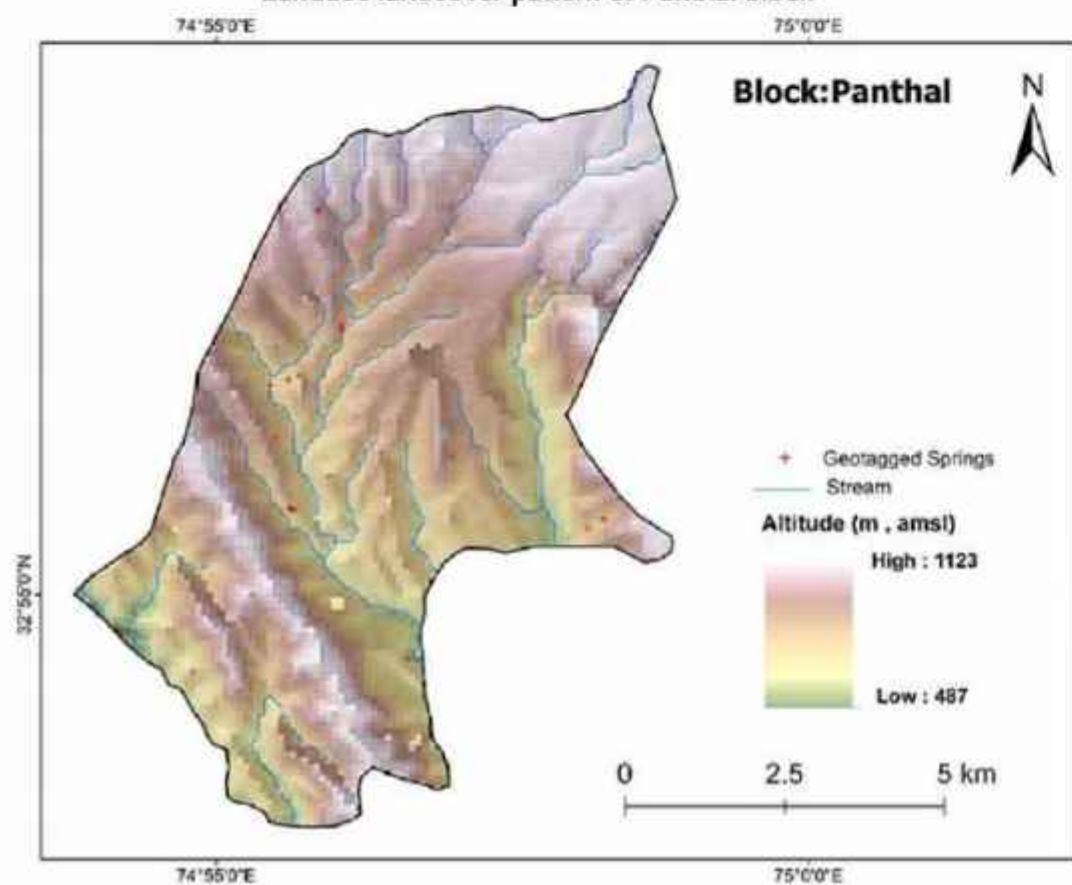
Spring ID	Spring Name	Nature	
TS457	Mandir Bawli	Perennial	
Latitude	Longitude	Altitude	
32.77715 ° N	75.02682 ° E	621 m (a.m.s.l)	
Discharge	pH	EC	
15.2 lpm	7.4	480 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	High	
Spring : TS457 [mapped on 2019/12/18 13:02:50]			
Village	Gram Panchayat	Tehsil	District
Surinstar	NA	Nagriota	Jammu
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 500	Medium	No Change	Spring

Tawi River Catchment

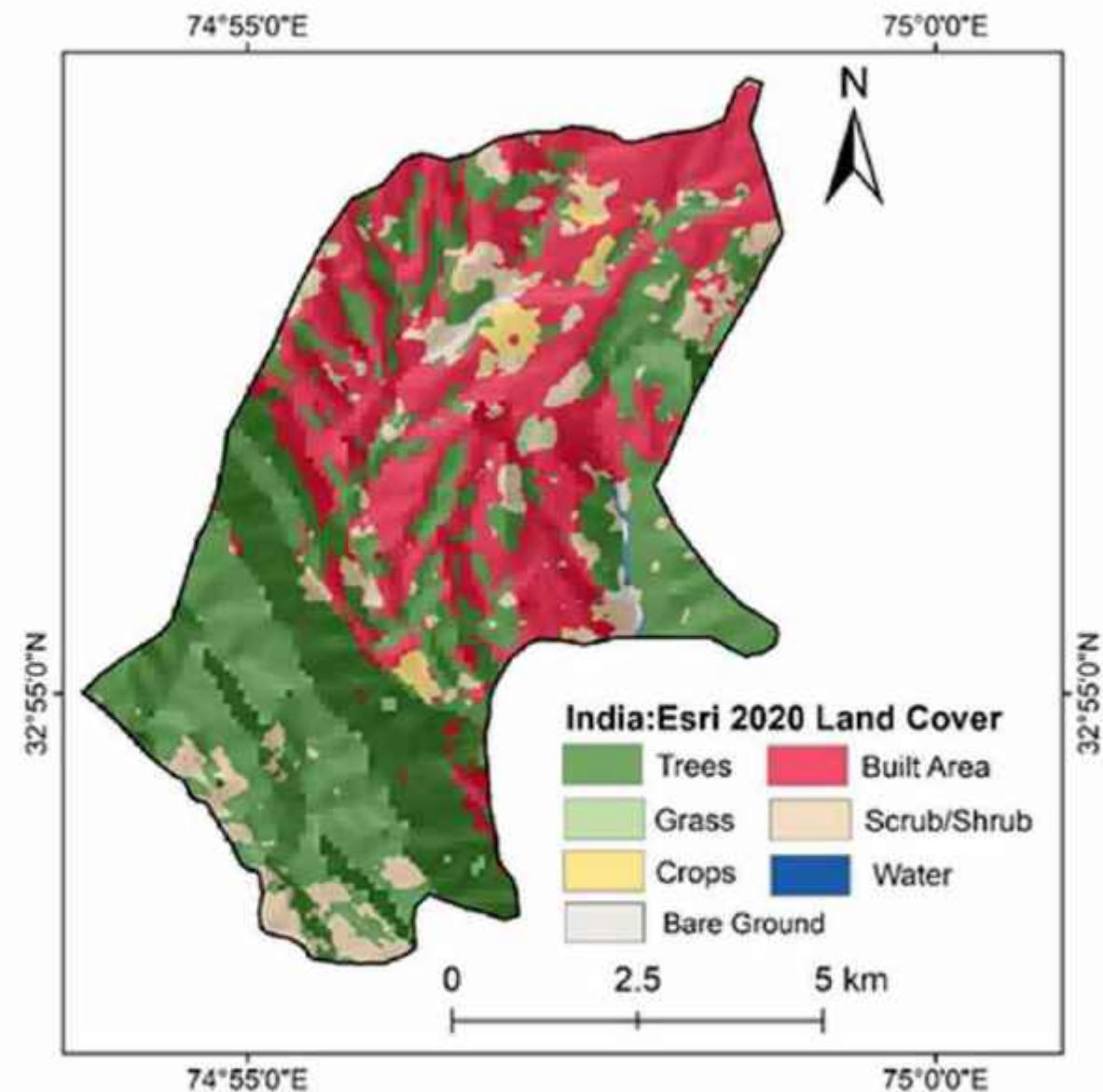
Panthal Block, Reasi



Landuse landcover pattern of Panthal block



Topographic map of Panthal block



Landuse land cover map of Panthal block

With an area of approximately 49.69 sq. km, the latitudinal extent of the Panthal block ranges from 32.883962°N to 32.991189°N, while the longitudinal extent ranges from 74.896649°E to 74.981451°E. In the Panthal block of the Reasi district, 14 springs were geotagged, covering various villages. The altitude in this block varies from 487 to 1123 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS194	Naara	Perennial	
Latitude	Longitude	Altitude	
32.94701° N	74.92682° E	645 m (a.m.s.l.)	
Discharge	pH	EC	
14.7 lpm	7.4	690 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Moderate	High	
Spring : TS194 [mapped on 2020-12-25 10:12:20]			
Village	Gram Panchayat	Tehsil	District
Talen	Dudura	Kabra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 250	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS196	NA	Perennial	
Latitude	Longitude	Altitude	
32.92736° N	74.97121° E	648 m (a.m.s.l.)	
Discharge	pH	EC	
3.7 lpm	7.2	756 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Muddy in Season	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TS196 [mapped on 2020-12-25 13:49:01]			
Village	Gram Panchayat	Tehsil	District
Dhirkot	Deharkot	Kabra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS197	NA	Perennial	
Latitude	Longitude	Altitude	
32.92605° N	74.989° E	622 m (a.m.s.l.)	
Discharge	pH	EC	
48 lpm	NA	-	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS197 [mapped on 2020-12-25 14:08:52]			
Village	Gram Panchayat	Tehsil	District
Dhirkot	Deharkot	Kabra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 400	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS198	Mandir di Baw	Perennial	
Latitude	Longitude	Altitude	
32.93614° N	74.94985° E	685 m (a.m.s.l.)	
Discharge	pH	EC	
5.3 lpm	7.4	769 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS198 [mapped on 2021-01-21 12:03:00]			
Village	Gram Panchayat	Tehsil	District
Chak Bhagta	NA	Kabra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 400	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS199	Pabuta Nala	Perennial
Latitude	Longitude	Altitude
32.95481° N	74.95439° E	655 m (a.m.s.l.)
Discharge	pH	EC
46.7 lpm	7.3	655 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS199 [mapped on 2021-01-21 12:54:00]			

Village	Gram Panchayat	Tehsil	District
Talen	Dudura	Katra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS200	Nada	Seasonal
Latitude	Longitude	Altitude
32.95437° N	74.95432° E	645 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	High	Moderate



Spring : TS200 [mapped on 2021-01-21 12:47:00]

Village	Gram Panchayat	Tehsil	District
Talen	Dudura	Katra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	Low	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS201	Publat Nada	Perennial
Latitude	Longitude	Altitude
32.95405° N	74.95419° E	640 m (a.m.s.l.)
Discharge	pH	EC
68.6 lpm	7.4	645 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS201 [mapped on 2021-01-21 12:55:00]			

Village	Gram Panchayat	Tehsil	District
Talen	Dudura	Katra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 1000	High	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TS202	Mandir Bawli	Perennial		
Latitude	Longitude	Altitude		
32.97077° N	74.951° E	756 m (a.m.s.l.)		
Discharge	pH	EC		
19.2 lpm	7.3	870 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	None	Moderate		
				
Spring : TS202 [mapped on 2021-01-21 13:28:00]				
Village		Gram Panchayat	Tehsil	District
Natali		Dudura	Katra	Reasi
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 250		Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS207	Bawli	Perennial
Latitude	Longitude	Altitude
52.9077° N	74.9455° E	559 m (a.m.s.l.)
Discharge	pH	EC
55.3 lpm	7.3	600 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS207 [mapped on 2021-01-22 11:09:00]			

Village	Gram Panchayat	Tehsil	District
Sira	Sira	Katra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS208	Magal Nadda	Perennial
Latitude	Longitude	Altitude
52.93675° N	74.92512° E	652 m (a.m.s.l.)
Discharge	pH	EC
8.9 lpm	7.6	750 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate



Spring : TS208 [mapped on 2021-01-22 11:38:00]

Village	Gram Panchayat	Tehsil	District
Sira	Sira	Katra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS209	Mandir Baw	Perennial
Latitude	Longitude	Altitude
52.94611° N	74.92427° E	612 m (a.m.s.l.)
Discharge	pH	EC
3.6 lpm	7.2	662 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	High



Spring : TS209 [mapped on 2021-01-22 11:56:00]

Village	Gram Panchayat	Tehsil	District
Sira	Sira	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TS210	Bawli	Perennial		
Latitude	Longitude	Altitude		
52.92866 ° N	74.92715 ° E	651 m (a.m.s.l.)		
Discharge	pH	EC		
3.6 lpm	7.2	651 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	None	High		
				
Spring : TS210 [mapped on 2021-01-22 12:35:00]				
Village		Gram Panchayat	Tehsil	District
Sira		Sira	Katra	Reasi
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 300		Medium	Decreased	Spring Piped water

Spring ID	Spring Name	Nature
T3211	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.92895 ° N	74.9269 ° E	640 m (a.m.s.l)
Discharge	pH	EC
4 lpm	7.1	821 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : T3211 [mapped on 2021-01-22 12:44:00]			
Village	Gram Panchayat	Tehsil	District
Sira	Sira	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	Decreased	Spring Piped water

Spring ID	Spring Name	Nature
T3212	Bawli	Perennial
Latitude	Longitude	Altitude
32.92865 ° N	74.92754 ° E	626 m (a.m.s.l)
Discharge	pH	EC
67.4 lpm	7.1	821 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate

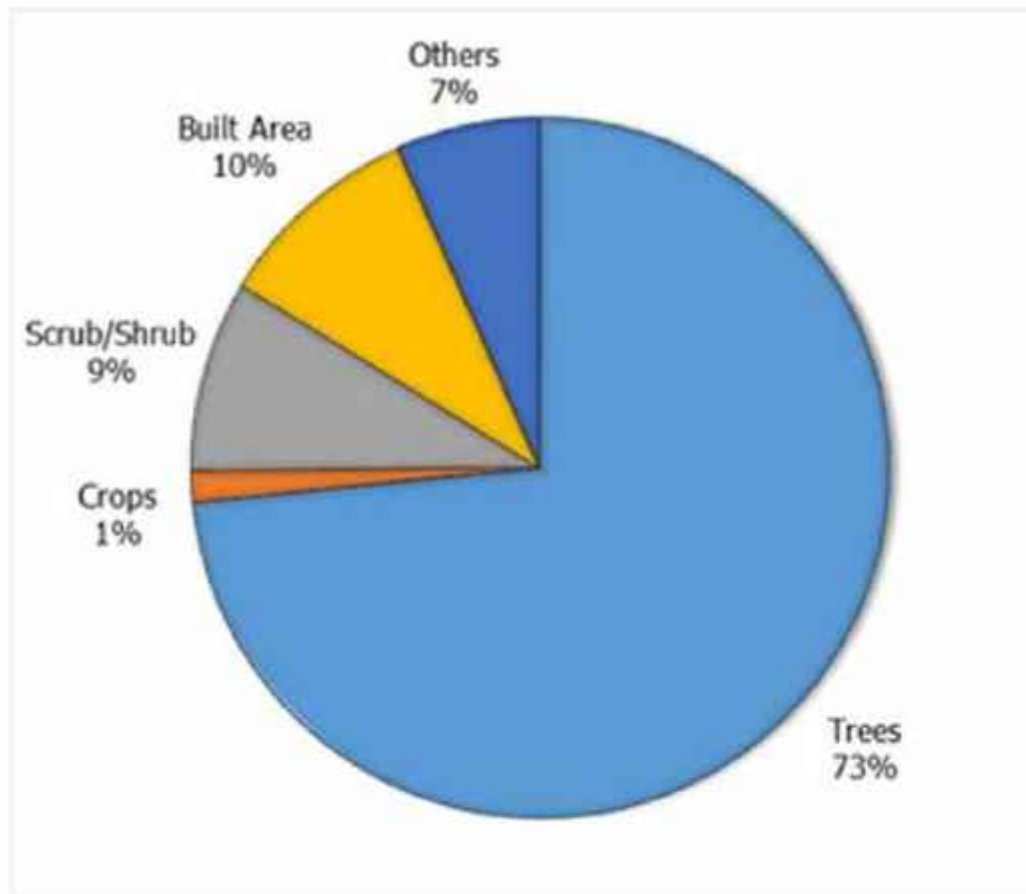
			
Spring : T3212 [mapped on 2021-01-22 12:55:00]			

Village	Gram Panchayat	Tehsil	District
Sira	Sira	Katra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	Decreased	Spring Piped water

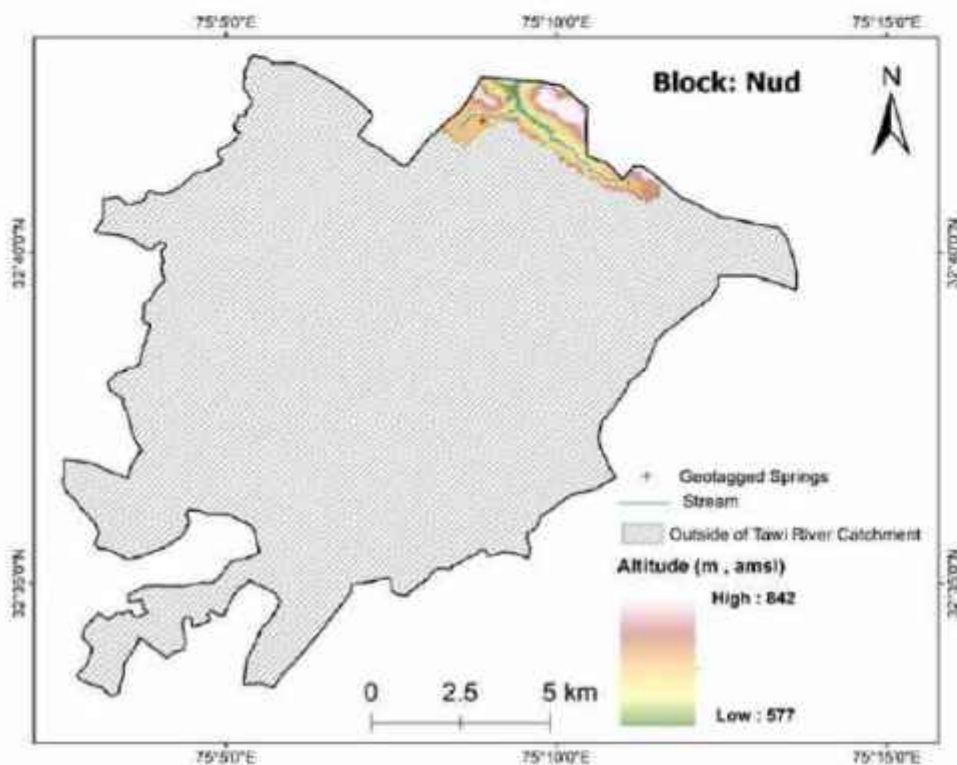
Tawi River Catchment

Nud Block, Samba

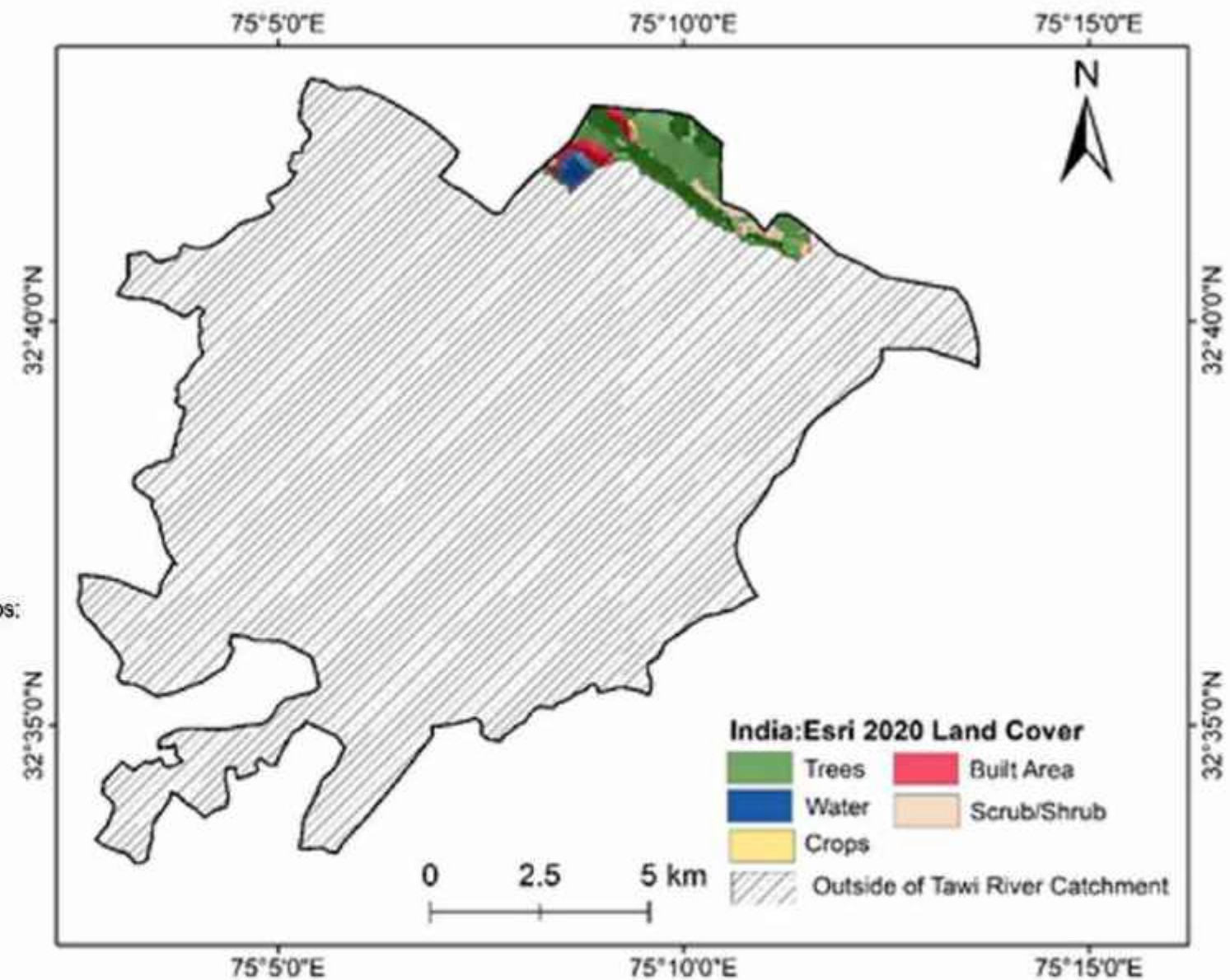


Landuse landcover pattern of Nud block

Source: [https://udhampur.nic.in/document/statistical handbook 2016 17/](https://udhampur.nic.in/document/statistical%20handbook%202016%2017/)



Topographic map of Nud block



Landuse land cover map of Nud block

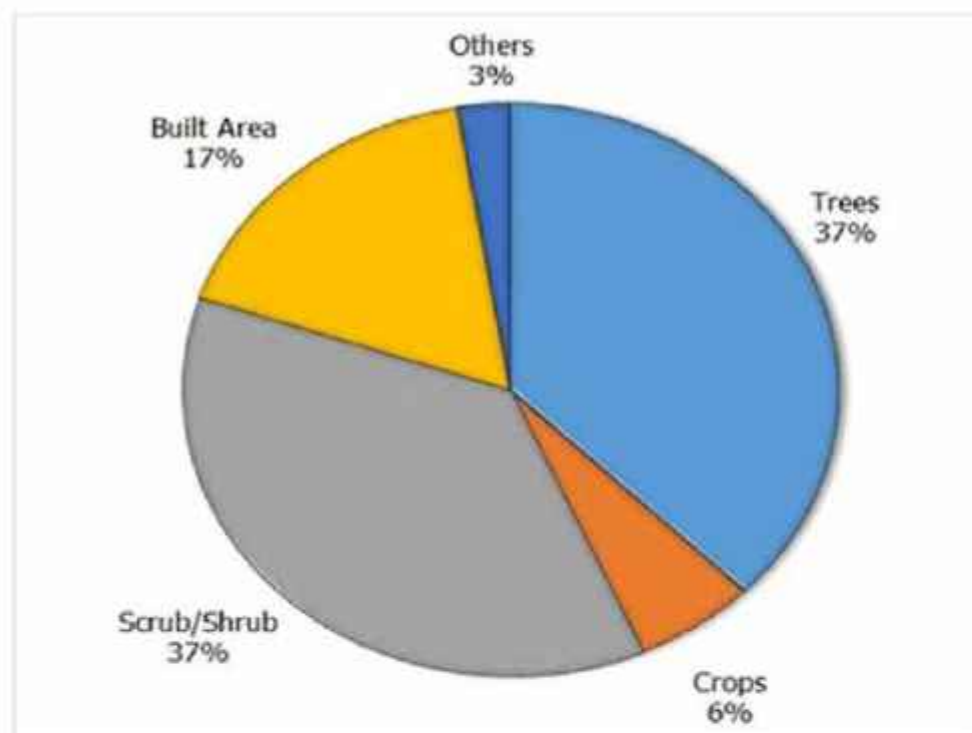
With an area of approximately 162.10 sq. km, the latitudinal extent of the Nud block ranges from 32.678732 N to 32.710901 N, while the longitudinal extent ranges from 75.137098 E to 75.192913 E. 3.78 % of the total area falls within the Tawi River catchment. In the Nud block of the Samba district, 02 springs were geotagged as majority of the area was outside form the Tawi River catchment. The altitude in this block varies from 577 to 842 meters above mean sea level.

Spring ID	Spring Name	Nature	
TS387	Bayli	Seasonal	
Latitude	Longitude	Altitude	
52.70565 ° N	75.15465 ° E	618 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	
Spring : TS387 [mapped on 2021.10.08 15:00:00]			
Village	Gram Panchayat	Tehsil	District
Batal	Batal	Samba	Samba
No. of Dependent Population	Dependency Level	People Perception	Other Sources

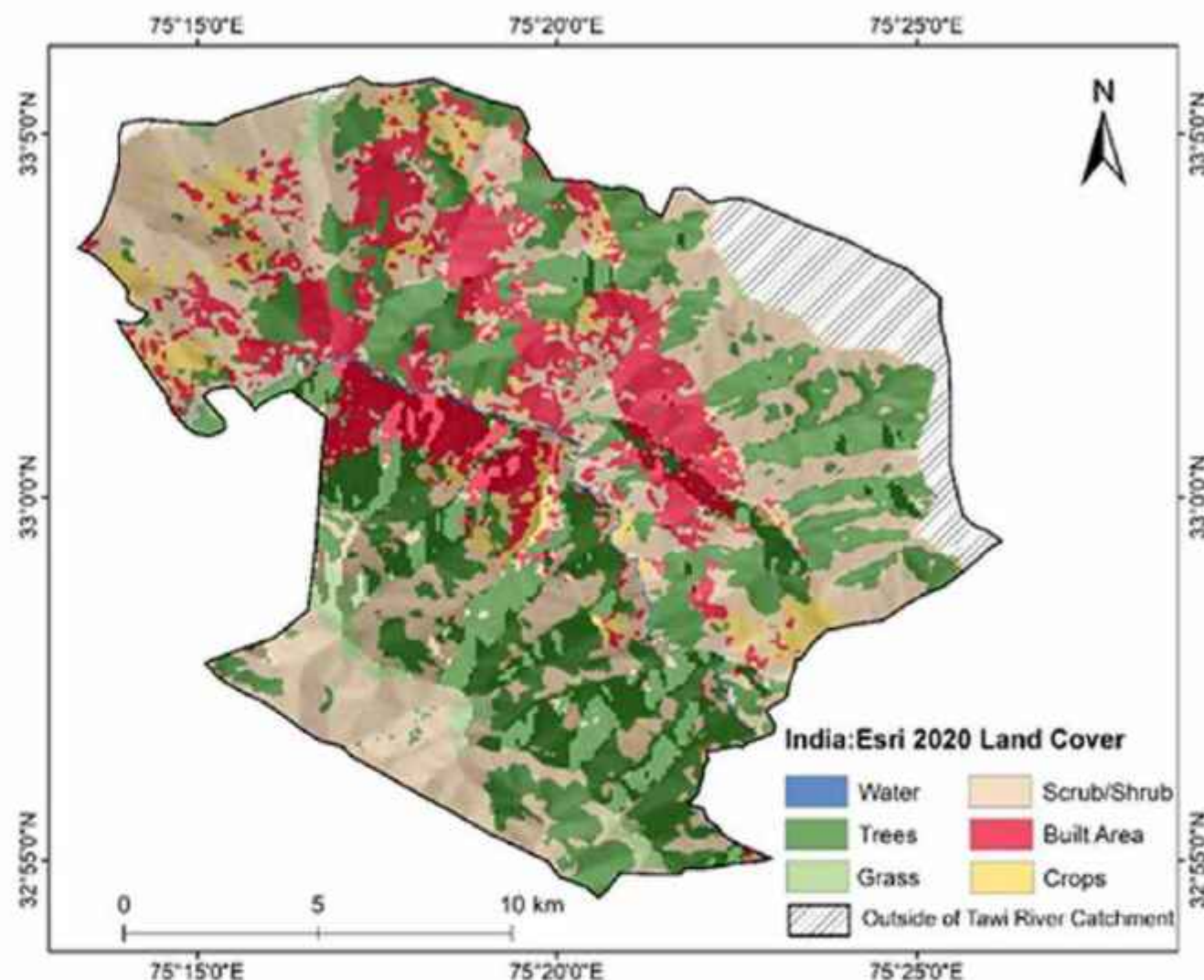
Spring ID	Spring Name	Nature	
TS455	Bayli	Seasonal	
Latitude	Longitude	Altitude	
52.70001 ° N	75.14914 ° E	666 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Unobjectionable	Muddy	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS455 [mapped on 2021.12.17 15:40:00]			
Village	Gram Panchayat	Tehsil	District
Mansar	Mansar	Samba	Samba
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 5	Low	Decreased	Spring Piped water

Tawi River Catchment

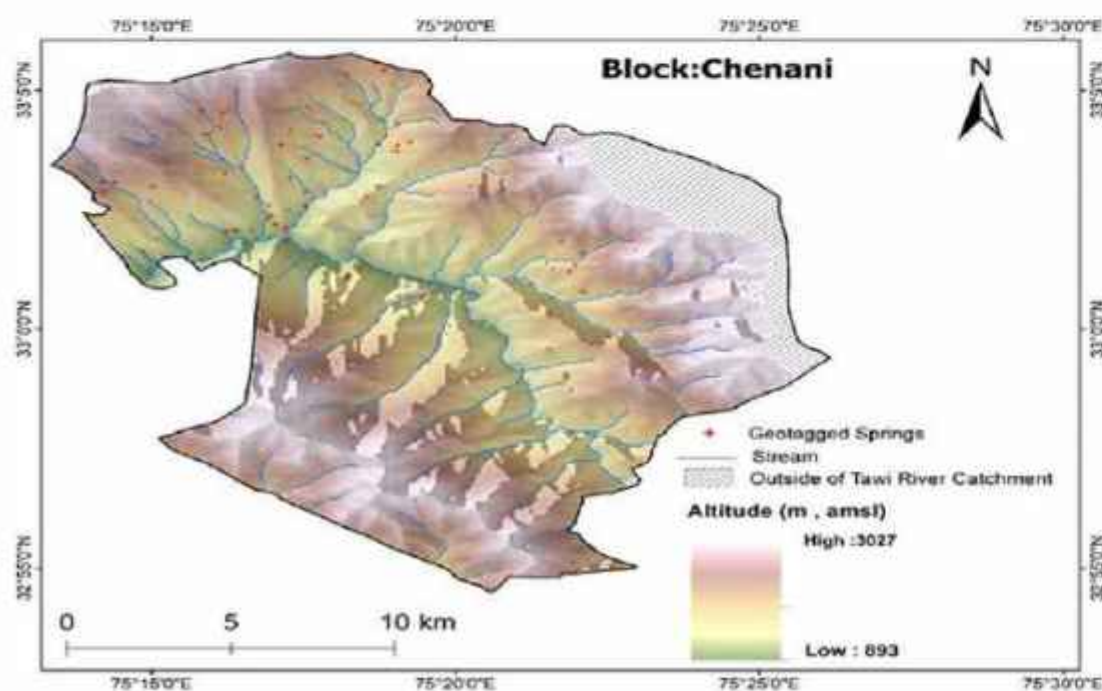
Chenani Block, Udhampur



Landuse landcover pattern of Chenani block



Landuse land cover map of Chenani block



Topographic map of Chenani block

The Chenani block of Udhampur district comprises 25 Panchayats and 39 villages. According to 2011 Census, it has a population of 46,943. With an area of approximately 243 sq. km, the latitudinal extent of the Chenani block ranges from 32.908026°N to 33.096487°N, while the longitudinal extent ranges from 75.222379°E to 75.436299°E. 93.75% of the total area falls within the Tawi River catchment. In the Chenani block of the Udhampur district, 59 springs were geotagged, covering various villages. The altitude of the study area in this block varies from 893 to 3027 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS067	Nadu	Perennial
Latitude	Longitude	Altitude
52.04611° N	75.27889° E	1208 m (a.m.s.l)
Discharge	pH	EC
9.6 lpm	8.5	534 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate



Spring : TS067 [mapped on 2020-06-26 10:20:09]

Village	Gram Panchayat	Tehsil	District
Madha	Lower Madha	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS068	Rajput Mohalla Bawli	Perennial
Latitude	Longitude	Altitude
52.01278° N	75.56972° E	1523 m (a.m.s.l)
Discharge	pH	EC
16.4 lpm	8.4	567 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate



Spring : TS068 [mapped on 2020-06-26 17:40:10]

Village	Gram Panchayat	Tehsil	District
Chonari	Sudh Mahadev	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS069	Paapnashini Bawli	Perennial
Latitude	Longitude	Altitude
33.02016° N	75.36462° E	1608 m (a.m.s.l)
Discharge	pH	EC
24.4 lpm	8.2	417 (µS/cm)
Taste	Colour	Odour
NA	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate



Spring : TS069 [mapped on 2020-06-26 18:00:00]

Village	Gram Panchayat	Tehsil	District
Sudh Mahadev	Sudh Mahadev	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1200	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS070	Shiv Bawli	Perennial
Latitude	Longitude	Altitude
33.05649° N	75.28425° E	1126 m (a.m.s.l)
Discharge	pH	EC
-	8	610 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate



Spring : TS070 [mapped on 2020-06-27 10:35:12]

Village	Gram Panchayat	Tehsil	District
Chennani	Chennani	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 450	Medium	No Change	Spring

Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS071	Kud Main Market Bawli	Perennial
Latitude	Longitude	Altitude
33.07747 ° N	75.29294 ° E	1824 m (a.m.s.l)
Discharge	pH	EC
-	8.1	476 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Muddy in Season	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate



Spring : TS071 [mapped on 2020-06-27 15:17:13]

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	High	Decreased	Piped water



Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS084	NA	Perennial
Latitude	Longitude	Altitude
33.03535 ° N	75.28666 ° E	1087 m (a.m.s.l)
Discharge	pH	EC
16 lpm	7.3	640 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate
		
Spring : TS084 [mapped on 2020-07-07 12:09:51]		

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 300	Medium	Decreased	Spring



Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS086	Bawli	Perennial
Latitude	Longitude	Altitude
33.03665 ° N	75.28346 ° E	1112 m (a.m.s.l)
Discharge	pH	EC
-	7.1	748 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	High

			
Spring : TS086 [mapped on 2020-07-07 11:33:53]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 65	Medium	No Change	Spring



Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS087	Banjara	Perennial
Latitude	Longitude	Altitude
33.03069 ° N	75.28653 ° E	1091 m (a.m.s.l.)
Discharge	pH	EC
5 lpm	8.5	343 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS087 [mapped on 2020-07-07 12:28:33]			

Village	Gram Panchayat	Tehsil	District
Incha	Kud Lower	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3088	Pritim Chand Bawli	Perennial
Latitude	Longitude	Altitude
33.01512 ~ N	75.32 ~ E	1171 m (a.m.s.l.)
Discharge	pH	EC
20 lpm	7.2	587 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : T3088 [mapped on 2020-07-07 15:15:19]			

Village	Gram Panchayat	Tehsil	District
Bain	Bain	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	Decreased	None

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3089	NA	Perennial	
Latitude	Longitude	Altitude	
33.0155° N	75.3244° E	1185 m (a.m.s.l.)	
Discharge	pH	EC	
80 lpm	7.2	545 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
			
Spring : T3089 [mapped on 2020-07-07 13:27:06]			
Village	Gram Panchayat	Tehsil	District
Bain	Bain	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3090	NA	Perennial
Latitude	Longitude	Altitude
33.02018° N	75.3068° E	1156 m (a.m.s.l.)
Discharge	pH	EC
34.3 lpm	7.4	560 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : T3090 [mapped on 2020-07-07 13:52:38]			

Village	Gram Panchayat	Tehsil	District
Challyar	Challyar	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3091	Choki Bawli	Perennial
Latitude	Longitude	Altitude
33.01752° N	75.30578° E	1239 m (a.m.s.l.)
Discharge	pH	EC
13.7 lpm	7.3	520 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : T3091 [mapped on 2020-07-07 14:22:26]			

Village	Gram Panchayat	Tehsil	District
Challyar	Challyar	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO92	NA	Perennial	
Latitude	Longitude	Altitude	
33.01854° N	75.3038° E	1215 m (a.m.s.l.)	
Discharge	pH	EC	
16 lpm	7.4	518 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TSO92 [mapped on 2020-07-07 14:37:24]			
Village	Gram Panchayat	Tehsil	District
Challyar	Challyar	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO95	Nadu	Perennial	
Latitude	Longitude	Altitude	
33.01907° N	75.30409° E	1196 m (a.m.s.l.)	
Discharge	pH	EC	
5.2 lpm	7.3	398 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TSO95 [mapped on 2020-07-07 14:50:57]			
Village	Gram Panchayat	Tehsil	District
Challyar	Challyar	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO94	NA	Perennial	
Latitude	Longitude	Altitude	
33.03945° N	75.28286° E	1147 m (a.m.s.l.)	
Discharge	pH	EC	
7.4 lpm	7.2	565 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	High	Moderate	
Spring : TSO94 [mapped on 2020-07-07 15:38:09]			
Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO93	Dogra	Perennial	
Latitude	Longitude	Altitude	
33.05946° N	75.29262° E	1461 m (a.m.s.l.)	
Discharge	pH	EC	
35.6 lpm	7.5	253 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TSO93 [mapped on 2020-07-07 16:51:06]			
Village	Gram Panchayat	Tehsil	District
Khetriar	Kud Lower	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 800	Medium	Decreased	Spring

Spring #14 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS096	NA	Perennial
Latitude	Longitude	Altitude
33.06739° N	75.29489° E	1559 m (a.m.s.l)
Discharge	pH	EC
-	7.1	653 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS096 [mapped on 2020-07-08 09:51:50]			

Village	Gram Panchayat	Tehsil	District
Sangote	Pachote	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring



Spring #14 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS097	Bavli	Perennial
Latitude	Longitude	Altitude
33.06714° N	75.29621° E	1514 m (a.m.s.l)
Discharge	pH	EC
36 lpm	7	670 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS097 [mapped on 2020-07-08 09:15:28]			

Village	Gram Panchayat	Tehsil	District
Sangote	Pachote	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring



Spring #14 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS164	Nadu	Perennial
Latitude	Longitude	Altitude
33.02646° N	75.36826° E	1706 m (a.m.s.l)
Discharge	pH	EC
25.6 lpm	7.8	256 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : TS164 [mapped on 2020-10-30 09:39:00]			

Village	Gram Panchayat	Tehsil	District
Sudh Mahadev	Sudh Mahadev	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring



Spring #14 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS165	Tul Ganga	Perennial
Latitude	Longitude	Altitude
33.0307° N	75.36247° E	1697 m (a.m.s.l)
Discharge	pH	EC
15 lpm	8.1	310 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High


Spring : TS165 [mapped on 2020-10-30 09:03:00]

Village	Gram Panchayat	Tehsil	District
Sudh Mahadev	Sudh Mahadev	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS218	Nadu	Perennial	
Latitude	Longitude	Altitude	
33.05176° N	75.3075° E	1135 m (a.m.s.l.)	
Discharge	pH	EC	
6.8 lpm	7.5	660 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
			
Spring : TS218 [mapped on 2021-02-16 12:44:55]			
Village	Gram Panchayat	Tehsil	District
Margana	Kud Lower	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS219	Nadu	Perennial	
Latitude	Longitude	Altitude	
33.0431° N	75.2922° E	1120 m (a.m.s.l.)	
Discharge	pH	EC	
2 lpm	7.6	661 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
			
Spring : TS219 [mapped on 2021-02-16 13:12:24]			
Village	Gram Panchayat	Tehsil	District
Incha	Kud Lower	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS220	Bawli	Perennial
Latitude	Longitude	Altitude
33.0434° N	75.28215° E	1224 m (a.m.s.l.)
Discharge	pH	EC
-	7.7	576 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

Spring : TS220 [mapped on 2021-02-16 13:30:56]

Village	Gram Panchayat	Tehsil	District
Kud	Kud Lower	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS221	Bawli	Perennial
Latitude	Longitude	Altitude
33.06505° N	75.32082° E	1502 m (a.m.s.l.)
Discharge	pH	EC
64 lpm	8.2	489 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	None	High



Spring : TS221 [mapped on 2021-02-16 14:15:29]

Village	Gram Panchayat	Tehsil	District
Pachot	Pachote	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS222	Bawli	Perennial
Latitude	Longitude	Altitude
33.07197° N	75.51757° E	1452 m (a.m.s.l)
Discharge	pH	EC
4 lpm	7.6	460 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS222 [mapped on 2021.02.16 14:55:42]			

Village	Gram Panchayat	Tehsil	District
Mandlot	Pachote	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Decreased	Piped water Spring



Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS223	Bawli	Perennial
Latitude	Longitude	Altitude
33.06396° N	75.51745° E	1395 m (a.m.s.l)
Discharge	pH	EC
2.6 lpm	7.4	616 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS223 [mapped on 2021.02.16 14:51:41]

Village	Gram Panchayat	Tehsil	District
Pachot	Pachote	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Decreased	Spring Piped water



Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS224	Bawli	Perennial
Latitude	Longitude	Altitude
33.06203° N	75.51632° E	1368 m (a.m.s.l)
Discharge	pH	EC
3.2 lpm	7.3	724 (µS/cm)
Taste	Colour	Odour
Unobjectionable	NA	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS224 [mapped on 2021.02.16 15:05:25]			

Village	Gram Panchayat	Tehsil	District
Pachot	Pachote	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	No Change	Spring Piped water



Spring #104 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS225	Bawli	Perennial
Latitude	Longitude	Altitude
33.06181° N	75.51757° E	1426 m (a.m.s.l)
Discharge	pH	EC
1 lpm	7.4	600 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : TS225 [mapped on 2021-02-16 15:19:23]			

Village	Gram Panchayat	Tehsil	District
Pachot	Pachote	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 180	Medium	Decreased	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS226	Poonch House	Perennial
Latitude	Longitude	Altitude
33.0906 ° N	75.31382 ° E	1890 m (a.m.s.l)
Discharge	pH	EC
16 lpm	7.6	400 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS226 [mapped on 2021-02-17 10:27:27]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS227	Poonch House	Seasonal
Latitude	Longitude	Altitude
33.0902 ° N	75.51357 ° E	1849 m (a.m.s.l)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS227 [mapped on 2021-02-17 10:35:56]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Decreased	Piped water Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS228	Nadu	Perennial
Latitude	Longitude	Altitude
33.08979° N	75.30549° E	1787 m (a.m.s.l)
Discharge	pH	EC
14.1 lpm	7.7	400 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS228 [mapped on 2021-02-17 10:45:54]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS229	Nadu	Perennial
Latitude	Longitude	Altitude
33.07045° N	75.26861° E	1861 m (a.m.s.l)
Discharge	pH	EC
40 lpm	8.1	190 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate



Spring : TS229 [mapped on 2021-02-17 11:33:53]

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS250	Bawli	Seasonal
Latitude	Longitude	Altitude
33.07036° N	75.26967° E	1861 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	Moderate

			
Spring : TS250 [mapped on 2021-02-17 11:54:35]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS251	Nadu	Perennial
Latitude	Longitude	Altitude
33.06799° N	75.26485° E	1789 m (a.m.s.l.)
Discharge	pH	EC
36.9 lpm	8.2	290 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate



Spring : TS251 [mapped on 2021-02-17 11:55:20]

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS232	Nadu	Perennial
Latitude	Longitude	Altitude
33.0765° N	75.26351° E	2015 m (a.m.s.l.)
Discharge	pH	EC
21.3 lpm	7.9	210 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate



Spring : TS232 [mapped on 2021-02-17 12:53:21]

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS235	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
33.07668° N	75.27095° E	1970 m (a.m.s.l.)
Discharge	pH	EC
19.2 lpm	8.1	210 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS235 [mapped on 2021-02-17 12:45:12]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS234	Kivch	Seasonal
Latitude	Longitude	Altitude
33.07528° N	75.2694° E	1959 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate



Spring : TS234 [mapped on 2021-02-17 13:16:48]

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS235	Bawli	Perennial
Latitude	Longitude	Altitude
33.06908 ° N	75.2881 ° E	1720 m (a.m.s.l)
Discharge	pH	EC
5.6 lpm	7.3	310 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate



Spring : TS235 [mapped on 2021-02-17 13:24:14]

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS236	Nadu	Perennial
Latitude	Longitude	Altitude
33.06452° N	75.28555° E	1692 m (a.m.s.l.)
Discharge	pH	EC
2.7 lpm	7.3	559 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS236 [mapped on 2021-02-17 13:35:42]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS237	Bawli	Perennial
Latitude	Longitude	Altitude
33.05265° N	75.288° E	1406 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	7.5	570 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS237 [mapped on 2021-02-17 14:01:53]			

Village	Gram Panchayat	Tehsil	District
Kud	Kud	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3339	Bawli	Perennial
Latitude	Longitude	Altitude
33.05432 ° N	75.27004 ° E	1556 m (a.m.s.l.)
Discharge	pH	EC
0.7 lpm	7.9	254 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : T3339 [mapped on 2021-08-07 17:19:00]			

Village	Gram Panchayat	Tehsil	District
Madha	Madha	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 30	Low	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3340	Nadu	Perennial	
Latitude	Longitude	Altitude	
33.04978 ° N	75.25016 ° E	1732 m (a.m.s.l.)	
Discharge	pH	EC	
66.7 lpm	7.5	332 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
			
Spring : T3340 [mapped on 2021-08-07 19:02:00]			
Village	Gram Panchayat	Tehsil	District
Madha	Madha	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 195	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3346	Nadu and Sawli	Perennial
Latitude	Longitude	Altitude
33.04806 ° N	75.13682 ° E	1818 m (a.m.s.l.)
Discharge	pH	EC
4 lpm	7.4	203 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3346 [mapped on 2021-08-08 16:58:00]

Village	Gram Panchayat	Tehsil	District
Kuthi	Madha Upper	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 90	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3347	Nadu	Perennial
Latitude	Longitude	Altitude
33.05172 ° N	75.25679 ° E	1822 m (a.m.s.l.)
Discharge	pH	EC
12 lpm	7.6	209 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate


Spring : T3347 [mapped on 2021-08-08 17:13:00]

Village	Gram Panchayat	Tehsil	District
Kithia	Madha Upper	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 100	Medium	Increased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3348	Pansu Nala nadu	Perennial	
Latitude	Longitude	Altitude	
55.05116° N	75.25983° E	1614 m (a.m.s.l)	
Discharge	pH	EC	
150 lpm	7.7	209 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : T3348 [mapped on 2021-09-09 17:50:00]			
Village	Gram Panchayat	Tehsil	District
Kirihar jagir	Madha Upper	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Increased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3355	Nadu	Perennial	
Latitude	Longitude	Altitude	
55.02705° N	75.2476° E	1120 m (a.m.s.l)	
Discharge	pH	EC	
5.5 lpm	7.7	247 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3355 [mapped on 2021-09-24 11:49:00]			
Village	Gram Panchayat	Tehsil	District
Dvanka kha phal	Madha Upper	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3354	Nadu	Perennial	
Latitude	Longitude	Altitude	
55.05374° N	75.27019° E	1082 m (a.m.s.l)	
Discharge	pH	EC	
8.6 lpm	7.7	287 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3354 [mapped on 2021-09-24 13:09:00]			
Village	Gram Panchayat	Tehsil	District
Champai	Chantval	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3355	Nadu	Perennial	
Latitude	Longitude	Altitude	
55.05408° N	75.27032° E	1073 m (a.m.s.l)	
Discharge	pH	EC	
132 lpm	8.3	230 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3355 [mapped on 2021-09-24 13:33:00]			
Village	Gram Panchayat	Tehsil	District
Champai	Chantval	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Low	No Change	Piped water Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3356	Nadu	Perennial
Latitude	Longitude	Altitude
33.05443° N	75.27263° E	1073 m (a.m.s.l)
Discharge	pH	EC
21.4 lpm	7.6	300 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3356 [mapped on 2021-09-24 14:01:00]

Village	Gram Panchayat	Tehsil	District
Champari	Chantval	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 600	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3357	Nadu and Bawli	Perennial
Latitude	Longitude	Altitude
33.05402° N	75.27565° E	1082 m (a.m.s.l)
Discharge	pH	EC
20 lpm	7.5	280 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate



Spring : T3357 [mapped on 2021-09-24 14:23:00]

Village	Gram Panchayat	Tehsil	District
Champari	Chantval	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3358	Nadu	Perennial
Latitude	Longitude	Altitude
33.0544 - N	75.27762 - E	1088 m (a.m.s.l)
Discharge	pH	EC
5.1 lpm	7.2	425 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3358 [mapped on 2021-09-24 14:49:00]

Village	Gram Panchayat	Tehsil	District
Champari	Chantval	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 180	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
T3359	Nadu	Perennial		
Latitude	Longitude	Altitude		
33.03865 ° N	75.28185 ° E	1095 m (a.m.s.l)		
Discharge	pH	EC		
12 lpm	7.6	264 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
Natural	Medium	Moderate		
				
Spring : T3359 [mapped on 2021-09-24 15:26:00]				
Village		Gram Panchayat	Tehsil	District
Champari		Chantval	Chenani	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 28		Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3360	Nadu	Perennial	
Latitude	Longitude	Altitude	
33.04791° N	75.29219° E	1201 m (a.m.s.l.)	
Discharge	pH	EC	
3.7 lpm	7.5	-	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
			
Spring : T3360 [mapped on 2021-09-29 11:15:00]			
Village	Gram Panchayat	Tehsil	District
Sangret	Pachote	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 245	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3361	Nadu	Perennial
Latitude	Longitude	Altitude
33.0674° N	75.31444° E	842 m (a.m.s.l.)
Discharge	pH	EC
1.4 lpm	7.6	-
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	Moderate

			
Spring : T3361 [mapped on 2021-09-29 12:51:00]			

Village	Gram Panchayat	Tehsil	District
Chabha	Pachote	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 36	Low	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3362	Nadu	Perennial
Latitude	Longitude	Altitude
33.06446° N	75.31251° E	1296 m (a.m.s.l.)
Discharge	pH	EC
6.7 lpm	7.7	-
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	NA	High

			
Spring : T3362 [mapped on 2021-09-29 14:08:00]			

Village	Gram Panchayat	Tehsil	District
Chabha	Pachote	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 42	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3466	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.99719° N	75.37551° E	1610 m (a.m.s.l.)	
Discharge	pH	EC	
6.4 lpm	NA	-	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	Moderate	High	
			
Spring : T3466 [mapped on 2022-09-18 17:55:29]			
Village	Gram Panchayat	Tehsil	District
Mantalai	Mantalai	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Low	Decreased	Spring Piped water

Spring ID	Spring Name	Nature
TS467	Nadu	Perennial
Latitude	Longitude	Altitude
33.02224° N	75.36627° E	1555 m (a.m.s.l.)
Discharge	pH	EC
60.6 lpm	8.25	326 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	Moderate	Moderate

			
Spring : TS467 [mapped on 2022-09-19 15:16:30]			
Village	Gram Panchayat	Tehsil	District
ShudMahadev	ShudMahadev	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 110	Medium	Decreased	Spring Piped water

Spring ID	Spring Name	Nature
TS469	Nadu	Perennial
Latitude	Longitude	Altitude
33.00578° N	75.35918° E	1599 m (a.m.s.l.)
Discharge	pH	EC
19.5 lpm	8.21	461 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate



Spring : TS469 [mapped on 2022-06-09 11:25:33]

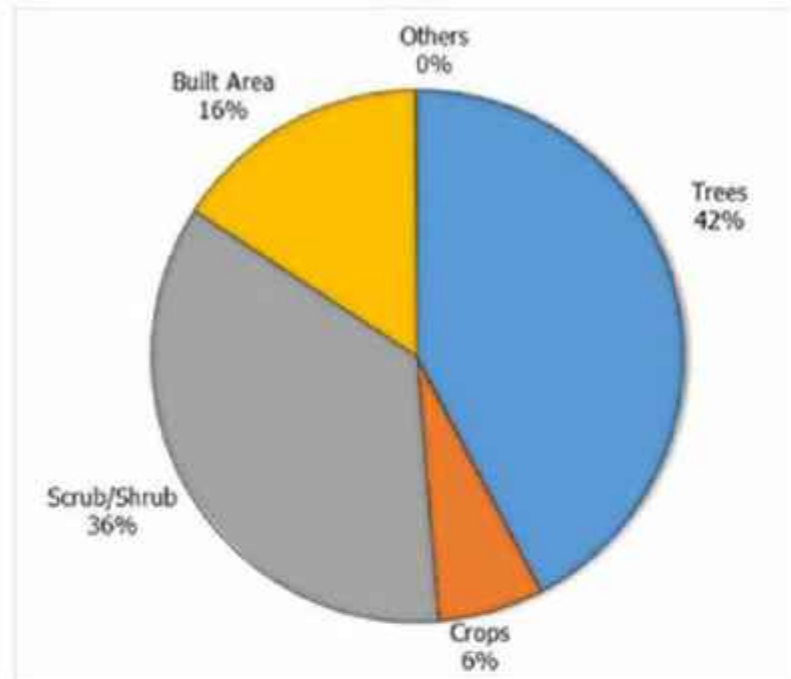
Village	Gram Panchayat	Tehsil	District
Mantalai	Mantalai	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring Piped water

Spring ID	Spring Name	Nature
TS470	Nadu	Perennial
Latitude	Longitude	Altitude
33.0417° N	75.28738° E	1193 m (a.m.s.l.)
Discharge	pH	EC
96.8 lpm	7.6	595 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

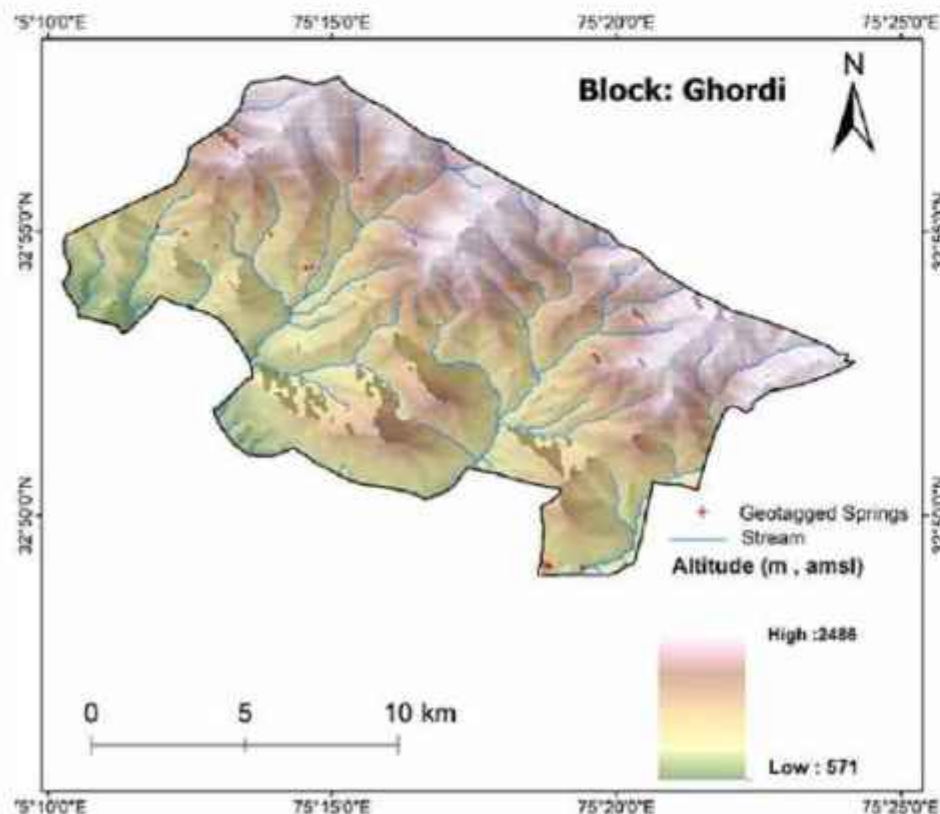
			
Spring : TS470 [mapped on 2022-06-09 14:51:33]			
Village	Gram Panchayat	Tehsil	District
Chennani	Chennani	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 170	Medium	No Change	Spring Piped water

Tawi River Catchment

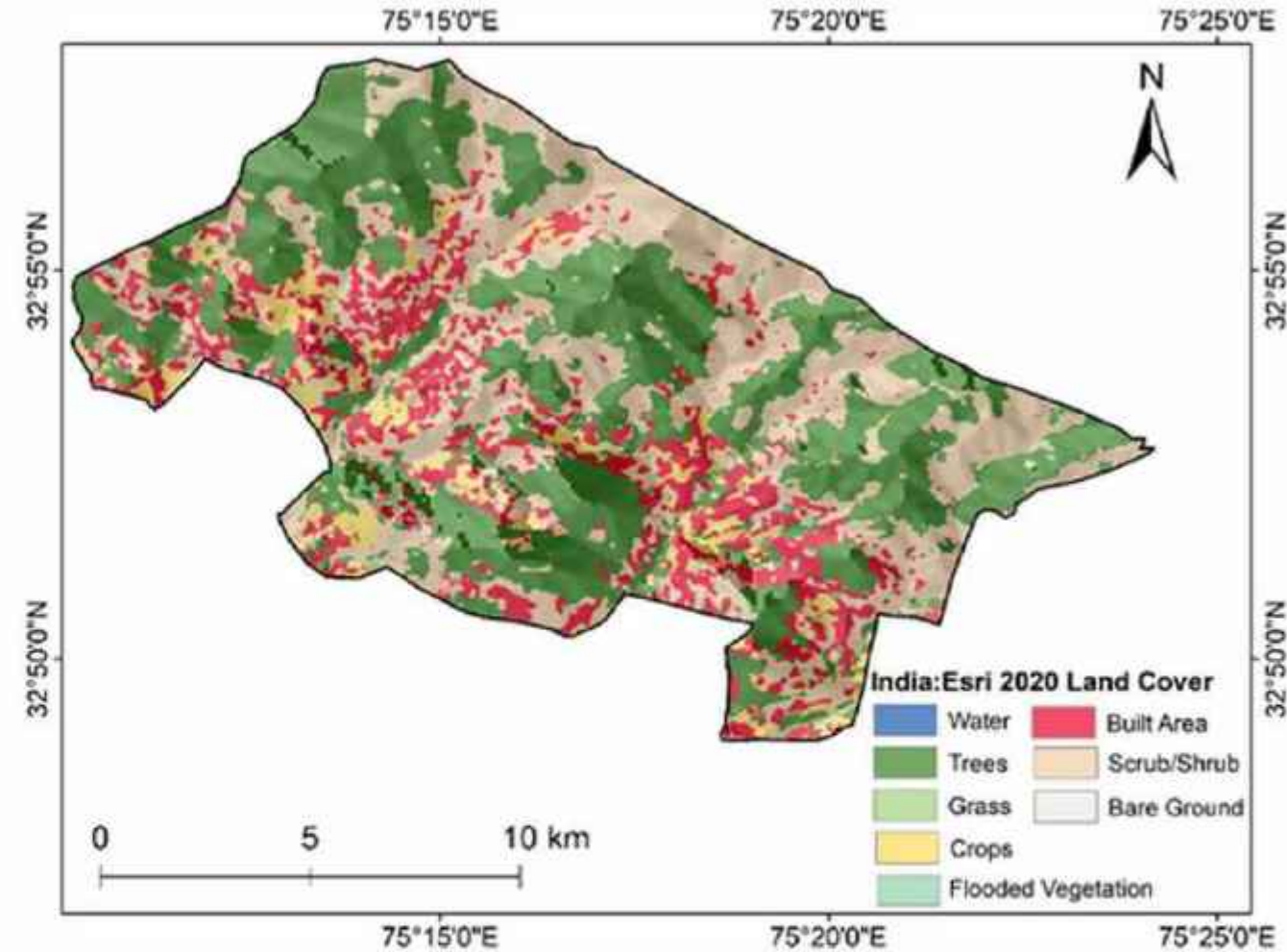
Ghordi Block, Udhampur



Landuse landcover pattern of Ghordi block



Topographic map of Ghordi block



Landuse land cover map of Ghordi block

The Ghordi block of Udhampur district comprises 20 Panchayats and 17 villages. According to 2011 Census, it has a population of 40,949. With an area of approximately 167.6 sq. km, the latitudinal extent of the Ghordi block ranges from 32.81580°N to 32.961667°N, while the longitudinal extent ranges from 75.171027°E to 75.403111°E. In the Ghordi block of the Udhampur district, 14 springs were geotagged, covering various villages. The altitude in this block varies from 571 to 2486 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS169	Hatti di Baw	Perennial
Latitude	Longitude	Altitude
32.81905 ° N	75.31258 ° E	874 m (a.m.s.l.)
Discharge	pH	EC
18.5 lpm	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate



Spring : TS169 [mapped on 2020/12/08 14:50:00]

Village	Gram Panchayat	Tehsil	District
Kanah	Kanah	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Low	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS170	Ambi Bawli	Perennial
Latitude	Longitude	Altitude
32.81862 ° N	75.3132 ° E	866 m (a.m.s.l.)
Discharge	pH	EC
9.6 lpm	7.1	615 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	High

			
Spring : TS170 [mapped on 2020/12/08 15:06:00]			
Village	Gram Panchayat	Tehsil	District
Kanah	Kanah	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS171	Ambi Baw	Perennial
Latitude	Longitude	Altitude
32.81829 ° N	75.31379 ° E	865 m (a.m.s.l.)
Discharge	pH	EC
8 lpm	7.1	640 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	High

			
Spring : TS171 [mapped on 2020-12-08 15:28:00]			

Village	Gram Panchayat	Tehsil	District
Kanah	Kanah	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TS172	Nadu	Perennial		
Latitude	Longitude	Altitude		
32.81831 ° N	75.31368 ° E	865 m (a.m.s.l.)		
Discharge	pH	EC		
6 lpm	7.2	782 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	Medium	Moderate		
				
Spring : TS172 [mapped on 2020/12/08 15:43:00]				
Village		Gram Panchayat	Tehsil	District
Kanah		Kanah	Ramnagar	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 200		High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS173	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.91795° N	75.32335° E	809 m (a.m.s.l.)	
Discharge	pH	EC	
14.8 lpm	8.1	620 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	Spring : TS173 [mapped on 2020-12-08 16:03:00]
Village	Gram Panchayat	Tehsil	District
Kanah	Kanah	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS400	Bavli	Perennial	
Latitude	Longitude	Altitude	
32.90624° N	75.24405° E	1535.2850 (502886 m (a.m.s.l.))	
Discharge	pH	EC	
2.6 lpm	7.9	139 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : TS400 [mapped on 2021-10-25 14:12:00]
Village	Gram Panchayat	Tehsil	District
Barmeem	Barmeem	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 35	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS401	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.95191° N	75.25944° E	969.96895 (336287 m (a.m.s.l.))	
Discharge	pH	EC	
0.9 lpm	7.8	378 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : TS401 [mapped on 2021-10-25 14:54:00]
Village	Gram Panchayat	Tehsil	District
Kansara	Barmeem	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS402	Bemina Bavli	Perennial	
Latitude	Longitude	Altitude	
32.90585° N	75.24221° E	1016 m (a.m.s.l.)	
Discharge	pH	EC	
3.4 lpm	7.7	245 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : TS402 [mapped on 2021-10-25 15:06:00]
Village	Gram Panchayat	Tehsil	District
Barmeem	Upper Barmeem	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS403	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.9158° N	75.25208° E	1026 m (a.m.s.l)
Discharge	pH	EC
3.1 lpm	7.8	280 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	High

			
Spring : TS403 [mapped on 2021-10-25 15:24:00]			

Village	Gram Panchayat	Tehsil	District
Barmeem	Upper Barmeem	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 35	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS404	Baw	Perennial
Latitude	Longitude	Altitude
32.91201° N	75.21561° E	996 m (a.m.s.l)
Discharge	pH	EC
3.7 lpm	7.5	405 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	Moderate



Spring : TS404 [mapped on 2021-10-25 15:41:00]

Village	Gram Panchayat	Tehsil	District
Panchayat Char	Upper Barmeem	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 35	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS405	Bawli	Perennial
Latitude	Longitude	Altitude
32.91596° N	75.20689° E	1015 m (a.m.s.l)
Discharge	pH	EC
1 lpm	7.6	378 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate

			
Spring : TS405 [mapped on 2021-10-25 15:34:00]			

Village	Gram Panchayat	Tehsil	District
Sulghar	Sulghar	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS406	Bawli	Seasonal
Latitude	Longitude	Altitude
32.91807° N	75.19886° E	885 m (a.m.s.l)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS406 [mapped on 2021-10-25 16:03:00]

Village	Gram Panchayat	Tehsil	District
Salgerh	Salghar	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 8	Medium	Decreased	Spring Piped water

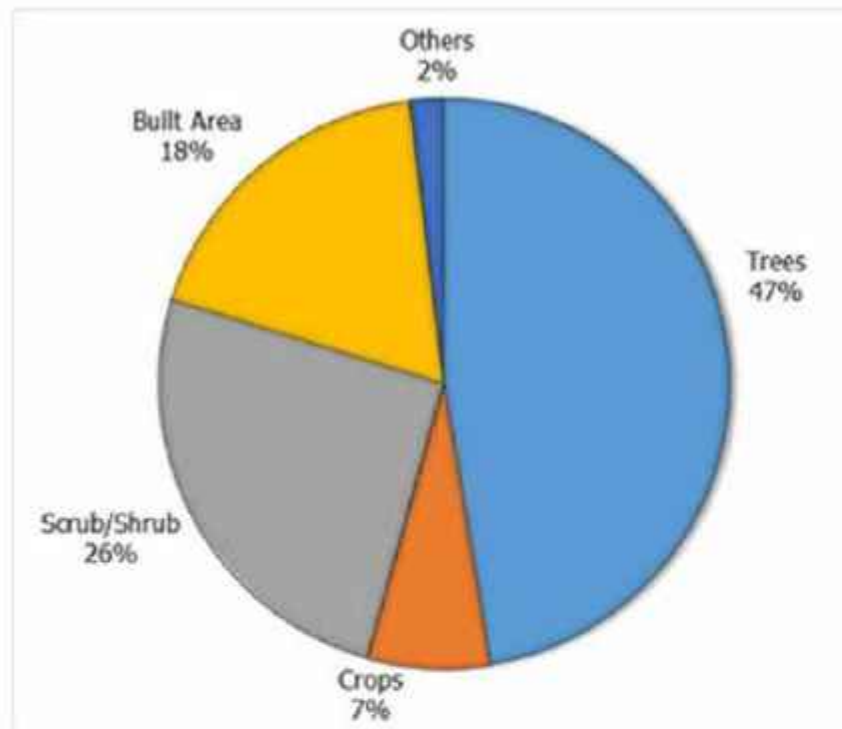
Spring ID	Spring Name	Nature	
TS407	Talab Bawli	Perennial	
Latitude	Longitude	Altitude	
32.95214 ° N	75.2173 ° E	1441 m (a.m.s.l)	
Discharge	pH	EC	
120 lpm	7.7	258 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	NA	Moderate	
			
Spring : TS407 [mapped on 2021/10/25 16:59:00]			
Village	Gram Panchayat	Tehsil	District
Salgar	Sulghar	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring Piped water

Spring ID	Spring Name	Nature	
TS420	Karvaki	Perennial	
Latitude	Longitude	Altitude	
32.89506 ° N	75.19555 ° E	705 m (a.m.s.l)	
Discharge	pH	EC	
21.4 lpm	7.8	540 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS420 [mapped on 2021/10/27 11:31:00]			
Village	Gram Panchayat	Tehsil	District
Thial	Thial	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 35	Medium	Decreased	Spring Piped water

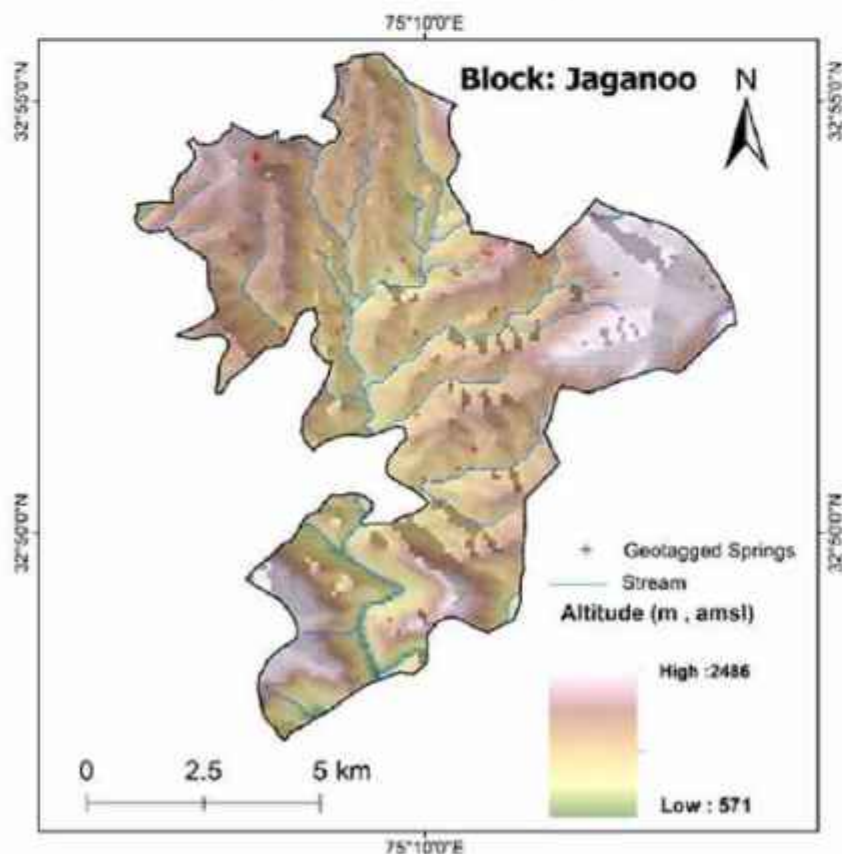


Tawi River Catchment

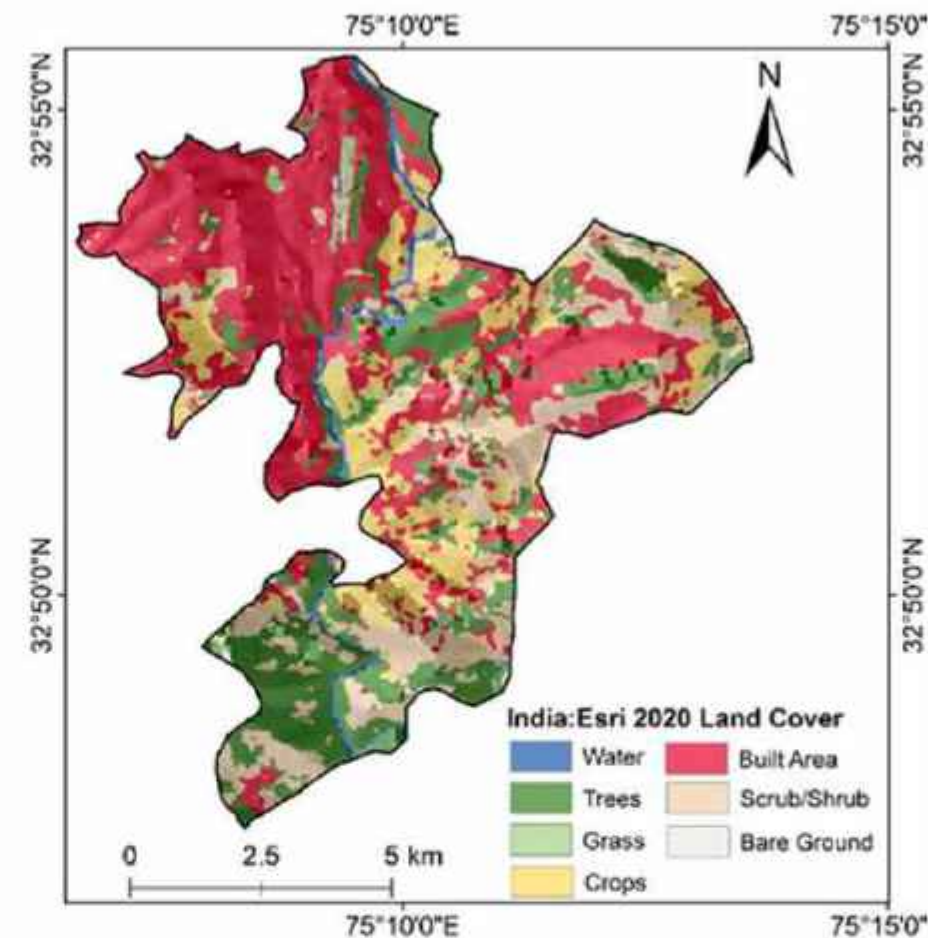
Jaganoo Block, Udhampur



Landuse landcover pattern of Jaganoo block



Topographic map of Jaganoo block



Landuse land cover map of Jaganoo block

The Jaganoo block of Udhampur district comprises 11 Panchayats and 27 villages. According to 2011 Census, it has a population of 24,593. With an area of approximately 65.64 sq. km, the latitudinal extent of the Jaganoo block ranges from 32.793271°N to 32.925804°N, while the longitudinal extent ranges from 75.110766°E to 75.226518°E. In the Jaganoo block of the Udhampur district, 34 springs were geotagged, covering various villages. The altitude in this block varies from 463 to 1019 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO13	NA	Perennial
Latitude	Longitude	Altitude
52.90595 - N	75.13409 - E	693 m (a.m.s.l.)
Discharge	pH	EC
192 lpm	7	444 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TSO13 [mapped on 2019/11/14 16:51:52]			

Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 5200	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO14	NA	Perennial
Latitude	Longitude	Altitude
52.90591° N	75.13412° E	695 m (a.m.s.l.)
Discharge	pH	EC
-	6.8	315 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	High

			
Spring : TSO14 [mapped on 2019/11/14 16:36:35]			

Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO15	Sakan Bawli	Perennial
Latitude	Longitude	Altitude
52.90602° N	75.1342° E	690 m (a.m.s.l.)
Discharge	pH	EC
50.5 lpm	7.4	410 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	High


Spring : TSO15 [mapped on 2019/11/14 16:56:45]

Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 3000	High	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO16	Bawli	Perennial
Latitude	Longitude	Altitude
52.90562° N	75.1341° E	694 m (a.m.s.l.)
Discharge	pH	EC
96 lpm	7.2	441 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Low	Moderate

			
Spring : TSO16 [mapped on 2019/11/21 12:04:04]			

Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO17	Bwompri Bawli	Perennial	
Latitude	Longitude	Altitude	
32.90575° N	75.13419° E	689 m (a.m.s.l.)	
Discharge	pH	EC	
120 lpm	7.2	345 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	Spring : TSO17 [mapped on 2019-11-21 13:43:49]
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Low	High	
Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 4000	High	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO18	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.90575° N	75.1341° E	694 m (a.m.s.l.)	
Discharge	pH	EC	
32 lpm	8	362 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	Spring : TSO18 [mapped on 2019-11-21 14:32:24]
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5000	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO19	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.90623° N	75.13429° E	689 m (a.m.s.l.)	
Discharge	pH	EC	
3.2 lpm	NA	-	
Taste	Colour	Odour	
NA	Clear	Un-objectionable	Spring : TSO19 [mapped on 2019-11-21 15:37:51]
Major Stressor	Degree of Threat	Vulnerability	
Both	Moderate	Moderate	
Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5000	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO20	Ashram Bawli	Perennial	
Latitude	Longitude	Altitude	
32.90565° N	75.13396° E	694 m (a.m.s.l.)	
Discharge	pH	EC	
12.6 lpm	7.4	389 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	Spring : TSO20 [mapped on 2019-11-21 15:01:59]
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Village	Gram Panchayat	Tehsil	District
Mansooch	Charee	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5000	Medium	No Change	Piped water

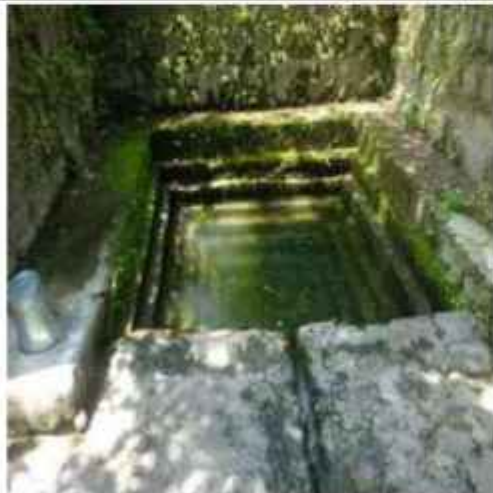
Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO21	Mardian Bawli	Perennial	
Latitude	Longitude	Altitude	
32.90564 ° N	75.13457 ° E	689 m (a.m.s.l.)	
Discharge	pH	EC	
-	7	386 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	Spring : TSO21 [mapped on 2019-11-21 17:16:02]
Anthropogenic	Moderate	Moderate	
Village	Gram Panchayat	Tehsil	District
Mansooah	Charee	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO72	Canesh Bawli	Perennial	
Latitude	Longitude	Altitude	
32.88595 ° N	75.16255 ° E	576 m (a.m.s.l.)	
Discharge	pH	EC	
5.9 lpm	7.7	201 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Muddy in Season	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	Spring : TSO72 [mapped on 2020-07-06 10:49:27]
None	None	Moderate	
Village	Gram Panchayat	Tehsil	District
Thanoa	Thanoa	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO74	NA	Perennial	
Latitude	Longitude	Altitude	
32.88706 ° N	75.13028 ° E	675 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	Spring : TSO74 [mapped on 2020-07-06 11:38:29]
Anthropogenic	Moderate	Moderate	
Village	Gram Panchayat	Tehsil	District
Kashi Rah	Kashi Rah	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO76	Chotus da Salla	Perennial	
Latitude	Longitude	Altitude	
32.8713 ° N	75.13892 ° E	598 m (a.m.s.l.)	
Discharge	pH	EC	
2 lpm	7.2	388 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	Spring : TSO76 [mapped on 2020-07-06 12:50:13]
Anthropogenic	Moderate	Moderate	
Village	Gram Panchayat	Tehsil	District
Preyan	Sataini	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS077	Purath di Baw	Perennial
Latitude	Longitude	Altitude
32.87277° N	75.13937° E	595 m (a.m.s.l.)
Discharge	pH	EC
1.6 lpm	7	665 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Low	Moderate

			
Spring : TS077 [mapped on 2020-07-06 12:45:00]			

Village	Gram Panchayat	Tehsil	District
Preyan	Satani	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS408	Baw	Seasonal
Latitude	Longitude	Altitude
32.88919° N	75.18224° E	705 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS408 [mapped on 2021-10-26 10:56:00]

Village	Gram Panchayat	Tehsil	District
Loadh	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	Decreased	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS409	Thanda Nala	Perennial
Latitude	Longitude	Altitude
32.88712° N	75.17934° E	665 m (a.m.s.l.)
Discharge	pH	EC
33.3 lpm	7.4	380 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS409 [mapped on 2021-10-26 11:10:00]			

Village	Gram Panchayat	Tehsil	District
Bhagpur	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 400	Medium	No Change	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS410	Nadu	Perennial
Latitude	Longitude	Altitude
32.8873° N	75.17841° E	665 m (a.m.s.l.)
Discharge	pH	EC
15 lpm	7.6	360 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS410 [mapped on 2021-10-26 11:19:00]

Village	Gram Panchayat	Tehsil	District
Sulghar	Sulghar	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 130	Medium	No Change	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS411	Baw	Perennial
Latitude	Longitude	Altitude
32.87649 ° N	75.19051 ° E	618 m (a.m.s.l.)
Discharge	pH	EC
5.9 lpm	7.5	201 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS411 [mapped on 2021:10:26 11:52:00]			

Village	Gram Panchayat	Tehsil	District
Marhor	Jaganoo	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 420	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS412	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
32.86169 ° N	75.19344 ° E	672 m (a.m.s.l.)	
Discharge	pH	EC	
2 lpm	7.6	200 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	NA	Moderate	
Spring : TS412 [mapped on 2021:10:26 12:25:00]			
Village	Gram Panchayat	Tehsil	District
Shivnagar	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 60	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS414	Mandir Baw	Perennial
Latitude	Longitude	Altitude
52.85918 ° N	75.1694 ° E	586 m (a.m.s.l.)
Discharge	pH	EC
4.4 lpm	7.1	375 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS414 [mapped on 2021:10:26 13:04:00]

Village	Gram Panchayat	Tehsil	District
Rakh Thana	Thana	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 55	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

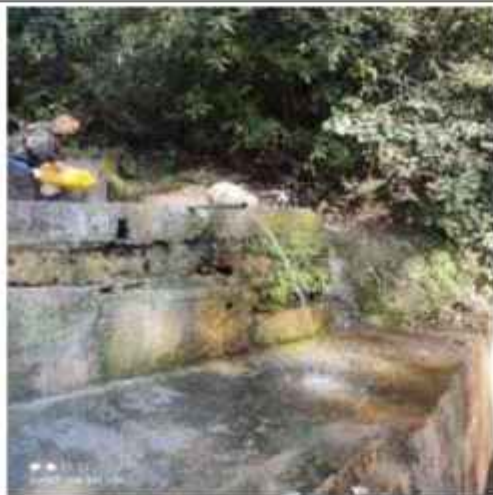
Spring ID	Spring Name	Nature
TS415	Mandir Baw	Perennial
Latitude	Longitude	Altitude
52.84372 ° N	75.16645 ° E	574 m (a.m.s.l.)
Discharge	pH	EC
6.2 lpm	7.4	456 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate
		
Spring : TS415 [mapped on 2021:10:26 13:10:00]		

Village	Gram Panchayat	Tehsil	District
Dhanda	Dhanda	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 140	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS416	Jagoon Moñ	Perennial
Latitude	Longitude	Altitude
52.87222° N	75.14994° E	596 m (a.m.s.l.)
Discharge	pH	EC
33.3 lpm	6.8	265 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS416 [mapped on 2021/10/27 9:52:00]			
Village	Gram Panchayat	Tehsil	District
Jagoon moñh	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 350	High	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS417	Mandir Nadu	Perennial
Latitude	Longitude	Altitude
52.87308° N	75.15091° E	574 m (a.m.s.l.)
Discharge	pH	EC
30 lpm	7.8	260 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS417 [mapped on 2021/10/27 9:59:00]

Village	Gram Panchayat	Tehsil	District
Jaganoo morh	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 40	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS418	Baw	Perennial
Latitude	Longitude	Altitude
52.87207° N	75.16492° E	597 m (a.m.s.l.)
Discharge	pH	EC
2.3 lpm	7.3	461 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS418 [mapped on 2021/10/27 10:26:00]

Village	Gram Panchayat	Tehsil	District
Jagnoo	Jaganoo	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 55	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS419	Baw	Perennial
Latitude	Longitude	Altitude
52.89465° N	75.19907° E	717 m (a.m.s.l.)
Discharge	pH	EC
9.2 lpm	8	427 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS419 [mapped on 2021/10/27 11:18:00]			

Village	Gram Panchayat	Tehsil	District
Thial	Thial	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 40	Medium	Decreased	Piped water Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS421	Baw	Perennial
Latitude	Longitude	Altitude
32.99337° N	75.20557° E	790 m (a.m.s.l.)
Discharge	pH	EC
-	7.4	482 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High



Spring : TS421 [mapped on 2021/10/27 11:44:00]

Village	Gram Panchayat	Tehsil	District
Dhanda	Dhanda	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 180	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS422	Bawli	Perennial
Latitude	Longitude	Altitude
32.97461° N	75.20466° E	768 m (a.m.s.l.)
Discharge	pH	EC
7.1 lpm	7.2	325 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS422 [mapped on 2021/10/27 11:55:00]

Village	Gram Panchayat	Tehsil	District
Dhanda	Dhanda	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS423	Mandi Baw	Perennial
Latitude	Longitude	Altitude
32.87633 ° N	75.22554 ° E	722 m (a.m.s.l.)
Discharge	pH	EC
40 lpm	7.3	340 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS423 [mapped on 2021/10/27 12:34:00]			
Village	Gram Panchayat	Tehsil	District
Sarsu	Prava Jagir	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 45	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TS424	Bawli	Perennial		
Latitude	Longitude	Altitude		
52.98079° N	75.22212° E	792 m (a.m.s.l.)		
Discharge	pH	EC		
2 lpm	7.6	253 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	NA	Moderate		
				
Spring : TS424 [mapped on 2021/10/27 12:50:00]				
Village		Gram Panchayat	Tehsil	District
Jasal chok		Prava Jagir	Ramnagar	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
— 60		Low	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS425	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.88711° N	75.22028° E	843 m (a.m.s.l.)
Discharge	pH	EC
40 lpm	7.1	406 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS425 [mapped on 2021-10-27 15:10:00]			

Village	Gram Panchayat	Tehsil	District
Sarsu	Prora Jagir	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS426	Baw	Perennial
Latitude	Longitude	Altitude
32.88259° N	75.22014° E	820 m (a.m.s.l)
Discharge	pH	EC
-	7.3	166 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	High



Spring : TS426 [mapped on 2021-10-27 15:18:00]

Village	Gram Panchayat	Tehsil	District
Sarsu	Prora Jagir	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	Decreased	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS428	Baw	Perennial
Latitude	Longitude	Altitude
32.84962° N	75.17623° E	607 m (a.m.s.l.)
Discharge	pH	EC
3.9 lpm	7.4	288 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate

			
Spring : TS428 [mapped on 2021-10-27 15:44:00]			

Village	Gram Panchayat	Tehsil	District
Malwa	Jaganoo	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS429	Bandu di Baw	Perennial
Latitude	Longitude	Altitude
32.84579° N	75.17317° E	590 m (a.m.s.l.)
Discharge	pH	EC
33.5 lpm	7.4	336 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS429 [mapped on 2021-10-27 15:51:00]

Village	Gram Panchayat	Tehsil	District
Kubala	Jaganoo	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	No Change	Spring Piped water



Spring ID	Spring Name	Nature
TS450	Sanal	Perennial
Latitude	Longitude	Altitude
32.8621° N	75.17183° E	609 m (a.m.s.l.)
Discharge	pH	EC
0.8 lpm	7.7	220 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	High

			
Spring : TS450 [mapped on 2021-10-27 16:14:00]			
Village	Gram Panchayat	Tehsil	District
Sanal	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	Decreased	Spring Piped water



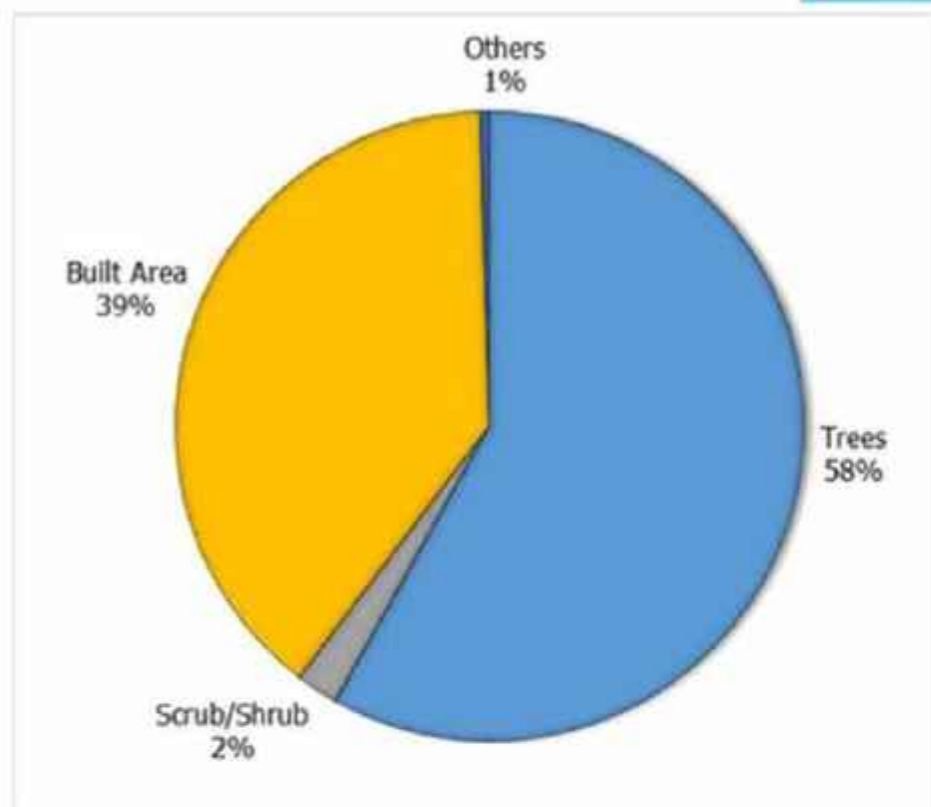
Spring ID	Spring Name	Nature	
TS431	Baw	Perennial	
Latitude	Longitude	Altitude	
32.85619° N	75.16511° E	595 m (a.m.s.l.)	
Discharge	pH	EC	
3.4 lpm	7.5	366 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	Moderate	
Spring : TS431 [mapped on 2021-10-27 16:25:00]			
Village	Gram Panchayat	Tehsil	District
Sanal	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Low	No Change	Spring Piped water



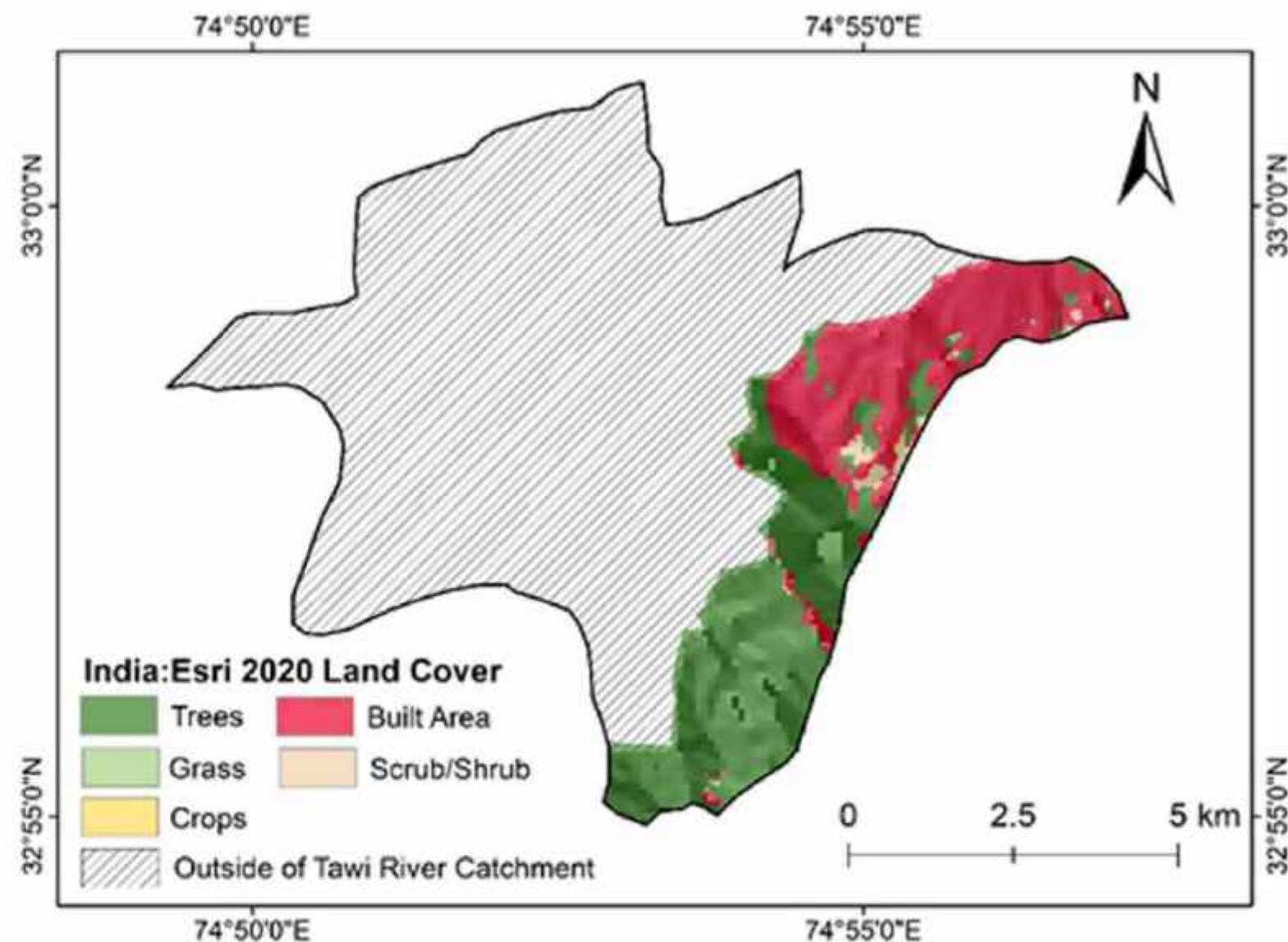


Tawi River Catchment

Katra Block, Udhampur

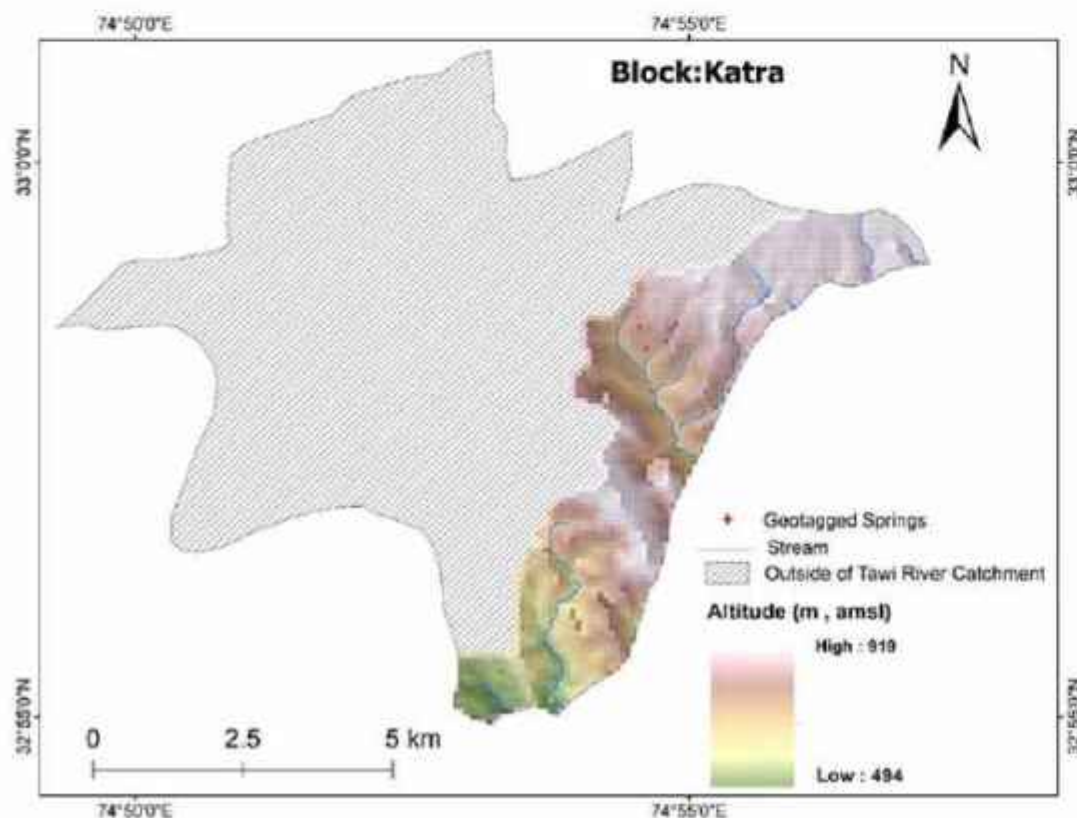


Landuse landcover pattern of Katra block



Landuse land cover map of Katra block

With an area of approximately 60.91 sq. km, the latitudinal extent of the Katra block ranges from 32.915471°N to 32.992974°N, while the longitudinal extent ranges from 74.881199°E to 74.952621°E. 27.84% of the total area falls within the Tawi River catchment. In the Katra block of the Reasi district, 08 springs were geotagged, covering various villages. The altitude of the study area in this block varies from 494 to 919 meters above mean sea level.



Topographic map of Katra block

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS458	Shani Dev Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.97535° N	74.90924° E	737 m (a.m.s.l.)
Discharge	pH	EC
26.8 lpm	8.09	456 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	High

			
Spring : TS458 [mapped on 2020-06-25 13:51:14]			

Village	Gram Panchayat	Tehsil	District
Kotli Bajajalya	Kotli Bajajalya	Kabra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS459	Mandir Bawli	Perennial	
Latitude	Longitude	Altitude	
32.97024° N	74.90272° E	722 m (a.m.s.l.)	
Discharge	pH	EC	
4.2 lpm	8.78	479 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
			
Spring : TS459 [mapped on 2020-06-25 14:35:42]			
Village	Gram Panchayat	Tehsil	District
Nawain	Kotli Bajajlyra	Kabra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS460	Shiv Mandir	Perennial
Latitude	Longitude	Altitude
32.97194° N	74.91022° E	686 m (a.m.s.l.)
Discharge	pH	EC
8.7 lpm	8.3	531 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	Moderate	Moderate

			
Spring : TS460 [mapped on 2020-06-25 14:55:04]			

Village	Gram Panchayat	Tehsil	District
Avli Hansali	Avli Hansali	Kabra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS461	Taran Nada	Perennial
Latitude	Longitude	Altitude
32.97314° N	74.91323° E	706 m (a.m.s.l.)
Discharge	pH	EC
90 lpm	8.4	474 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TS461 [mapped on 2020-06-23 15:13:49]			

Village	Gram Panchayat	Tehsil	District
Avli Hansali	Avli Hansali	Kabra	Reasi

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 140	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS462	Shani Mandir - 1	Perennial	
Latitude	Longitude	Altitude	
32.97487° N	74.91372° E	741 m (a.m.s.l.)	
Discharge	pH	EC	
5.6 lpm	7.5	650 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TS462 [mapped on 2020-06-25 19:25:19]			
Village	Gram Panchayat	Tehsil	District
Auli Hansali	Auli Hansali	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS465	Shani Mandir - 2	Perennial	
Latitude	Longitude	Altitude	
32.97566° N	74.91468° E	744 m (a.m.s.l.)	
Discharge	pH	EC	
61.8 lpm	7.2	651 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS465 [mapped on 2020-06-25 19:35:08]			
Village	Gram Panchayat	Tehsil	District
Auli Hansali	Auli Hansali	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

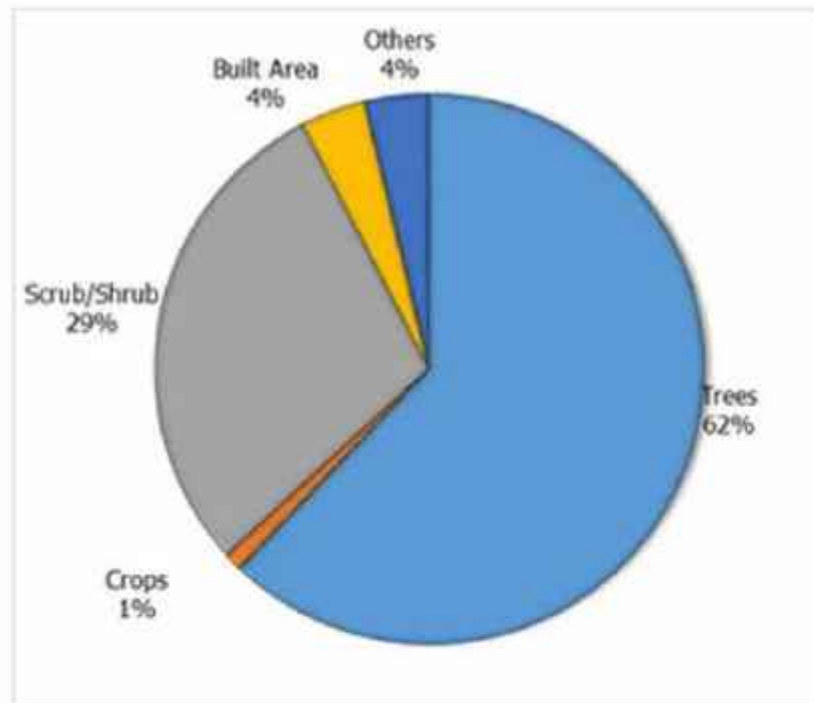
Spring ID	Spring Name	Nature	
TS464	NA	Perennial	
Latitude	Longitude	Altitude	
32.99717° N	74.95252° E	1055 m (a.m.s.l.)	
Discharge	pH	EC	
8.2 lpm	7.7	480 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS464 [mapped on 2020-06-25 15:42:28]			
Village	Gram Panchayat	Tehsil	District
Purana Daroor	Purana Daroor	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 70	High	Decreased	Piped water

Spring Atlas of Tawi River Catchment

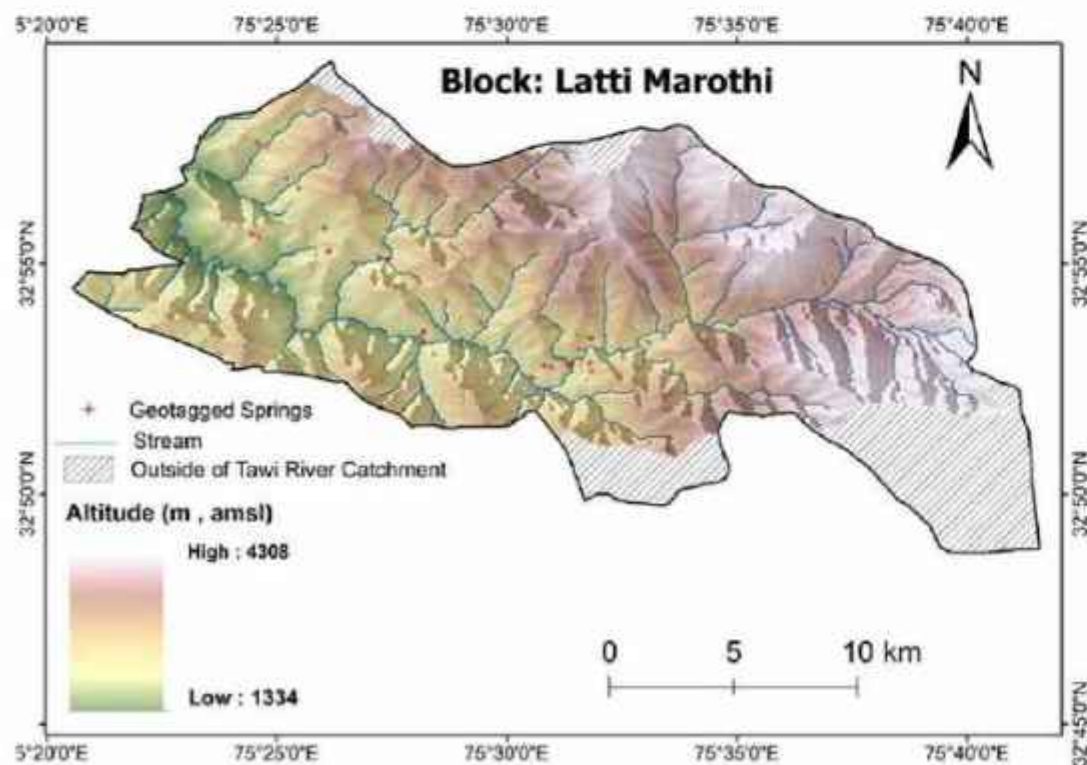
Spring ID	Spring Name	Nature	
TS466	Bhumika Devi	Perennial	
Latitude	Longitude	Altitude	
32.99501° N	74.94429° E	880 m (a.m.s.l.)	
Discharge	pH	EC	
15.5 lpm	7.6	400 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS466 [mapped on 2020-06-25 15:42:28]			
Village	Gram Panchayat	Tehsil	District
Bhumika	Purana Daroor	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5000	High	Decreased	Piped water

Tawi River Catchment

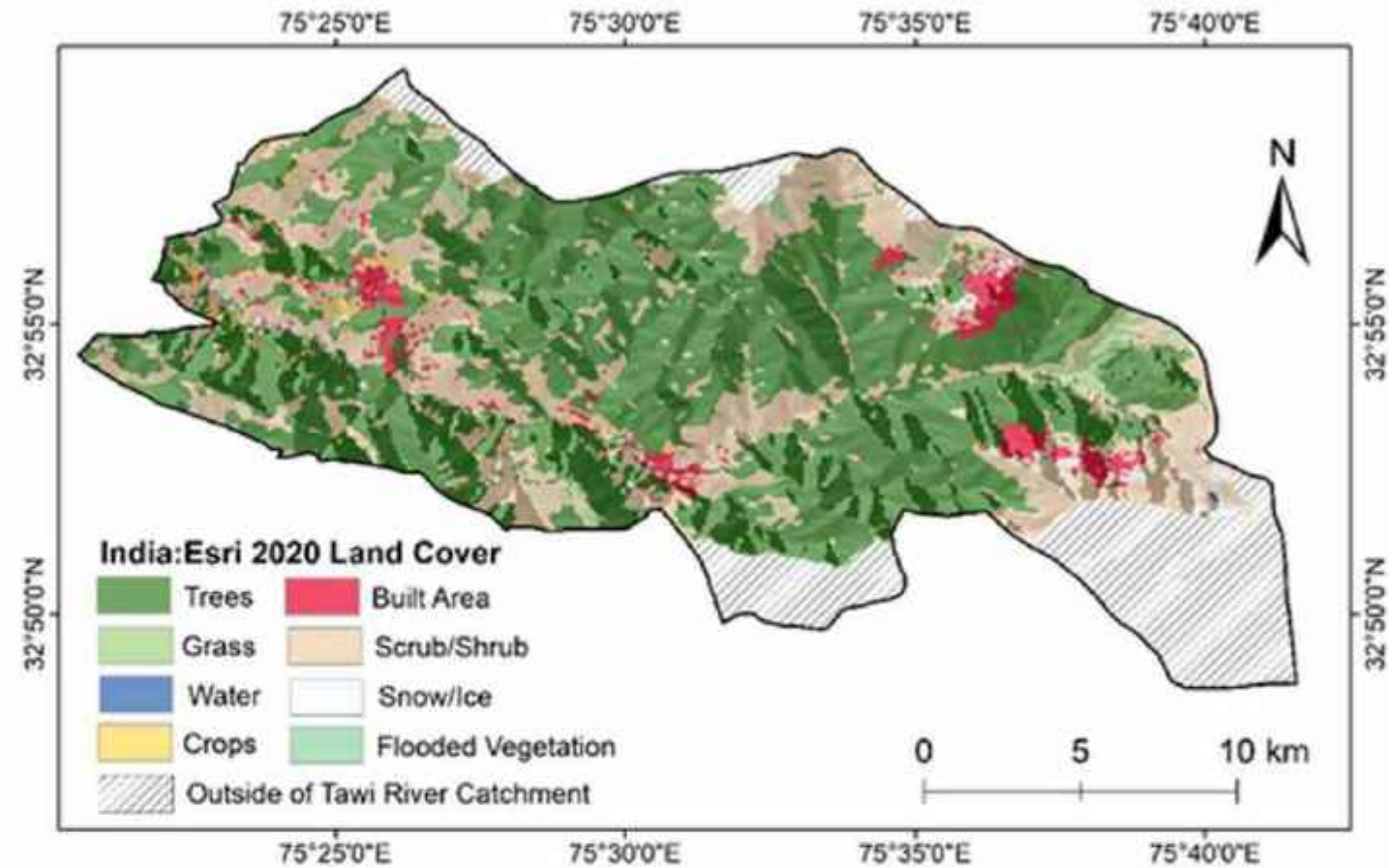
Latti Marothi block, Udhampur



Landuse landcover pattern of Latti Marothi block



Topographic map of Latti Marothi block



Landuse land cover map of Latti Marothi block

The Latti Marothi block of Udhampur district comprises 12 Panchayats and 10 villages. According to 2011 Census, it has a population of 22,772. With an area of approximately 324.69 sq. km, the latitudinal extent of the Latti Marothi block ranges from 32.812053°N to 32.989954°N, while the longitudinal extent ranges from 75.342875°E to 75.692877°E. 86.38% of the total area falls within the Tawi River catchment. In the Latti Marothi block of the Udhampur district, 27 springs were geotagged, covering various villages. The altitude of the study area in this block varies from 1334 to 4308 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS137	Vasu Naag Spring	Perennial	
Latitude	Longitude	Altitude	
32.87948° N	75.51596° E	1968 m (a.m.s.l.)	
Discharge	pH	EC	
11.7 lpm	7.5	160 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TS137 [mapped on 2020-10-28 09:30:00]			
Village	Gram Panchayat	Tehsil	District
Dhar Seoj	Pachound	Latti	Vidhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS138	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.88957° N	75.53065° E	2103 m (a.m.s.l.)	
Discharge	pH	EC	
3.4 lpm	7.4	126 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS138 [mapped on 2020-10-28 10:02:00]			
Village	Gram Panchayat	Tehsil	District
Dhar Seoj	Pachound	Latti	Vidhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS139	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.88978° N	75.53046° E	2105 m (a.m.s.l.)	
Discharge	pH	EC	
1.6 lpm	8.3	114 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS139 [mapped on 2020-10-28 10:26:00]			
Village	Gram Panchayat	Tehsil	District
Dhar Seoj	Pachound	Latti	Vidhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS140	Barnava Sawli	Perennial	
Latitude	Longitude	Altitude	
32.88559° N	75.52621° E	2099 m (a.m.s.l.)	
Discharge	pH	EC	
0.6 lpm	7.8	330 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS140 [mapped on 2020-10-28 10:54:45]			
Village	Gram Panchayat	Tehsil	District
Padder	Pachound	Latti	Vidhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3141	Kochu Bawli	Perennial	
Latitude	Longitude	Altitude	
32.87977° N	75.51358° E	1992 m (a.m.s.l.)	
Discharge	pH	EC	
8.7 lpm	7.3	202 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
			
Spring : T3141 [mapped on 2020/10/28 11:45:00]			
Village	Gram Panchayat	Tehsil	District
Pachound	Pachound	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3142	Seri Bawli	Perennial	
Latitude	Longitude	Altitude	
32.88004 ° N	75.52185 ° E	1988 m (a.m.s.l.)	
Discharge	pH	EC	
3.3 lpm	7.8	105 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	Medium	Moderate	
			
Spring : T3142 [mapped on 2020/10/28 12:32:00]			
Village	Gram Panchayat	Tehsil	District
Pachound	Pachound	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS143	Hem Raj Nadi	Perennial
Latitude	Longitude	Altitude
32.88089° N	75.52584° E	1915 m (a.m.s.l.)
Discharge	pH	EC
45.7 lpm	8.2	200 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS143 [mapped on 2020/10/28 12:55:00]			

Village	Gram Panchayat	Tehsil	District
Padder	Pachound	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
T3144	Sara Bawli	Perennial		
Latitude	Longitude	Altitude		
32.8807° N	75.53019° E	2034 m (a.m.s.l.)		
Discharge	pH	EC		
6.5 lpm	7.6	250 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
Anthropogenic	None	High		
				
Spring : T3144 [mapped on 2020/10/28 13:31:00]				
Village		Gram Panchayat	Tehsil	District
Dhar Seoj		Pachound	Latti	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 200		Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3145	Nadar	Perennial
Latitude	Longitude	Altitude
32.87795 ° N	75.55075 ° E	2050 m (a.m.s.l)
Discharge	pH	EC
-	7.4	147 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : T3145 [mapped on 2020/10/28 15:55:00]			

Village	Gram Panchayat	Tehsil	District
Dhar Seoj	Pachound	Latti	Vidhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3146	Nadu	Perennial
Latitude	Longitude	Altitude
32.67548 ° N	75.50914 ° E	1981 m (a.m.s.l)
Discharge	pH	EC
3 lpm	7.5	152 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : T3146 [mapped on 2020/10/28 14:56:00]			

Village	Gram Panchayat	Tehsil	District
Pachound	Pachound	Latti	Vidhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS147	Jakad Bawli	Perennial
Latitude	Longitude	Altitude
32.69535 ° N	75.49068 ° E	1901 m (a.m.s.l)
Discharge	pH	EC
0.2 lpm	8.7	250 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate

			
Spring : TS147 [mapped on 2020/10/28 15:54:00]			

Village	Gram Panchayat	Tehsil	District
Duda	Duda	Latti	Vidhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3148	NA	Perennial
Latitude	Longitude	Altitude
32.89222 ° N	75.46968 ° E	1813 m (a.m.s.l)
Discharge	pH	EC
2.2 lpm	NA	-
Taste	Colour	Odour
NA	NA	NA
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate



Village	Gram Panchayat	Tehsil	District
Pachound	Pachound	Latti	Vijhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 45	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS149	Nadu	Perennial
Latitude	Longitude	Altitude
32.89206° N	75.47017° E	1816 m (a.m.s.l.)
Discharge	pH	EC
4.3 lpm	8	425 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS149 [mapped on 2020/10/28 15:57:00]			

Village	Gram Panchayat	Tehsil	District
Pachound	Pachound	Latti	Vidhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS150	Seri Nadu	Perennial
Latitude	Longitude	Altitude
32.89211° N	75.46994° E	1814 m (a.m.s.l.)
Discharge	pH	EC
6 lpm	8.1	427 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High



Spring : TS150 [mapped on 2020/10/28 16:06:00]

Village	Gram Panchayat	Tehsil	District
Pachound	Pachound	Latti	Vidhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS151	Jaugan Pani	Perennial
Latitude	Longitude	Altitude
32.91891° N	75.45395° E	1819 m (a.m.s.l.)
Discharge	pH	EC
17.8 lpm	8.2	255 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS151 [mapped on 2020/10/29 10:43:00]			

Village	Gram Panchayat	Tehsil	District
Chapper	Chapper	Latti	Vidhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS152	Nadu	Perennial
Latitude	Longitude	Altitude
32.91813° N	75.45705° E	1821 m (a.m.s.l.)
Discharge	pH	EC
15.5 lpm	8.1	318 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High



Spring : TS152 [mapped on 2020/10/29 11:07:00]

Village	Gram Panchayat	Tehsil	District
Chapper	Chapper	Latti	Vidhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS153	Bavli	Seasonal	
Latitude	Longitude	Altitude	
32.91702° N	75.44476° E	1822 m (a.m.s.l)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Medium	Moderate	Spring : TS153 [mapped on 2020-10-29 11:51:00]
Village	Gram Panchayat	Tehsil	District
Chapper	Chapper	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS154	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.92101° N	75.43524° E	1954 m (a.m.s.l)	
Discharge	pH	EC	
6.4 lpm	7.7	310 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	Spring : TS154 [mapped on 2020-10-29 12:49:00]
Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 70	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS155	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.9215° N	75.43561° E	1951 m (a.m.s.l)	
Discharge	pH	EC	
3.2 lpm	7.8	552 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	Spring : TS155 [mapped on 2020-10-29 12:58:00]
Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS156	Pundal	Perennial	
Latitude	Longitude	Altitude	
32.92957° N	75.43398° E	1910 m (a.m.s.l)	
Discharge	pH	EC	
6.2 lpm	7.6	253 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	None	Moderate	Spring : TS156 [mapped on 2020-10-29 13:31:00]
Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS157	Mandir Bawli	Seasonal
Latitude	Longitude	Altitude
32.92754 ° N	75.40798 ° E	1951 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate



Spring : TS157 [mapped on 2020-10-29 15:57:00]

Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS158	Bawli	Perennial
Latitude	Longitude	Altitude
32.92754 ° N	75.40775 ° E	1946 m (a.m.s.l.)
Discharge	pH	EC
-	7.8	252 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : TS158 [mapped on 2020-10-29 14:13:00]			

Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS159	Banote	Perennial
Latitude	Longitude	Altitude
32.92616 ° N	75.40999 ° E	1927 m (a.m.s.l.)
Discharge	pH	EC
4 lpm	8	540 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Muddy	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate

			
Spring : TS159 [mapped on 2020-10-29 14:28:00]			

Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS160	NA	Perennial
Latitude	Longitude	Altitude
32.94391 ° N	75.42455 ° E	1970 m (a.m.s.l.)
Discharge	pH	EC
17.5 lpm	NA	-
Taste	Colour	Odour
NA	NA	NA
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS160 [mapped on 2020-10-29 15:37:13]			

Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 10	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS161	Bavli	Perennial	
Latitude	Longitude	Altitude	
32.94765° N	75.4203° E	1968 m (a.m.s.l.)	
Discharge	pH	EC	
1.3 lpm	7.4	450 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS161 [mapped on 2020-10-29 15:50:00]			
Village	Gram Panchayat	Tehsil	District
Latti	Latti	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

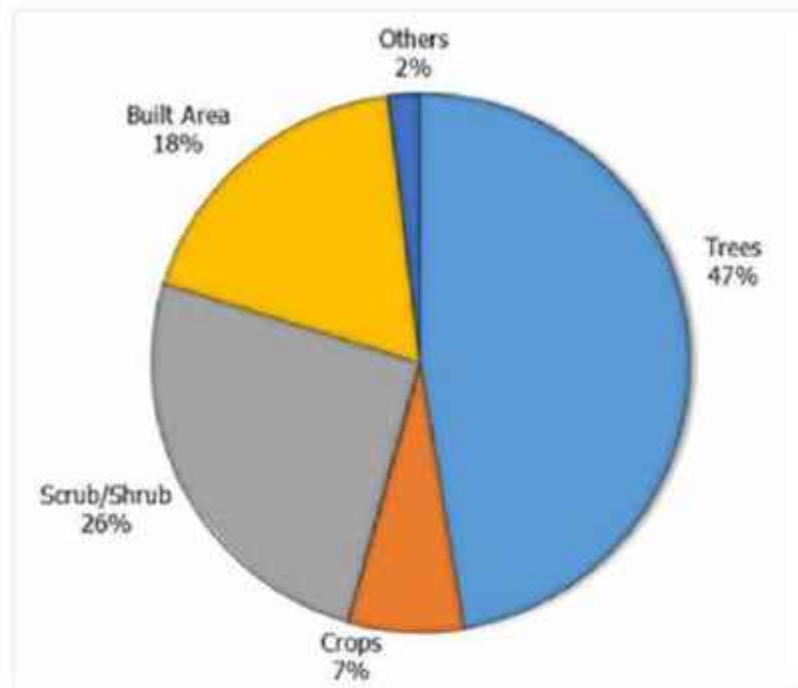
Spring ID	Spring Name	Nature	
TS162	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.95871° N	75.41281° E	1811 m (a.m.s.l.)	
Discharge	pH	EC	
4.3 lpm	7.7	330 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Medium	Moderate	
Spring : TS162 [mapped on 2020-10-29 16:21:00]			
Village	Gram Panchayat	Tehsil	District
Marothi	Marothi	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

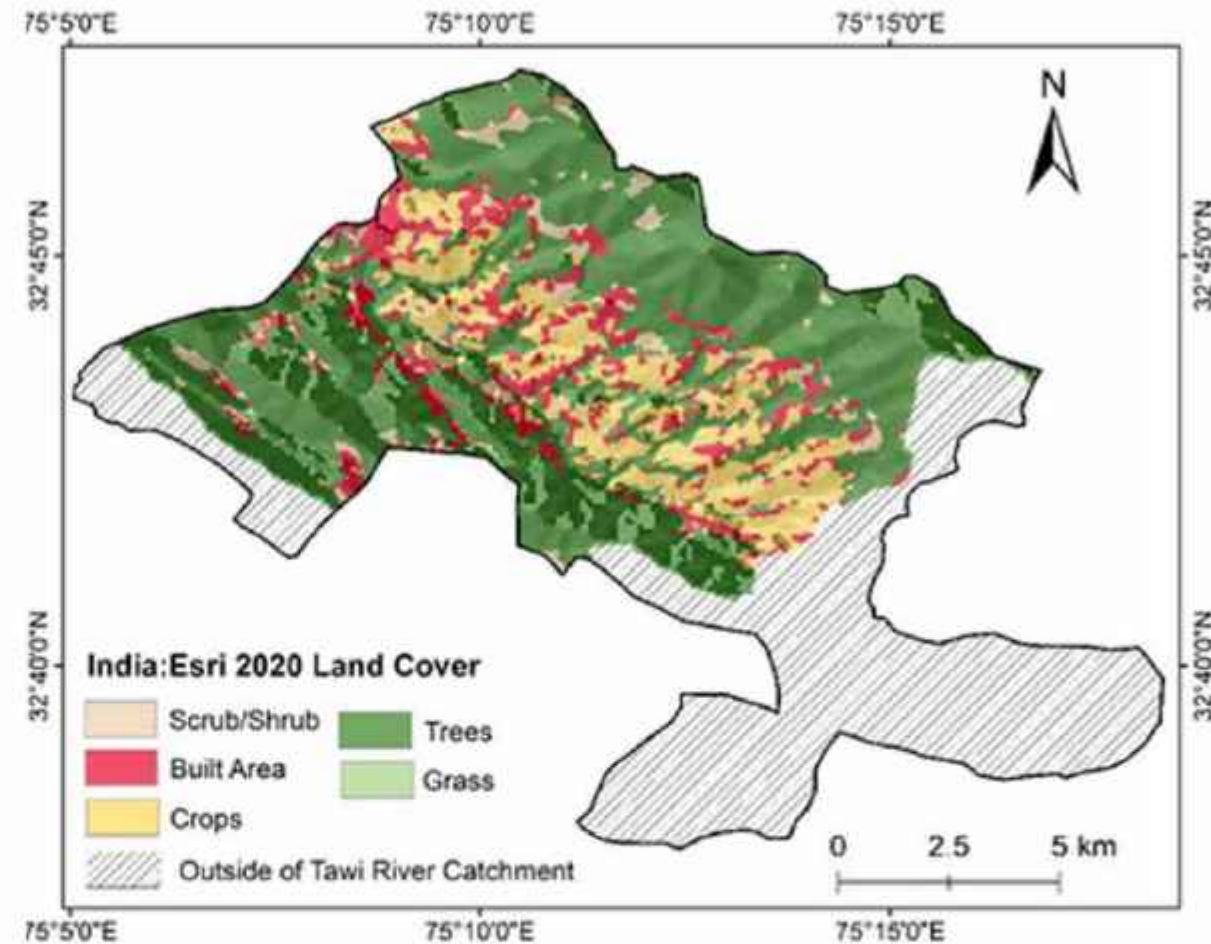
Spring ID	Spring Name	Nature	
TS163	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.96073° N	75.40959° E	1813 m (a.m.s.l.)	
Discharge	pH	EC	
8.7 lpm	7.7	456 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Medium	Moderate	
Spring : TS163 [mapped on 2020-10-29 16:37:00]			
Village	Gram Panchayat	Tehsil	District
Marothi	Marothi	Latti	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Decreased	Spring

Tawi River Catchment

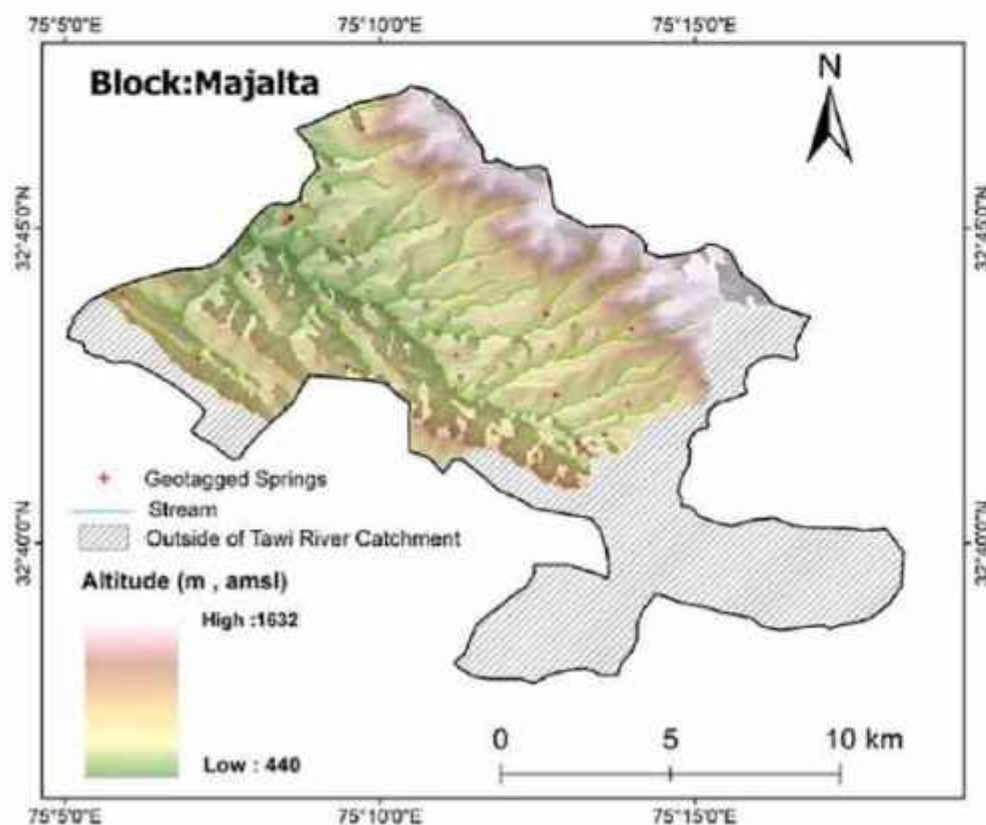
Majalta Block, Udhampur



Landuse landcover pattern of Majalta block



Landuse land cover map of Majalta block



Topographic map of Majalta block

The Majalta block of Udhampur district comprises 14 Panchayats and 25 villages. According to 2011 Census, it has a population of 24,404. With an area of approximately 147.19 sq. km, the latitudinal extent of the Majalta block ranges from 32.629535°N to 32.787601°N, while the longitudinal extent ranges from 75.084114°E to 75.305268°E. 67.19% of the total area falls within the Tawi River catchment. In the Majalta block of the Udhampur district, 23 springs were geotagged, covering various villages. The altitude of the study area in this block varies from 440 to 1632 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO79	Gaya ka Bonta	Perennial
Latitude	Longitude	Altitude
52.75619° N	75.14742° E	534 m (a.m.s.l.)
Discharge	pH	EC
72 lpm	7	845 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate



Spring : TSO79 [mapped on 2020-07-06 15:00:33]

Village	Gram Panchayat	Tehsil	District
Thalora	Thalora	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO80	Ancient Mandir	Perennial
Latitude	Longitude	Altitude
32.75126° N	75.14159° E	503 m (a.m.s.l.)
Discharge	pH	EC
13.7 lpm	7.2	680 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate



Spring : TSO80 [mapped on 2020-07-06 15:50:25]

Village	Gram Panchayat	Tehsil	District
Battal	Battal	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO81	Shamshan Ghat	Perennial
Latitude	Longitude	Altitude
52.75206° N	75.14261° E	516 m (a.m.s.l.)
Discharge	pH	EC
3.2 lpm	7	717 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy in Season	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate


Spring : TSO81 [mapped on 2020-07-06 15:45:18]

Village	Gram Panchayat	Tehsil	District
Battal	Battal	Majalta	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TSO82	Upali Bawli	Perennial		
Latitude	Longitude	Altitude		
52.75294° N	75.14812° E	520 m (a.m.s.l.)		
Discharge	pH	EC		
11.7 lpm	7	720 (µS/cm)		
Taste	Colour	Odour		
Un-objectionable	Clear	Un-objectionable		
Major Stressor	Degree of Threat	Vulnerability		
Anthropogenic	Moderate	Moderate		
				
Spring : TSO82 [mapped on 2020-07-06 16:03:11]				
Village		Gram Panchayat	Tehsil	District
Thalora		Thalora	Majalta	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 100		Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3085	Upper Bawli	Perennial	
Latitude	Longitude	Altitude	
32.7527° N	75.14289° E	523 m (a.m.s.l.)	
Discharge	pH	EC	
6.6 lpm	7.1	740 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	High	
Spring : T3085 [mapped on 2020-07-06 16:19:07]			
Village	Gram Panchayat	Tehsil	District
Thalora	Thalora	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3365	Kathil	Perennial	
Latitude	Longitude	Altitude	
32.72707° N	75.21066° E	658 m (a.m.s.l.)	
Discharge	pH	EC	
75 lpm	7.8	341 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3365 [mapped on 2021-10-04 12:22:00]			
Village	Gram Panchayat	Tehsil	District
Kathil	Kathil	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3366	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.72692° N	75.21069° E	659 m (a.m.s.l.)	
Discharge	pH	EC	
10.3 lpm	7.6	300 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : T3366 [mapped on 2021-10-04 12:28:00]			
Village	Gram Panchayat	Tehsil	District
Kathil	Kathil	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3367	Bawli	Seasonal	
Latitude	Longitude	Altitude	
32.72761° N	75.21087° E	647 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	High	
Spring : T3367 [mapped on 2021-10-04 12:37:00]			
Village	Gram Panchayat	Tehsil	District
Kathil	Kathil	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3368	Baw	Perennial	
Latitude	Longitude	Altitude	
52.72527° N	75.25557° E	797 m (a.m.s.l.)	
Discharge	pH	EC	
2.9 lpm	7.5	358 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Muddy	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3368 [mapped on 2021-10-04 15:25:00]			
Village	Gram Panchayat	Tehsil	District
Kathil	Kathil	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 30	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3369	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
52.70586° N	75.21327° E	645 m (a.m.s.l.)	
Discharge	pH	EC	
2.5 lpm	7.2	495 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3369 [mapped on 2021-10-04 15:47:00]			
Village	Gram Panchayat	Tehsil	District
Dhamma	Dhamma	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 30	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3370	Baw	Perennial	
Latitude	Longitude	Altitude	
52.70597° N	75.2132° E	645 m (a.m.s.l.)	
Discharge	pH	EC	
—	NA	—	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	
Spring : T3370 [mapped on 2021-10-04 15:51:00]			
Village	Gram Panchayat	Tehsil	District
Dhamma	Dhamma	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3371	Bawli	Perennial	
Latitude	Longitude	Altitude	
52.70548° N	75.25249° E	668 m (a.m.s.l.)	
Discharge	pH	EC	
12 lpm	6.7	150 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	Medium	Moderate	
Spring : T3371 [mapped on 2021-10-04 16:51:00]			
Village	Gram Panchayat	Tehsil	District
Bharnara	Bharnara	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS372	Baw	Perennial
Latitude	Longitude	Altitude
32.69541° N	75.22614° E	644 m (a.m.s.l.)
Discharge	pH	EC
5.9 lpm	6.9	137 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	High



Spring : TS372 [mapped on 2021-10-04 14:42:00]

Village	Gram Panchayat	Tehsil	District
Bhamara	Bhamara	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS373	Baw	Perennial
Latitude	Longitude	Altitude
32.69185° N	75.22087° E	646 m (a.m.s.l.)
Discharge	pH	EC
6.6 lpm	7.3	466 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS373 [mapped on 2021-10-04 14:57:00]

Village	Gram Panchayat	Tehsil	District
Bhamara	Bhamara	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 60	Medium	No Change	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS374	Bawli	Perennial
Latitude	Longitude	Altitude
32.69513° N	75.21928° E	641 m (a.m.s.l.)
Discharge	pH	EC
1.2 lpm	7.4	419 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS374 [mapped on 2021-10-04 15:05:00]			

Village	Gram Panchayat	Tehsil	District
Bhamara	Bhamara	Majalga	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 200	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3383	/Jharoth di Baw	Perennial
Latitude	Longitude	Altitude
52.73284 ° N	75.09839 ° E	621 m (a.m.s.l.)
Discharge	pH	EC
1.2 lpm	7.7	404 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	NA	Moderate

			
Spring : T3383 [mapped on 2021-10-05 11:46:00]			

Village	Gram Panchayat	Tehsil	District
Chennad	Chennad	Majalga	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3384	Chennad Baw	Perennial
Latitude	Longitude	Altitude
52.71562° N	75.11855° E	575 m (a.m.s.l.)
Discharge	pH	EC
5 lpm	7.7	410 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3384 [mapped on 2021-10-05 12:01:00]

Village	Gram Panchayat	Tehsil	District
Chennad	Chennad	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water Streams/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3385	Baw	Seasonal
Latitude	Longitude	Altitude
52.71343° N	75.15784° E	574 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	Moderate

			
Spring : T3385 [mapped on 2021-10-05 12:52:00]			

Village	Gram Panchayat	Tehsil	District
Mansar	Mansar	Majalga	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 34	Medium	Decreased	Spring Piped water/ Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3386	Bayi	Perennial
Latitude	Longitude	Altitude
52.7125° N	75.15993° E	576 m (a.m.s.l.)
Discharge	pH	EC
4.9 lpm	7	418 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3386 [mapped on 2021-10-05 12:58:00]			

Village	Gram Panchayat	Tehsil	District
Mansar	Mansar	Majalga	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 220	Medium	No Change	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

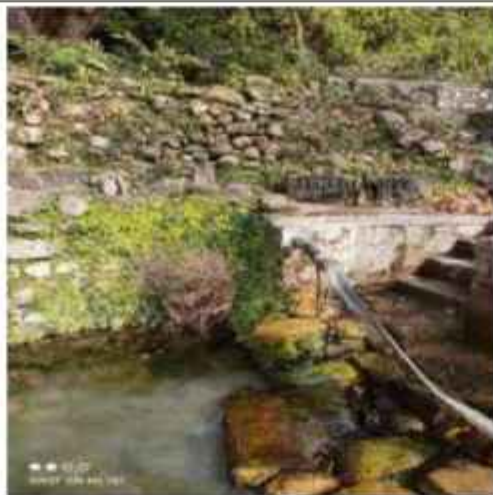
Spring ID	Spring Name	Nature
TS451	Bawli	Perennial
Latitude	Longitude	Altitude
52.74657° N	75.15681° E	537 m (a.m.s.l.)
Discharge	pH	EC
-	7.72	412 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High



Spring : TS451 [mapped on 2021-12-17 11:44:00]

Village	Gram Panchayat	Tehsil	District
Plater	Majalga	Majalga	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 60	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS452	Panoraba Bagh	Perennial	
Latitude	Longitude	Altitude	
32.70738° N	75.18689° E	572 m (a.m.s.l.)	
Discharge	pH	EC	
120 lpm	7.56	452 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS452 [mapped on 2021/12/17 12:58:00]			
Village	Gram Panchayat	Tehsil	District
Plater	Majalta	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 120	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS455	Bawi	Perennial
Latitude	Longitude	Altitude
32.71644° N	75.18686° E	585 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	7.62	326 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	High



Spring : TS455 [mapped on 2021/12/17 12:58:00]

Village	Gram Panchayat	Tehsil	District
Plater	Majalta	Majalta	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS454	Majalta Bawli	Perennial
Latitude	Longitude	Altitude
32.72595° N	75.17124° E	520 m (a.m.s.l.)
Discharge	pH	EC
88.3 lpm	7.34	759 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

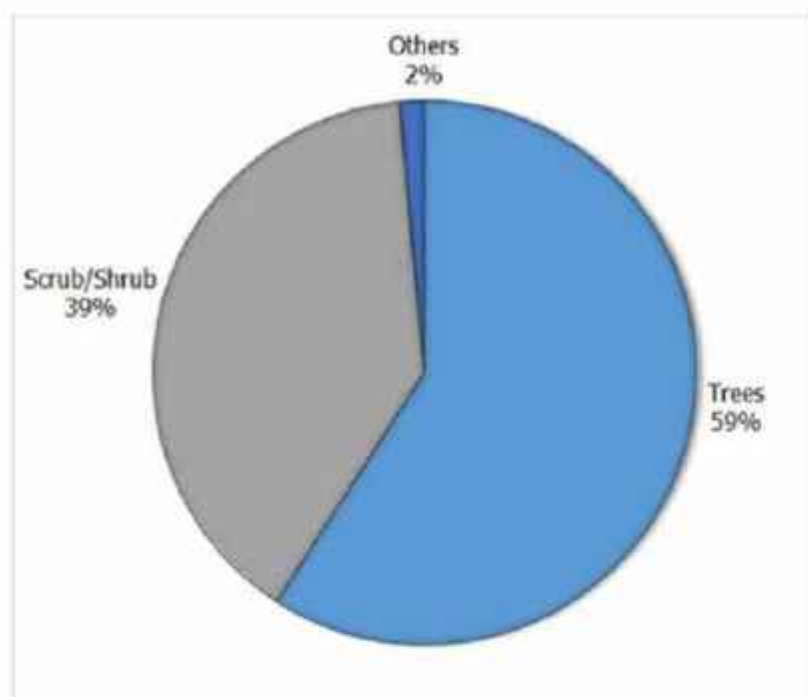
			
Spring : TS454 [mapped on 2021/12/17 13:10:00]			

Village	Gram Panchayat	Tehsil	District
Majalta	Majalta	Majalta	Udhampur

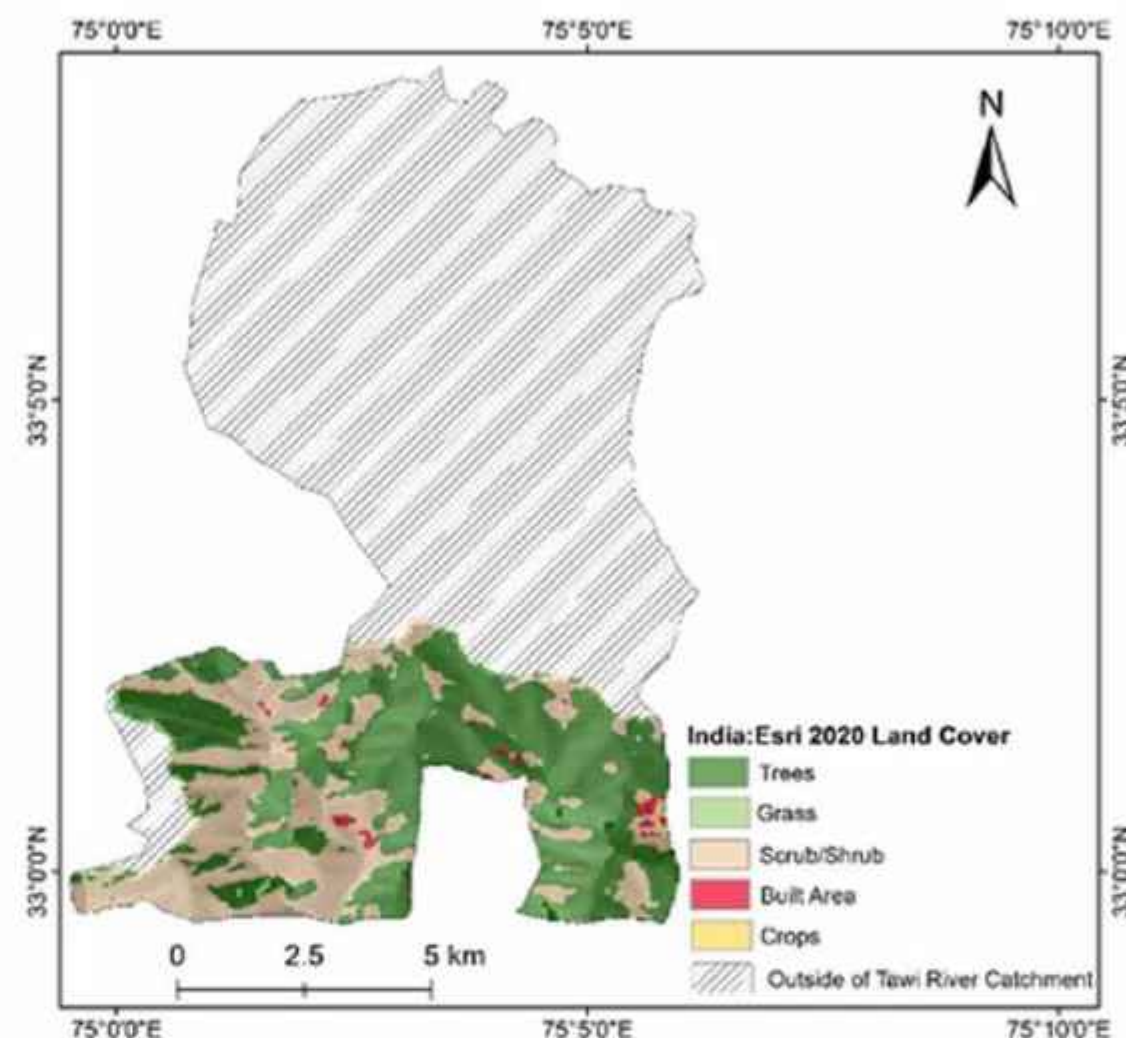
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 250	Medium	No Change	Spring

Tawi River Catchment

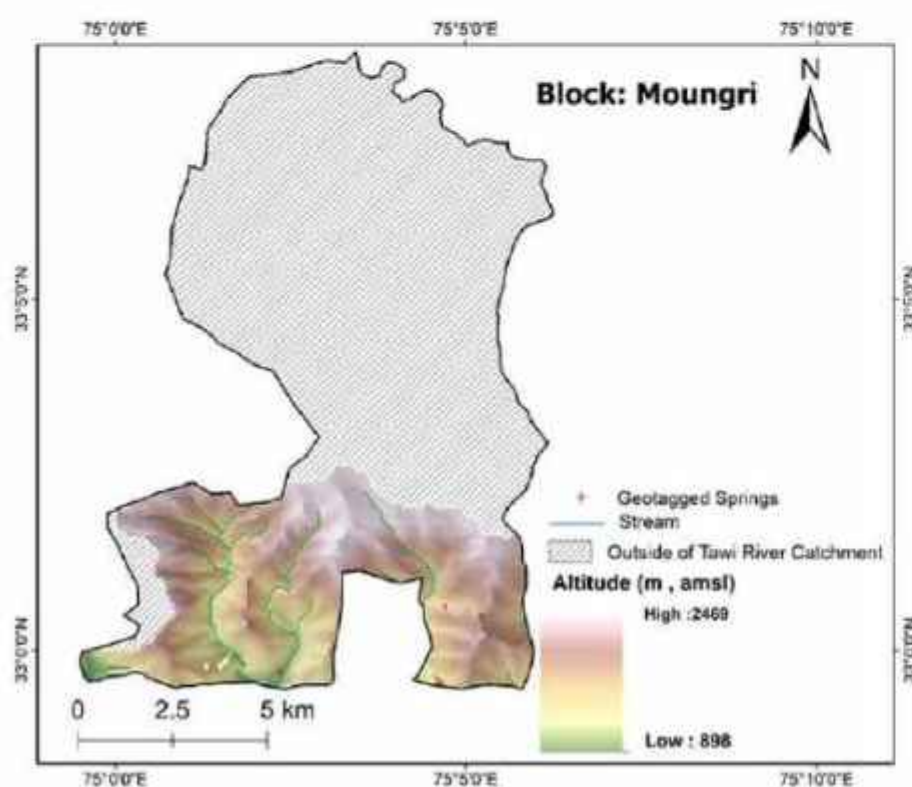
Moungri Block, Udhampur



Landuse landcover pattern of Moungri block



Landuse land cover map of Moungri block



Topographic map of Moungri block

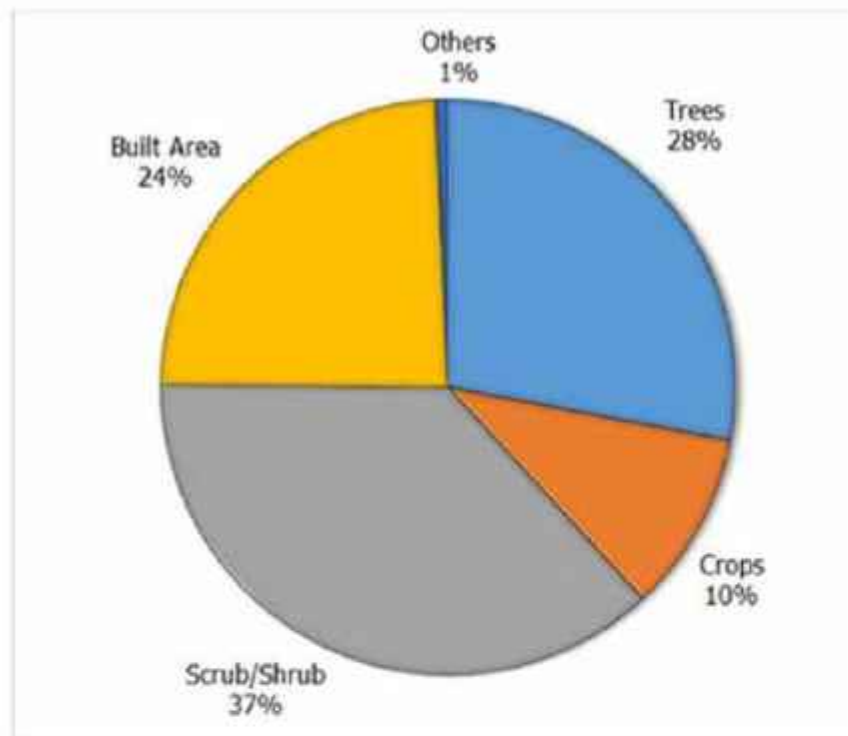
The Moungri block of Udhampur district comprises 08 Panchayats and 17 villages. According to 2011 Census, it has a population of 17,217. With an area of approximately 108.48 sq. km, the latitudinal extent of the Moungri block ranges from 32.990741 N to 33.142072 N, while the longitudinal extent ranges from 74.991711 E to 75.103927 E. 34.43% of the total area falls within the Tawi River catchment. In the Moungri block of the Udhampur district, only 02 springs were geotagged, as majority of the area was outside of the Tawi River catchment. The altitude of the study area in this block varies from 898 to 2469 meters above mean sea level.

Spring ID	Spring Name	Nature	
TS451	Baw	Perennial	
Latitude	Longitude	Altitude	
52.85619° N	75.16511° E	593 m (a.m.s.l.)	
Discharge	pH	EC	
3.4 lpm	7.5	366 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	Moderate	
Spring : TS451 [mapped on 2021-10-27 16:25:00]			
Village	Gram Panchayat	Tehsil	District
Sanal	Jaganoo	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Low	No Change	Spring Piped water

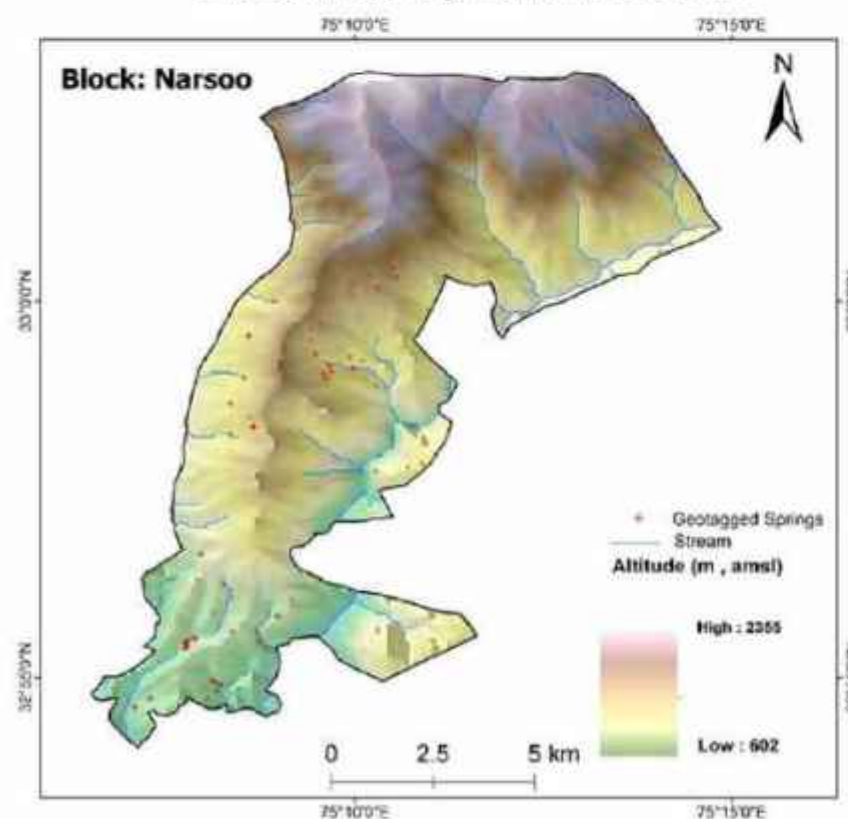
Spring ID	Spring Name	Nature	
TS458	Shani Dev Mandir Bawli	Perennial	
Latitude	Longitude	Altitude	
52.97535° N	74.90924° E	757 m (a.m.s.l.)	
Discharge	pH	EC	
26.8 lpm	8.09	456 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	High	
Spring : TS458 [mapped on 2020-06-23 13:51:14]			
Village	Gram Panchayat	Tehsil	District
Kotli Bajalya	Kotli Bajalya	Katra	Reasi
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Decreased	Piped water

Tawi River Catchment

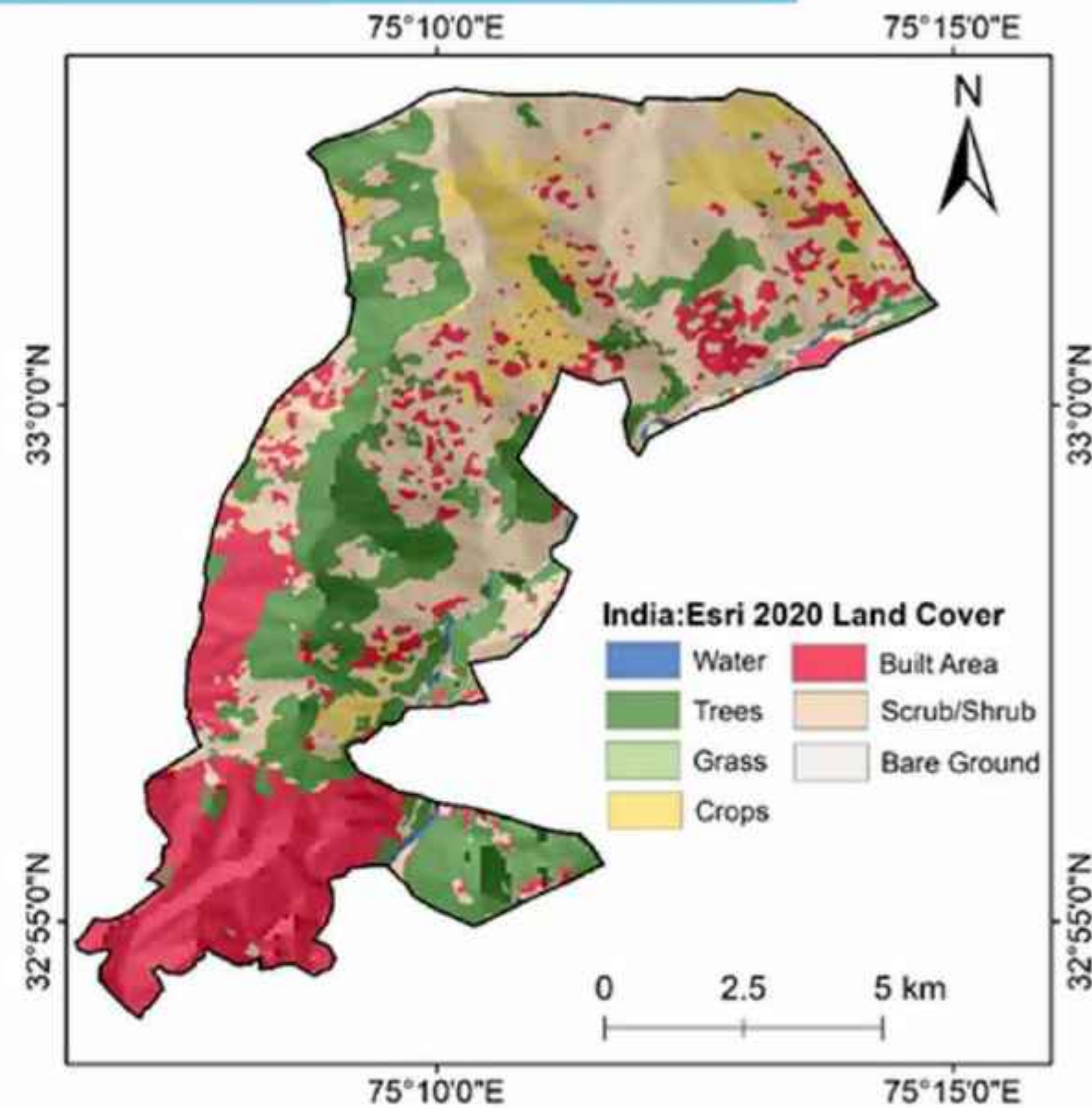
Narsoo Block, Udhampur



Landuse landcover pattern of Narsoo block



Topographic map of Narsoo block



Landuse land cover map of Narsoo block

The Narsoo block of Udhampur district comprises 08 Panchayats and 13 villages. According to 2011 Census, it has a population of 15,345. With an area of approximately 88.93 sq. km, the latitudinal extent of the Narsoo block ranges from 32.901171°N to 33.050835°N, while the longitudinal extent ranges from 75.108517°E to 75.247471°E. In the Narsoo block of the Udhampur district, 76 springs were geotagged, covering various villages. The altitude in this block varies from 602 to 2355 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3001	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.92435 ° N	75.14555 ° E	695 m (a.m.s.l.)	
Discharge	pH	EC	
90.2 lpm	NA	-	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : T3001 [mapped on 2019-11-12 11:21:58]			
Village	Gram Panchayat	Tehsil	District
Ward No. 20	NA	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3002	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.92492 ° N	75.14545 ° E	695 m (a.m.s.l.)	
Discharge	pH	EC	
58.4 lpm	6.5	434 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both	Moderate	Moderate	
Spring : T3002 [mapped on 2019-11-12 14:22:58]			
Village	Gram Panchayat	Tehsil	District
Chanthal	NA	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1200	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3003	NA	Perennial	
Latitude	Longitude	Altitude	
32.93016 ° N	75.14989 ° E	760 m (a.m.s.l.)	
Discharge	pH	EC	
17.8 lpm	6.5	418 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : T3003 [mapped on 2019-11-13 13:50:06]			
Village	Gram Panchayat	Tehsil	District
Rakh Kotli	Kotli Bhala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1200	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3004	NA	Perennial	
Latitude	Longitude	Altitude	
32.93569 ° N	75.15267 ° E	773 m (a.m.s.l.)	
Discharge	pH	EC	
137.1 lpm	6.4	405 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Low	Moderate	
Spring : T3004 [mapped on 2019-11-14 12:03:55]			
Village	Gram Panchayat	Tehsil	District
Rakh Kotli	Kotli Bhala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO05	Bilon Sawli - 1	Perennial	
Latitude	Longitude	Altitude	
32.91506° N	75.13707° E	695 m (a.m.s.l.)	
Discharge	pH	EC	
106.7 lpm	6.2	562 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TSO05 [mapped on 2019/11/14 12:59:26]			
Village	Gram Panchayat	Tehsil	District
Sawal	Charee	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 850	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO06	Bilon Sawli - 2	Perennial	
Latitude	Longitude	Altitude	
32.9155° N	75.13621° E	697 m (a.m.s.l.)	
Discharge	pH	EC	
58.4 lpm	6.6	462 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TSO06 [mapped on 2019/11/14 13:17:01]			
Village	Gram Panchayat	Tehsil	District
Charee	Charee	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 450	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO07	NA	Perennial	
Latitude	Longitude	Altitude	
32.91399° N	75.1354° E	707 m (a.m.s.l.)	
Discharge	pH	EC	
63.9 lpm	6.3	590 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	High	
Spring : TSO07 [mapped on 2019/11/14 13:47:03]			
Village	Gram Panchayat	Tehsil	District
Charee	Charee	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5000	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO08	NA	Perennial	
Latitude	Longitude	Altitude	
32.91613° N	75.13502° E	715 m (a.m.s.l.)	
Discharge	pH	EC	
4.6 lpm	7	582 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TSO08 [mapped on 2019/11/14 14:20:59]			
Village	Gram Panchayat	Tehsil	District
Charee	Charee	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS009	Dudha Dhari Nadi - 1	Perennial
Latitude	Longitude	Altitude
32.91361° N	75.13392° E	695 m (a.m.s.l.)
Discharge	pH	EC
22.9 lpm	7.4	615 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	High

			
Spring : TS009 [mapped on 2019.11.14 14:47:09]			

Village	Gram Panchayat	Tehsil	District
Sewail	Charee	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 800	High	Decreased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS010	Dudha Dhari - 2	Perennial
Latitude	Longitude	Altitude
32.9136° N	75.13368° E	695 m (a.m.s.l.)
Discharge	pH	EC
25.3 lpm	7.2	662 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TS010 [mapped on 2019.11.14 14:59:27]			

Village	Gram Panchayat	Tehsil	District
Sewail	Charee	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 800	High	Decreased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS011	Dudha Dhari Sewail	Perennial
Latitude	Longitude	Altitude
32.9136° N	75.13387° E	695 m (a.m.s.l.)
Discharge	pH	EC
55.3 lpm	7.5	662 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TS011 [mapped on 2019-11-14 15:00:18]			

Village	Gram Panchayat	Tehsil	District
Sewail	Charee	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 800	High	Decreased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS012	NA	Perennial
Latitude	Longitude	Altitude
32.912° N	75.134° E	721 m (a.m.s.l.)
Discharge	pH	EC
8.9 lpm	7.3	577 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TS012 [mapped on 2019/11/14 16:00:07]			

Village	Gram Panchayat	Tehsil	District
Sewail	Charee	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	Medium	Decreased	Spring



Spring Bkior of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO25	Saula Bawli	Perennial
Latitude	Longitude	Altitude
32.92678° N	75.13956° E	765 m (a.m.s.l.)
Discharge	pH	EC
6.4 lpm	7.4	847 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	Moderate	Moderate

			
Spring : TSO25 [mapped on 2019-12-16 12:52:04]			

Village	Gram Panchayat	Tehsil	District
Chanthal	Charee	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Piped water



Spring Bkior of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS052	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94399° N	75.13266° E	816 m (a.m.s.l.)	
Discharge	pH	EC	
3.2 lpm	6.5	251 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
			
Spring : TS052 [mapped on 2019-12-17 12:54:17]			
Village	Gram Panchayat	Tehsil	District
Sayal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 70	Low	Increased	Spring



Spring Bkior of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO35	Bavli	Perennial
Latitude	Longitude	Altitude
32.98123° N	75.17134° E	995 m (a.m.s.l.)
Discharge	pH	EC
2.1 lpm	8.2	703 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate

			
Spring : TSO35 [mapped on 2020-01-25 12:09:53]			

Village	Gram Panchayat	Tehsil	District
Mohar	Bali	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Low	No Change	Piped water



Spring Bkior of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO36	Bawli	Perennial
Latitude	Longitude	Altitude
32.98506° N	75.16656° E	1033 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	8	410 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TSO36 [mapped on 2020-01-25 13:52:15]			

Village	Gram Panchayat	Tehsil	District
Mohar	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO57	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.99511° N	75.16625° E	1055 m (a.m.s.l)	
Discharge	pH	EC	
16 lpm	8	410 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TSO57 [mapped on 2020-01-25 13:43:14]			
Village	Gram Panchayat	Tehsil	District
Mohar	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO58	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.98767° N	75.16561° E	1086 m (a.m.s.l)	
Discharge	pH	EC	
1.6 lpm	8.1	492 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both	Moderate	Moderate	
Spring : TSO58 [mapped on 2020-01-25 14:11:46]			
Village	Gram Panchayat	Tehsil	District
Mohar	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 90	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO39	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.99663° N	75.16636° E	1060 m (a.m.s.l)	
Discharge	pH	EC	
2 lpm	8	542 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TSO39 [mapped on 2020-01-25 14:32:29]			
Village	Gram Panchayat	Tehsil	District
Mohar	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Low	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO40	NA	Perennial	
Latitude	Longitude	Altitude	
32.96234° N	75.17133° E	925 m (a.m.s.l)	
Discharge	pH	EC	
3.2 lpm	7.8	565 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	Moderate	
Spring : TSO40 [mapped on 2020-01-25 14:55:55]			
Village	Gram Panchayat	Tehsil	District
Mohar	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO41	Bawli	Perennial
Latitude	Longitude	Altitude
32.94395 ° N	75.13267 ° E	814 m (a.m.s.l.)
Discharge	pH	EC
3.2 lpm	8	564 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	High


Spring : TSO41 [mapped on 2020-01-26 13:43:55]

Village	Gram Panchayat	Tehsil	District
Gangera	Bali Upper Dalah	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Low	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO57	Devak Mandir	Perennial
Latitude	Longitude	Altitude
32.92528 ° N	75.15136 ° E	718 m (a.m.s.l.)
Discharge	pH	EC
7.1 lpm	7.3	319 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate



Spring : TSO57 [mapped on 2020-02-27 11:08:16]

Village	Gram Panchayat	Tehsil	District
Devika Mohalla	Udhampur	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS058	Devika Mandir	Perennial
Latitude	Longitude	Altitude
32.92516 ° N	75.1511 ° E	716 m (a.m.s.l.)
Discharge	pH	EC
4 lpm	6.9	368 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate


Spring : TS058 [mapped on 2020-02-27 11:30:17]

Village	Gram Panchayat	Tehsil	District
Devika Mohalla	Udhampur	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TSO59	Devika Mandir	Perennial		
Latitude	Longitude	Altitude		
32.92521 ° N	75.1511 ° E	716 m (a.m.s.l.)		
Discharge	pH	EC		
4.9 lpm	6.8	414 (µS/cm)		
Taste	Colour	Odour		
Un-objectionable	Clear	Un-objectionable		
Major Stressor	Degree of Threat	Vulnerability		
Anthropogenic	High	Moderate		
				
Spring : TSO59 [mapped on 2020-02-27 11:47:20]				
Village		Gram Panchayat	Tehsil	District
Devika Mohalla		Udhampur	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 1000		Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3060	Devika Mandir	Perennial
Latitude	Longitude	Altitude
32.92532° N	75.13112° E	717 m (a.m.s.l.)
Discharge	pH	EC
-	6.8	410 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	High	Moderate



Spring : T3060 [mapped on 2020-02-27 11:58:19]

Village	Gram Panchayat	Tehsil	District
Devika Mohalla	Udhampur	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3061	Devika Mandir	Perennial
Latitude	Longitude	Altitude
32.92523° N	75.1311° E	716 m (a.m.s.l.)
Discharge	pH	EC
8.4 lpm	6.9	425 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate

			
Spring : T3061 [mapped on 2020-02-27 12:10:20]			

Village	Gram Panchayat	Tehsil	District
Devika Mohalla	Udhampur	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3062	Devika Mandir	Perennial
Latitude	Longitude	Altitude
32.92521° N	75.1311° E	716 m (a.m.s.l.)
Discharge	pH	EC
5.3 lpm	6.8	436 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	High



Spring : T3062 [mapped on 2020-02-27 12:27:21]

Village	Gram Panchayat	Tehsil	District
Devika Mohalla	Udhampur	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3065	NA	Perennial
Latitude	Longitude	Altitude
32.92551° N	75.12928° E	712 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	6.8	466 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate

			
Spring : T3065 [mapped on 2020-02-27 13:25:22]			

Village	Gram Panchayat	Tehsil	District
Barian	Badali Barian	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO64	NA	Perennial
Latitude	Longitude	Altitude
32.92337 ° N	75.12919 ° E	715 m (a.m.s.l.)
Discharge	pH	EC
4 lpm	6.9	479 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Both	High	Moderate

			
Spring : TSO64 [mapped on 2020-02-27 13:50:23]			

Village	Gram Panchayat	Tehsil	District
Barian	Badali Barian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 5	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO65	NA	Seasonal
Latitude	Longitude	Altitude
52.92302 ° N	75.12905 ° E	714 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
NA	NA	NA
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate



Spring : TSO65 [mapped on 2020-02-27 14:15:24]

Village	Gram Panchayat	Tehsil	District
Barian	Badali Barian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 10	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO66	NA	Perennial
Latitude	Longitude	Altitude
52.92339 ° N	75.12954 ° E	719 m (a.m.s.l.)
Discharge	pH	EC
4.4 lpm	7.1	524 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate

			
Spring : TSO66 [mapped on 2020-02-27 14:40:08]			

Village	Gram Panchayat	Tehsil	District
Barian	Badali Barian	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 5	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS258	Bawli	Perennial
Latitude	Longitude	Altitude
52.95754 ° N	75.15753 ° E	782 m (a.m.s.l.)
Discharge	pH	EC
1.5 lpm	6.6	586 (µS/cm)
Taste	Colour	Odour
Objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	NA	Moderate



Spring : TS258 [mapped on 2021-05-08 13:14:00]

Village	Gram Panchayat	Tehsil	District
Rainti	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 15	Medium	Decreased	Stream/ Nallah Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS248	Nadu	Perennial
Latitude	Longitude	Altitude
32.97191° N	75.14428° E	1227 m (a.m.s.l.)
Discharge	pH	EC
12.8 lpm	7.6	245 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS248 [mapped on 2021-03-10 11:22:00]			

Village	Gram Panchayat	Tehsil	District
Candala	Candala	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS249	Baldan Bawli	Seasonal
Latitude	Longitude	Altitude
52.97212° N	75.14401° E	1227 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	High

			
Spring : TS249 [mapped on 2021-03-10 11:52:00]			

Village	Gram Panchayat	Tehsil	District
Gandala	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS250	Nadu	Perennial
Latitude	Longitude	Altitude
52.97226° N	75.14418° E	1258 m (a.m.s.l.)
Discharge	pH	EC
1.1 lpm	7.7	270 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS250 [mapped on 2021-03-10 11:57:00]

Village	Gram Panchayat	Tehsil	District
Candala	Candala	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 70	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS251	Bani	Perennial
Latitude	Longitude	Altitude
52.97427° N	75.14356° E	1222 m (a.m.s.l.)
Discharge	pH	EC
2.3 lpm	7.7	226 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

Spring : TS251 [mapped on 2021-03-10 11:55:00]

Village	Gram Panchayat	Tehsil	District
Gandala	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS252	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.97729° N	75.13912° E	1106 m (a.m.s.l.)	
Discharge	pH	EC	
2 lpm	7.7	190 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : TS252 [mapped on 2021-03-10 12:15:00]
Village	Gram Panchayat	Tehsil	District
Candala	Candala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS299	Baw	Perennial	
Latitude	Longitude	Altitude	
32.91005° N	75.11773° E	680 m (a.m.s.l.)	
Discharge	pH	EC	
2.1 lpm	6.6	165 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	NA	Moderate	Spring : TS299 [mapped on 2021-04-07 12:56:00]
Village	Gram Panchayat	Tehsil	District
Copal Chat	Ward no.9	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS300	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.91015° N	75.11809° E	688 m (a.m.s.l.)	
Discharge	pH	EC	
3.9 lpm	7.3	180 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : TS300 [mapped on 2021-04-07 13:05:00]
Village	Gram Panchayat	Tehsil	District
Copal Chat	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 5	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS301	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
32.91225° N	75.12164° E	719 m (a.m.s.l.)	
Discharge	pH	EC	
27.4 lpm	6.5	248 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Medium	High	Spring : TS301 [mapped on 2021-04-07 13:50:00]
Village	Gram Panchayat	Tehsil	District
Dandyal	Kallar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Spring Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature
T3302	Mandir Baiw	Perennial
Latitude	Longitude	Altitude
32.91198° N	75.12117° E	705 m (a.m.s.l.)
Discharge	pH	EC
13.9 lpm	6.7	221 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3302 [mapped on 2021-04-07 14:02:00]			

Village	Gram Panchayat	Tehsil	District
Dandyal	Kallar	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 250	Medium	No Change	Spring Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature
T3305	Devika Bawli	Perennial
Latitude	Longitude	Altitude
32.92528° N	75.15136° E	718 m (a.m.s.l.)
Discharge	pH	EC
4.2 lpm	6.7	290 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	High



Spring : T3305 [mapped on 2021-04-14 11:54:00]

Village	Gram Panchayat	Tehsil	District
Devika	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 400	Medium	No Change	Spring Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature
T3304	Devika Bawli	Perennial
Latitude	Longitude	Altitude
32.92516° N	75.1511° E	716 m (a.m.s.l.)
Discharge	pH	EC
4.2 lpm	6.2	225 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : T3304 [mapped on 2021-04-14 12:03:00]			

Village	Gram Panchayat	Tehsil	District
Devika Mohalla	Ward no.10	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 1500	High	No Change	Spring Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature		
T3305	Devika Bawli	Perennial		
Latitude	Longitude	Altitude		
32.92521° N	75.1511° E	716 m (a.m.s.l.)		
Discharge	pH	EC		
-	6.3	220 (µS/cm)		
Taste	Colour	Odour		
Objectionable	Muddy	Objectionable		
Major Stressor	Degree of Threat	Vulnerability		
Anthropogenic	NA	Moderate		
				
Spring : T3305 [mapped on 2021-04-14 12:14:00]				
Village		Gram Panchayat	Tehsil	District
Devika mohalla		Ward no.10	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
— 1200		Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3306	Sunar Bawli	Perennial	
Latitude	Longitude	Altitude	
32.92395 ° N	75.12954 ° E	714 m (a.m.s.l.)	
Discharge	pH	EC	
3.9 lpm	6.2	606 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	High	
Spring : T3306 [mapped on 2021-04-14 12:41:00]			
Village	Gram Panchayat	Tehsil	District
Devika mohalla	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 400	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3307	Bruchu Bawli	Perennial	
Latitude	Longitude	Altitude	
32.92295 ° N	75.12903 ° E	714 m (a.m.s.l.)	
Discharge	pH	EC	
7.7 lpm	6.8	233 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3307 [mapped on 2021-04-14 13:00:00]			
Village	Gram Panchayat	Tehsil	District
Devika	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 125	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3308	Mangu Bawli	Perennial	
Latitude	Longitude	Altitude	
32.92488 ° N	75.12973 ° E	712 m (a.m.s.l.)	
Discharge	pH	EC	
140 lpm	6	204 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3308 [mapped on 2021-04-14 13:17:00]			
Village	Gram Panchayat	Tehsil	District
Devika	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 2500	High	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3309	Gupt Ganga	Perennial	
Latitude	Longitude	Altitude	
32.92455 ° N	75.12957 ° E	710 m (a.m.s.l.)	
Discharge	pH	EC	
-	6.8	198 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : T3309 [mapped on 2021-04-14 13:31:00]			
Village	Gram Panchayat	Tehsil	District
Devika	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 8	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3510	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.92436° N	75.12895° E	707 m (a.m.s.l.)	
Discharge	pH	EC	
10.1 lpm	6.5	165 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	Moderate	
Spring : T3510 [mapped on 2021-04-14 13:48:00]			
Village	Gram Panchayat	Tehsil	District
Devika	Ward no.10	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3515	Dali Nara	Perennial	
Latitude	Longitude	Altitude	
33.02618° N	75.15196° E	1340 m (a.m.s.l.)	
Discharge	pH	EC	
4.7 lpm	8.2	223 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
NA	NA	High	
Spring : T3515 [mapped on 2021-07-08 11:40:00]			
Village	Gram Panchayat	Tehsil	District
Bali	Naroor	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3516	Baw	Perennial	
Latitude	Longitude	Altitude	
33.02808° N	75.15249° E	1311 m (a.m.s.l.)	
Discharge	pH	EC	
0.1 lpm	7.2	256 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	High	
Spring : T3516 [mapped on 2021-07-08 11:54:00]			
Village	Gram Panchayat	Tehsil	District
Trishi	Trishi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3517	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.99994° N	75.14873° E	1172 m (a.m.s.l.)	
Discharge	pH	EC	
7.1 lpm	7.6	223 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3517 [mapped on 2021-07-08 12:18:00]			
Village	Gram Panchayat	Tehsil	District
Trishi	Trishi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3518	Bawli	Seasonal
Latitude	Longitude	Altitude
32.99237° N	75.14531° E	1149 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High



Spring : T3518 [mapped on 2021-07-08 12:59:00]

Village	Gram Panchayat	Tehsil	District
Trishi	Trishi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3519	Baw	Perennial
Latitude	Longitude	Altitude
32.99233° N	75.145° E	1144 m (a.m.s.l.)
Discharge	pH	EC
2.6 lpm	8	256 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	NA	Moderate



Spring : T3519 [mapped on 2021-07-08 12:43:00]

Village	Gram Panchayat	Tehsil	District
Trishi	Trishi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 130	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3520	Bawli	Perennial
Latitude	Longitude	Altitude
32.98305° N	75.14208° E	1103 m (a.m.s.l.)
Discharge	pH	EC
2.5 lpm	7.3	222 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : T3520 [mapped on 2021-07-08 12:56:00]

Village	Gram Panchayat	Tehsil	District
Himbria	Candala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3521	Jansu Bawli	Perennial
Latitude	Longitude	Altitude
32.9707° N	75.1392° E	1057 m (a.m.s.l.)
Discharge	pH	EC
12.5 lpm	7.4	243 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : T3521 [mapped on 2021-07-08 13:14:00]			
Village	Gram Panchayat	Tehsil	District
Gandala	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3522	Nadu	Perennial
Latitude	Longitude	Altitude
32.92341° N	75.14673° E	679 m (a.m.s.l.)
Discharge	pH	EC
67.9 lpm	6.5	214 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3522 [mapped on 2021-07-10 12:01:00]			

Village	Gram Panchayat	Tehsil	District
Sangur	Sangur	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 800	High	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3525	Nadu	Perennial
Latitude	Longitude	Altitude
32.92672° N	75.14501° E	700 m (a.m.s.l.)
Discharge	pH	EC
96 lpm	6.6	223 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3525 [mapped on 2021-07-10 13:17:00]			

Village	Gram Panchayat	Tehsil	District
Udhampur	Udhampur	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 400	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3524	Nadu	Perennial
Latitude	Longitude	Altitude
33.00583° N	75.17029° E	1459 m (a.m.s.l.)
Discharge	pH	EC
75.4 lpm	6.6	64 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3524 [mapped on 2021-07-31 11:53:00]

Village	Gram Panchayat	Tehsil	District
Bali	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3525	Nadu	Perennial
Latitude	Longitude	Altitude
33.00741° N	75.17525° E	1443 m (a.m.s.l.)
Discharge	pH	EC
85.7 lpm	7.5	116 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3525 [mapped on 2021-07-31 13:07:00]			

Village	Gram Panchayat	Tehsil	District
Chatera	Moud	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3526	Nadu	Perennial
Latitude	Longitude	Altitude
33.00528 ° N	75.176 ° E	1370 m (a.m.s.l)
Discharge	pH	EC
20 lpm	7.6	133 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : T3526 [mapped on 2021-07-31 13:46:00]			

Village	Gram Panchayat	Tehsil	District
Chatara	Moud	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	Increased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3527	Bawli	Perennial	
Latitude	Longitude	Altitude	
33.00232 ° N	75.17223 ° E	1384 m (a.m.s.l)	
Discharge	pH	EC	
0.6 lpm	7.6	151 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Muddy	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
			
Spring : T3527 [mapped on 2021-07-31 14:19:00]			
Village	Gram Panchayat	Tehsil	District
Upper bali	Upper bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3528	Nadu and Bawli	Perennial
Latitude	Longitude	Altitude
33.00371 ° N	75.17157 ° E	1410 m (a.m.s.l)
Discharge	pH	EC
5 lpm	6.8	128 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3528 [mapped on 2021-07-31 14:47:00]

Village	Gram Panchayat	Tehsil	District
Upper bali	Upper bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3529	Nadu	Perennial
Latitude	Longitude	Altitude
33.00371 ° N	75.16682 ° E	1422 m (a.m.s.l)
Discharge	pH	EC
66.7 lpm	7.6	205 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3529 [mapped on 2021-07-31 15:38:00]

Village	Gram Panchayat	Tehsil	District
Upper bali	Upper bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3330	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.99507° N	75.15926° E	1376 m (a.m.s.l)	
Discharge	pH	EC	
1 lpm	6.5	101 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3330 [mapped on 2021-07-31 16:15:00]			
Village	Gram Panchayat	Tehsil	District
Upper bali	Upper bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3331	Shiv Mandir Bawli	Perennial	
Latitude	Longitude	Altitude	
32.99119° N	75.1569° E	1325 m (a.m.s.l)	
Discharge	pH	EC	
3.3 lpm	6.7	156 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3331 [mapped on 2021-07-31 16:37:00]			
Village	Gram Panchayat	Tehsil	District
Upper bali	Upper bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Increased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3332	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.98829° N	75.15795° E	1240 m (a.m.s.l)	
Discharge	pH	EC	
7.5 lpm	7.2	216 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3332 [mapped on 2021-08-01 11:55:00]			
Village	Gram Panchayat	Tehsil	District
Tand bali	Upper bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3333	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.98598° N	75.16076° E	1145 m (a.m.s.l)	
Discharge	pH	EC	
6.7 lpm	8.1	250 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : T3333 [mapped on 2021-08-01 12:27:00]			
Village	Gram Panchayat	Tehsil	District
Lower bali	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Low	Increased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3334	Kumara da Soo	Perennial
Latitude	Longitude	Altitude
32.98566 ° N	75.1613 ° E	1143 m (a.m.s.l.)
Discharge	pH	EC
10.9 lpm	7	242 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3334 [mapped on 2021-08-01 12:41:00]			

Village	Gram Panchayat	Tehsil	District
Lower bali	Bali	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 130	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS335	Bawli	Perennial
Latitude	Longitude	Altitude
32.98443 ° N	75.1615 ° E	1143 m (a.m.s.l.)
Discharge	pH	EC
3.3 lpm	7.2	262 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Muddy	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate



Spring : TS335 [mapped on 2021-08-01 13:06:00]

Village	Gram Panchayat	Tehsil	District
Lower bali	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 60	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS336	Pattini da Nadu	Perennial
Latitude	Longitude	Altitude
32.9839 ° N	75.15961 ° E	1174 m (a.m.s.l.)
Discharge	pH	EC
46.2 lpm	7.5	215 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS336 [mapped on 2021-08-01 13:28:00]

Village	Gram Panchayat	Tehsil	District
Lower bali	Bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS337	Sangara Bawli	Perennial	
Latitude	Longitude	Altitude	
32.98284 ° N	75.16048 ° E	1174 m (a.m.s.l.)	
Discharge	pH	EC	
5 lpm	7.4	275 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS337 [mapped on 2021-08-01 13:54:00]			
Village	Gram Panchayat	Tehsil	District
Sangara	Sangara	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 40	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3338	Chanara Nadu	Perennial
Latitude	Longitude	Altitude
32.98521° N	75.1597° E	1184 m (a.m.s.l)
Discharge	pH	EC
10 lpm	7.3	297 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate


Spring : T3338 [mapped on 2021-08-01 14:11:00]

Village	Gram Panchayat	Tehsil	District
Chanara, upper-bali	Upper-bali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3544	Nadu	Perennial
Latitude	Longitude	Altitude
33.04499° N	75.22266° E	1888 m (a.m.s.l)
Discharge	pH	EC
12 lpm	7.6	122 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	Moderate


Spring : T3544 [mapped on 2021-08-08 15:11:00]

Village	Gram Panchayat	Tehsil	District
Childi	Madha Upper	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3434	Sui	Perennial
Latitude	Longitude	Altitude
32.96515° N	75.17639° E	1019 m (a.m.s.l)
Discharge	pH	EC
10.9 lpm	8.1	167 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3434 [mapped on 2021-10-28 10:23:00]			

Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3435	Bawi	Perennial
Latitude	Longitude	Altitude
32.96398° N	75.18147° E	1060 m (a.m.s.l.)
Discharge	pH	EC
6.5 lpm	7.2	86 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate

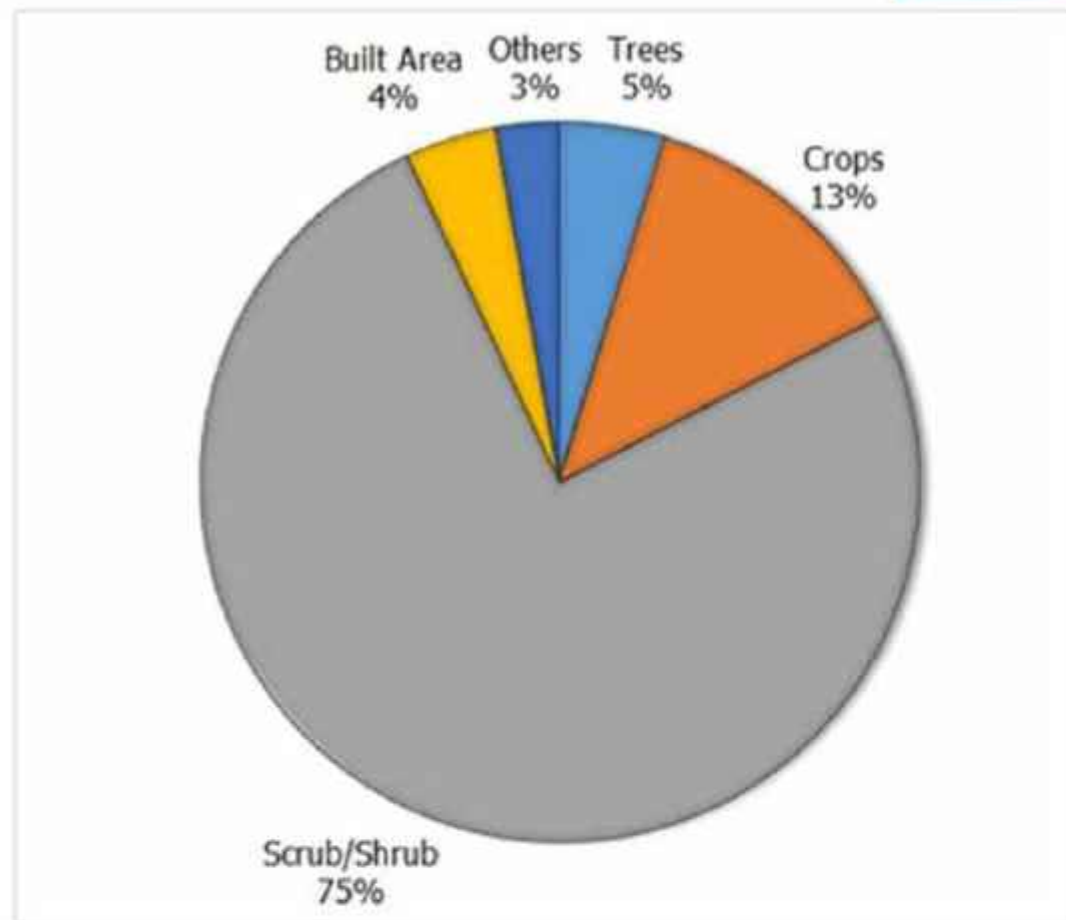
			
Spring: T3435 [mapped on 2021-10-28 10:35:00]			

Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Udhampur	Udhampur

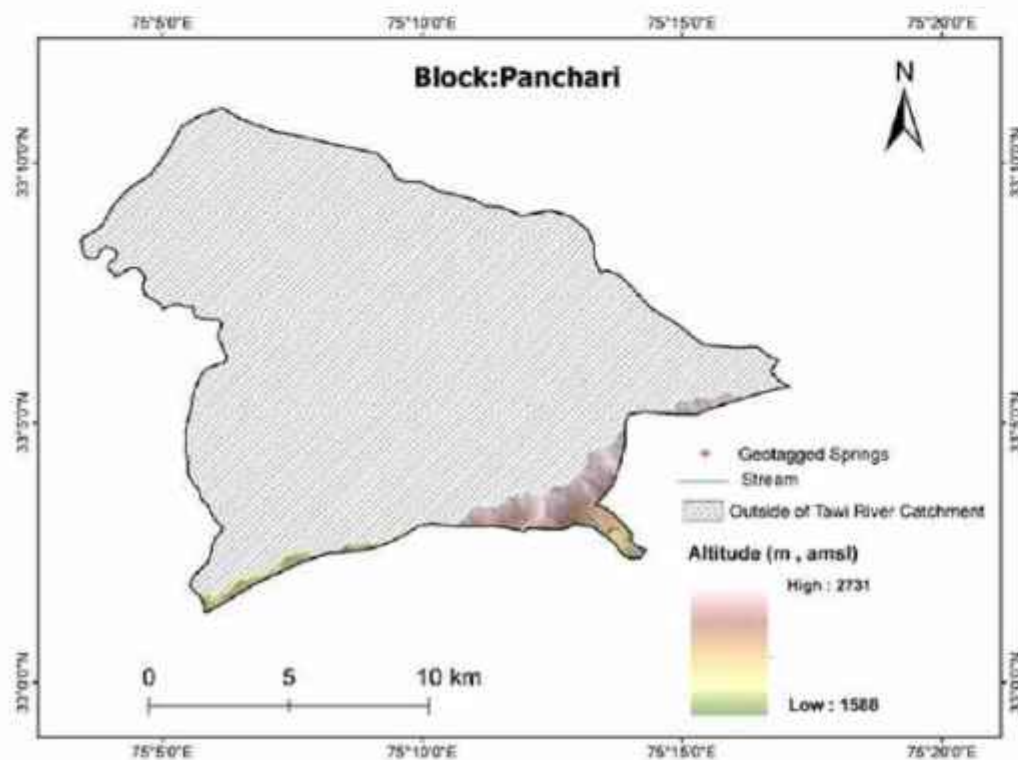
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring Piped water

Tawi River Catchment

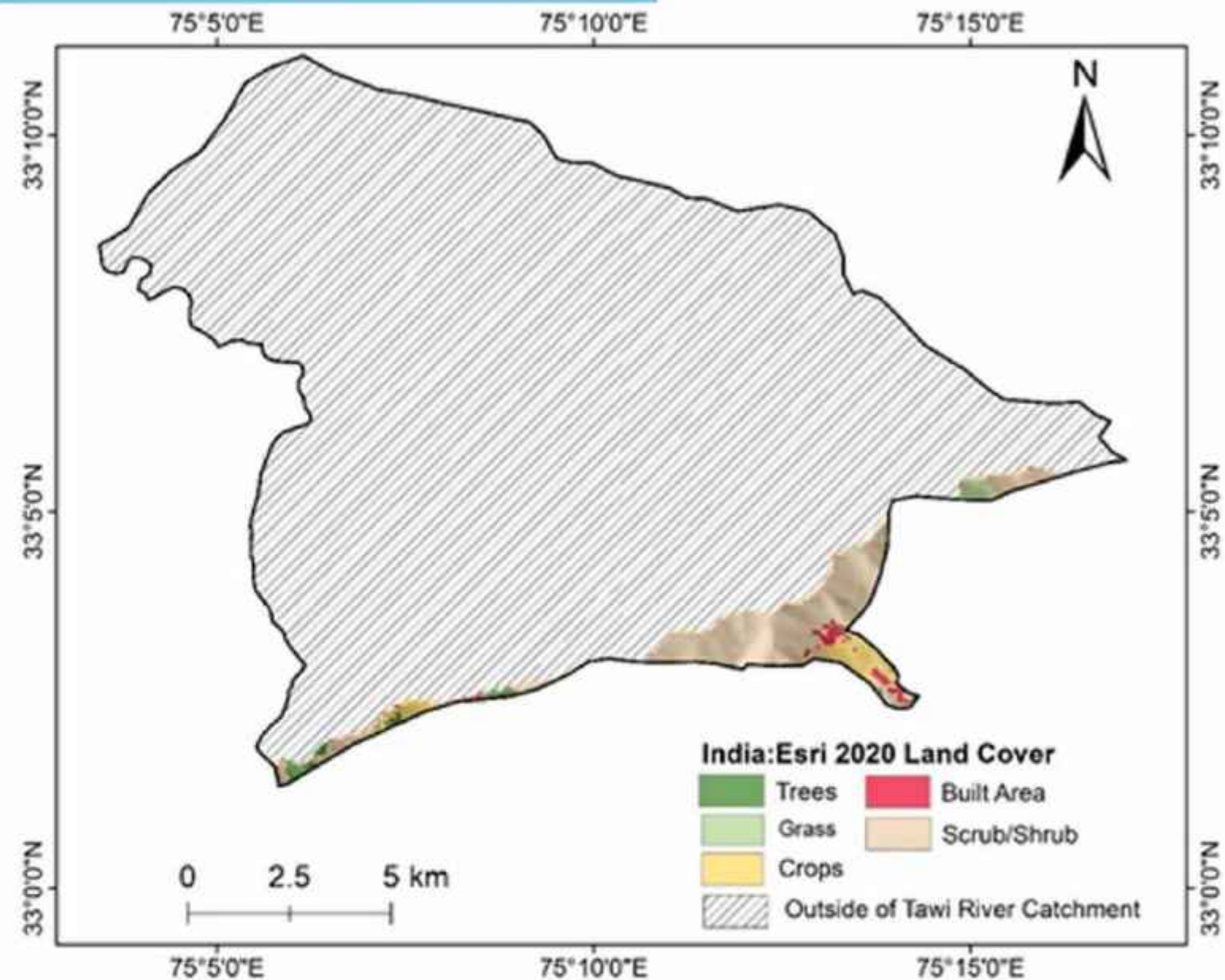
Panchari Block, Udhampur



Landuse landcover pattern of Panchari block



Topographic map of Panchari block



Landuse land cover map of Panchari block

The Panchari block of Udhampur district comprises 13 Panchayats and 22 villages. According to 2011 Census, it has a population of 26,260. With an area of approximately 191.87 sq. km, the latitudinal extent of the Panchari block ranges from 32.022541°N to 33.184186°N, while the longitudinal extent ranges from 75.057252°E to 75.284453°E. 5.78% of the total area falls within the Tawi River catchment. In the Panchari block of the Udhampur district, 04 springs were geotagged as majority of the area was outside form the Tawi River catchment. The altitude of the study area in this block varies from 1588 to 2731 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3341	Nadu	Perennial
Latitude	Longitude	Altitude
33.0484 ° N	75.2265 ° E	1887 m (a.m.s.l.)
Discharge	pH	EC
15.9 lpm	7.5	145 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3341 [mapped on 2021-08-08 14:13:00]			

Village	Gram Panchayat	Tehsil	District
Kithir	Madha Upper	Panchari	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	Increased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3342	Nadu	Perennial
Latitude	Longitude	Altitude
33.04915° N	75.22737° E	1901 m (a.m.s.l.)
Discharge	pH	EC
6.7 lpm	7.8	118 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : T3342 [mapped on 2021-08-08 14:29:00]			

Village	Gram Panchayat	Tehsil	District
Kithir ward no 3	Madha Upper	Panchari	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 35	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3345	Nadu	Perennial
Latitude	Longitude	Altitude
33.04929° N	75.22945° E	1914 m (a.m.s.l.)
Discharge	pH	EC
2.6 lpm	7.8	198 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3345 [mapped on 2021-08-08 14:30:00]

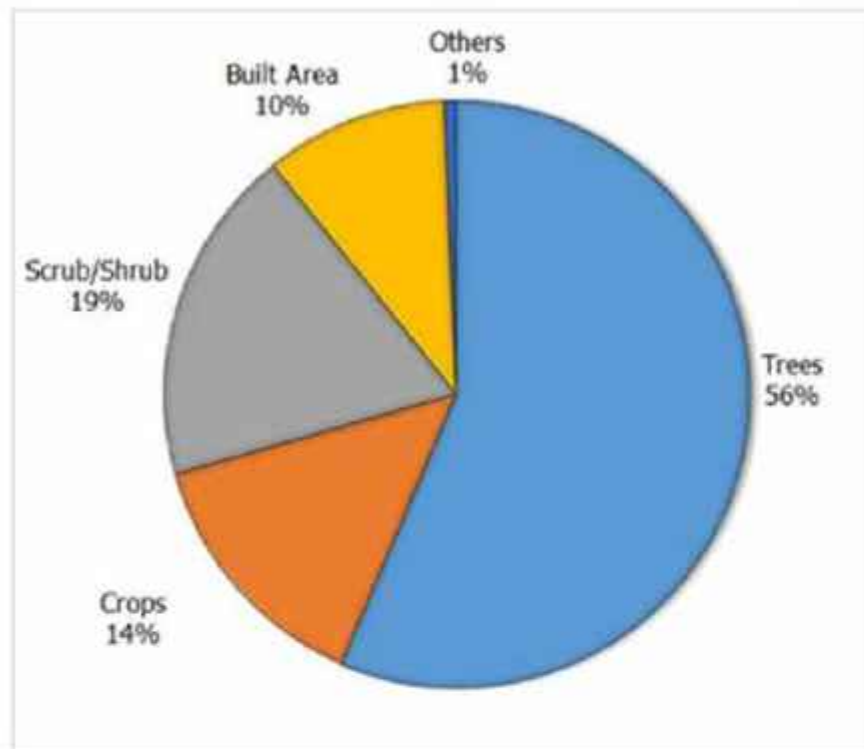
Village	Gram Panchayat	Tehsil	District
Kithir	Madha Upper	Panchari	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 36	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

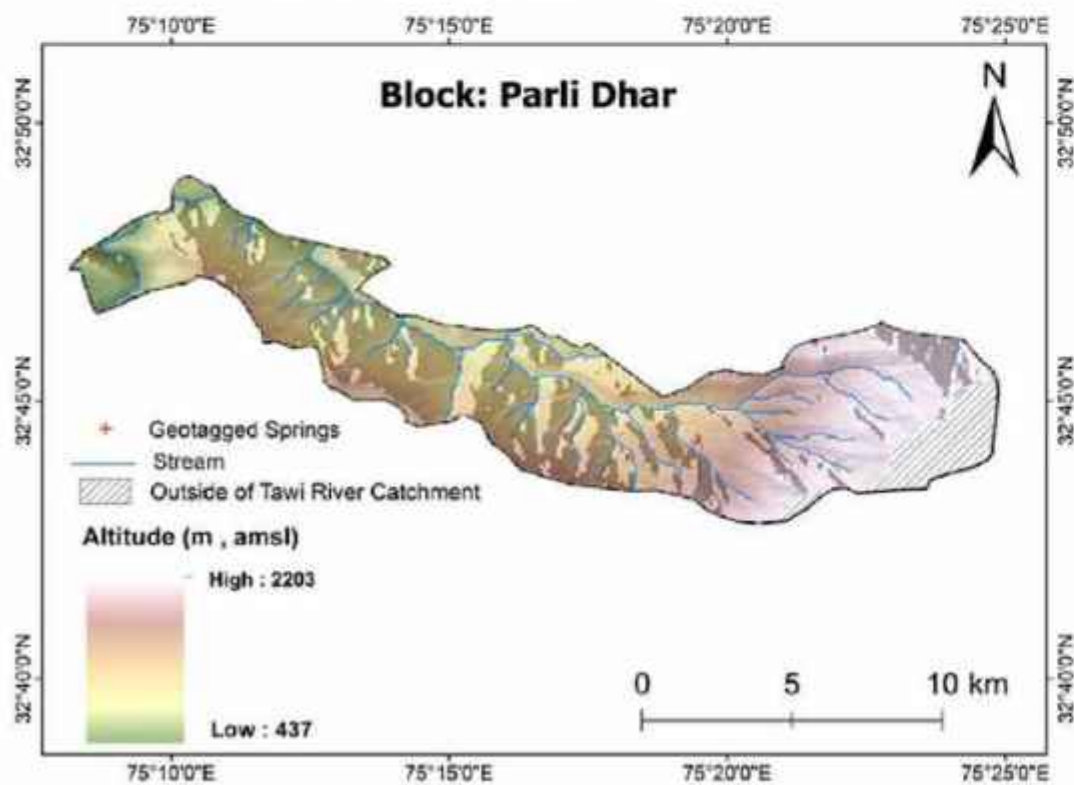
Spring ID	Spring Name	Nature		
T3345	Nadu and Bawli	Perennial		
Latitude	Longitude	Altitude		
33.04601° N	75.23306° E	1847 m (a.m.s.l.)		
Discharge	pH	EC		
0.5 lpm	8.1	173 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	NA	High		
Spring : T3345 [mapped on 2021-08-08 16:41:00]				
Village		Gram Panchayat	Tehsil	District
Kithir		Madha Upper	Panchari	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
— 30		Low	No Change	Spring

Tawi River Catchment

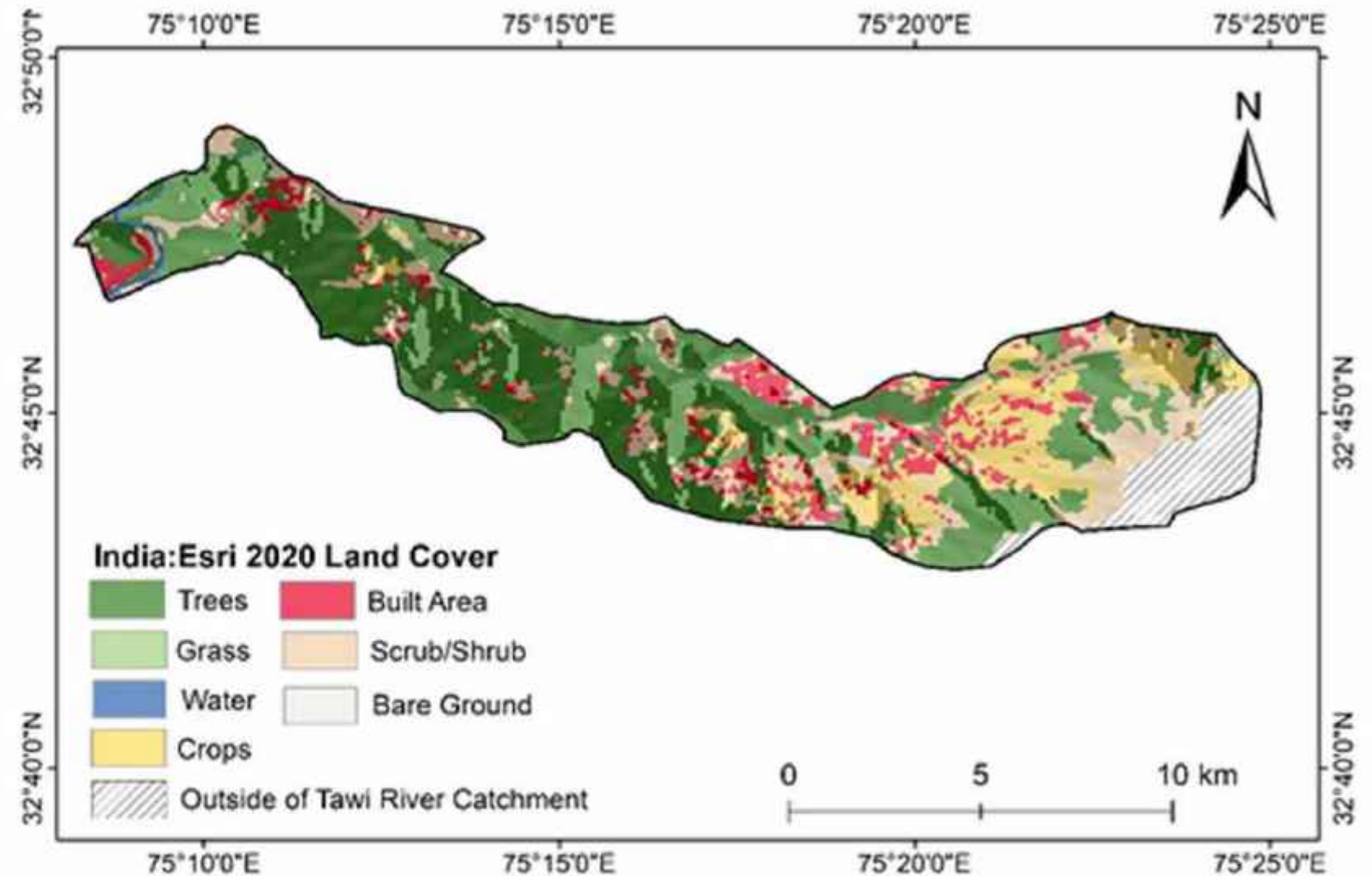
Parli Dhar Block, Udhampur



Landuse landcover pattern of Parli Dhar



Topographic map of Parli Dhar



Landuse land cover map of Parli Dhar

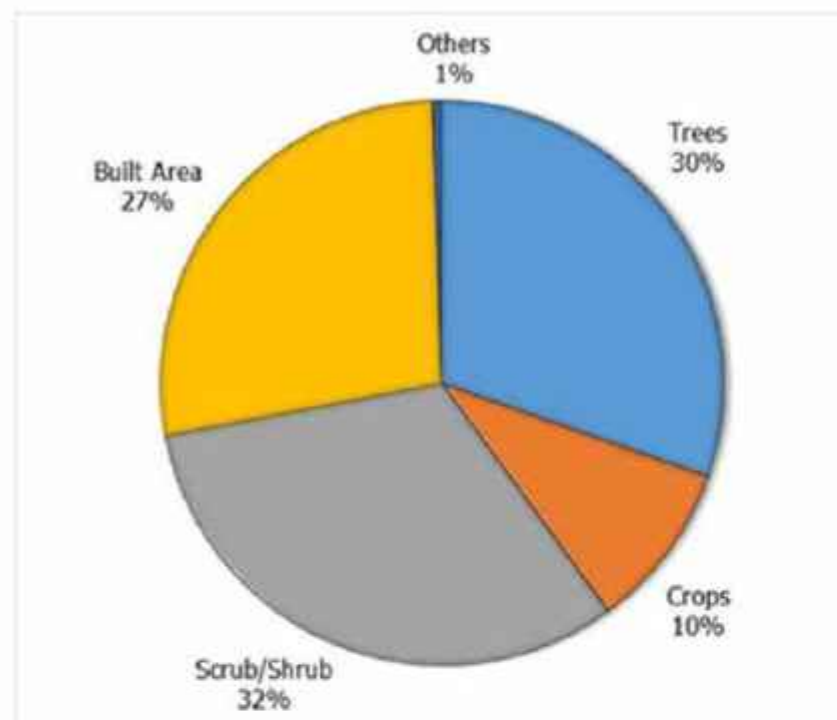
The Parli Dhar block of Udhampur district comprises 07 Panchayats and 13 villages. According to 2011 Census, it has a population of 13,843. With an area of approximately 102.68 sq. km, the latitudinal extent of the Parli Dhar block ranges from 32.713214°N to 32.817272°N, while the longitudinal extent ranges from 75.136351°E to 75.414450°E. 93.40% of the total area falls within the Tawi River catchment. In the Parli Dhar block of the Udhampur district, only 01 springs was geotagged. The altitude of study area in this block varies from 437 to 2203 meters above mean sea level.

Spring Atlas of Tawi River Catchment

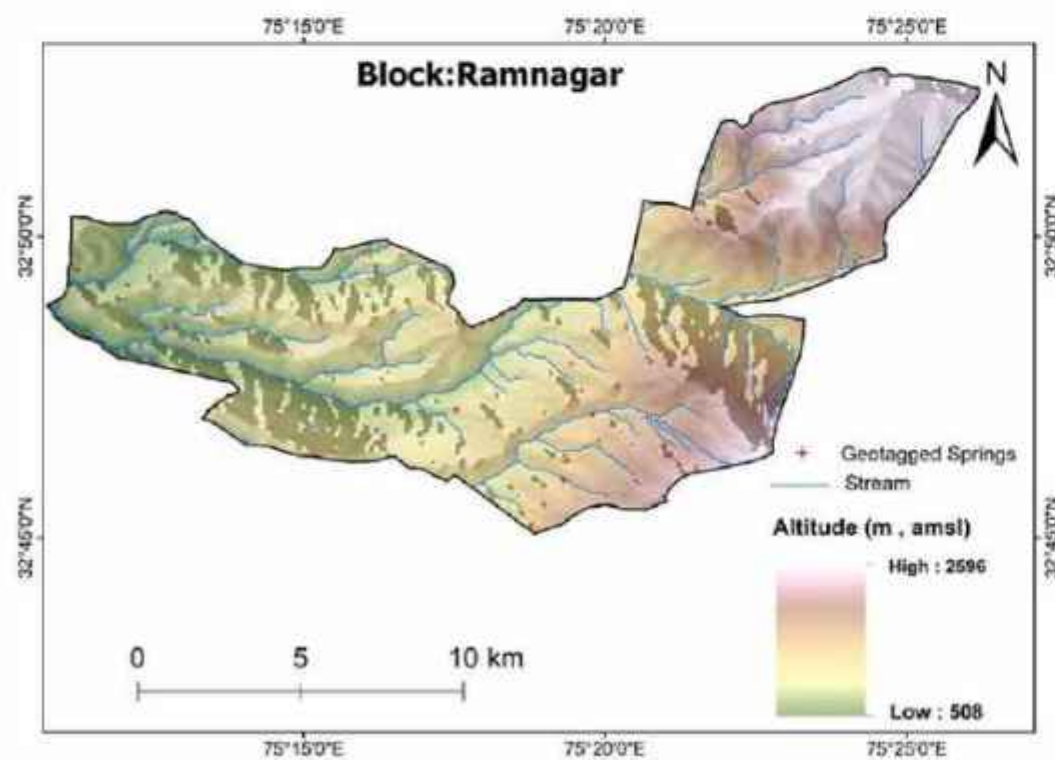
Spring ID	Spring Name	Nature	
TS078	Darsu Mandir	Perennial	
Latitude	Longitude	Altitude	
32.79449° N	75.14425° E	511 m (a.m.s.l.)	
Discharge	pH	EC	
45.6 lpm	7	848 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TS078 [mapped on 2020-07-06 14:21:44]			
Village	Gram Panchayat	Tehsil	District
Pingar	Pingar	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 3000	High	Decreased	Spring

Tawi River Catchment

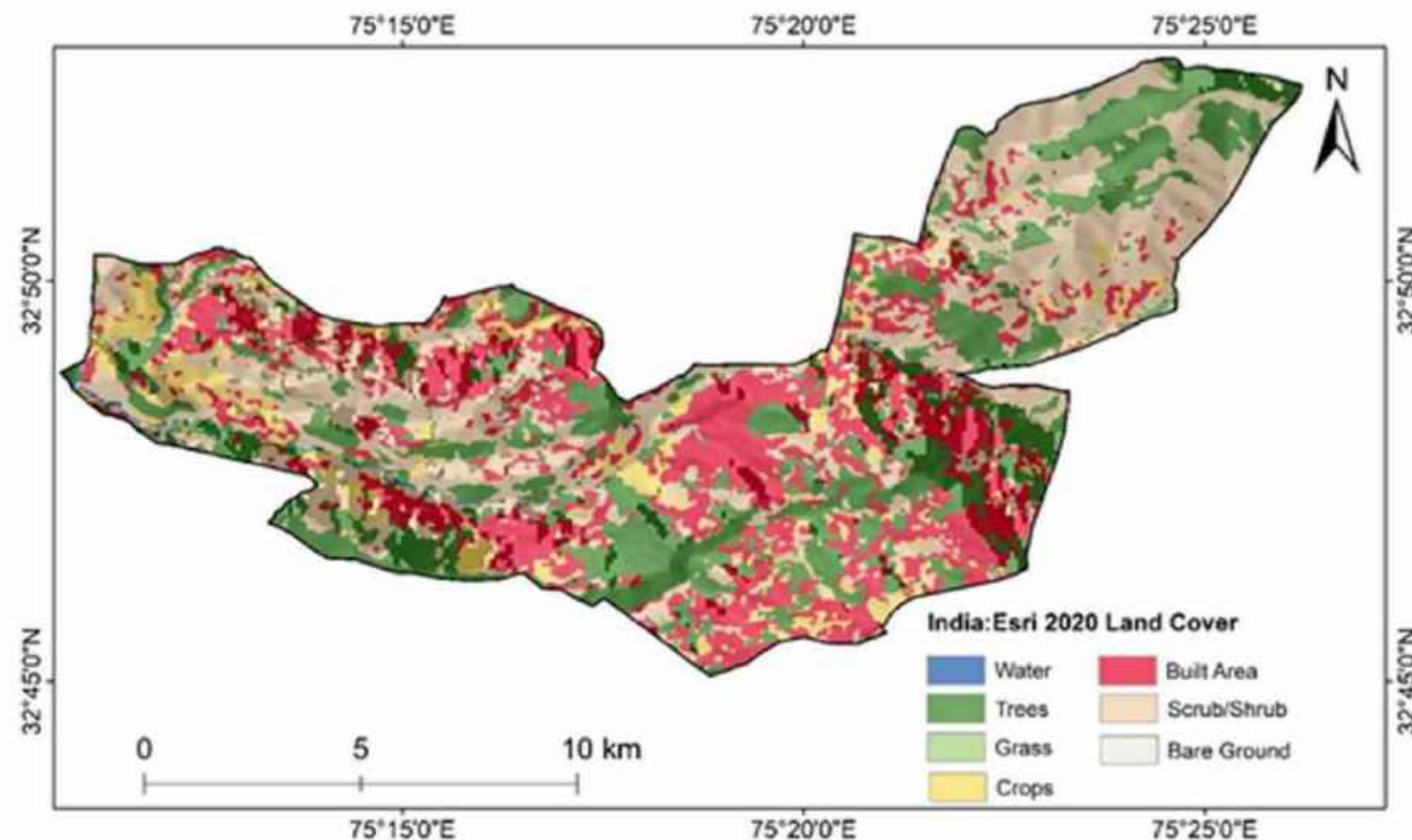
Ramnagar Block, Udhampur



Landuse landcover pattern of Ramnagar block



Topographic map of Ramnagar block



Landuse land cover map of Ramnagar block

The Ramnagar block of Udhampur district comprises 18 Panchayats and 18 villages. According to 2011 Census, it has a population of 36,552. With an area of approximately 142.33 sq. km, the latitudinal extent of the Ramnagar block ranges from 32.751096°N to 32.879676°N, while the longitudinal extent ranges from 75.178990°E to 75.436688°E. In the Ramnagar block of the Udhampur district, 15 springs were geotagged, covering various villages. The altitude in this block varies from 508 to 2596 meters above mean sea level.

Spring #166 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS166	Nadu	Perennial
Latitude	Longitude	Altitude
32.82836 ° N	75.26692 ° E	709 m (a.m.s.l.)
Discharge	pH	EC
9.5 lpm	7.7	597 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS166 [mapped on 2020-12-08 15:11:00]			

Village	Gram Panchayat	Tehsil	District
Rumain	Kathil- Ganju East	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water



Spring #167 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS167	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
52.82506 ° N	75.27022 ° E	756 m (a.m.s.l.)
Discharge	pH	EC
6.4 lpm	7.2	592 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate



Spring : TS167 [mapped on 2020-12-08 15:50:00]

Village	Gram Panchayat	Tehsil	District
Rumain	Kathil- Ganju East	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Piped water



Spring #168 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS168	Aamalia di Baw	Perennial
Latitude	Longitude	Altitude
52.82642 ° N	75.28458 ° E	797 m (a.m.s.l.)
Discharge	pH	EC
6.4 lpm	7.1	807 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	High

			
Spring : TS168 [mapped on 2020-12-08 14:14:00]			

Village	Gram Panchayat	Tehsil	District
Palarn	Kathil- Ganju West	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	High	Decreased	Piped water



Spring #174 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS174	Nauan Baw	Perennial
Latitude	Longitude	Altitude
52.79924 ° N	75.31625 ° E	1198 m (a.m.s.l.)
Discharge	pH	EC
6 lpm	7.1	545 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	High

			
Spring : TS174 [mapped on 2020-12-09 11:44:00]			

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS175	Chamanu di Bawli	Perennial
Latitude	Longitude	Altitude
32.7537° N	75.31296° E	1165 m (a.m.s.l.)
Discharge	pH	EC
8 lpm	7.5	343 (µS/cm)
Taste	Colour	Odour
Objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	High

			
Spring : TS175 [mapped on 2020-12-09 12:06:00]			

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS176	Chamma Nala	Perennial	
Latitude	Longitude	Altitude	
32.76599° N	75.52197° E	1110 m (a.m.s.l.)	
Discharge	pH	EC	
3 lpm	7.5	343 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Medium	High	
Spring : TS176 [mapped on 2020-12-09 12:56:00]			
Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 170	High	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS177	Hambal Nala	Perennial
Latitude	Longitude	Altitude
32.76623° N	75.52167° E	1097 m (a.m.s.l.)
Discharge	pH	EC
5 lpm	8.1	495 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS177 [mapped on 2020-12-09 12:49:00]			

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS178	Kawa	Perennial
Latitude	Longitude	Altitude
32.77135 ° N	75.52286 ° E	1087 m (a.m.s.l.)
Discharge	pH	EC
2.5 lpm	7.7	554 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	High



Spring : TS178 [mapped on 2020-12-09 13:20:00]

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring Piped water

Spring #107 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS179	Jandola Baw	Perennial
Latitude	Longitude	Altitude
32.77267° N	75.522° E	1059 m (a.m.s.l.)
Discharge	pH	EC
20 lpm	7.4	545 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : TS179 [mapped on 2020/12/09 13:41:00]			

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~120	Medium	Decreased	Spring Piped water



Spring #108 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS180	Mandir Baw	Perennial
Latitude	Longitude	Altitude
52.78419° N	75.52987° E	1055 m (a.m.s.l.)
Discharge	pH	EC
8 lpm	7.3	560 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS180 [mapped on 2020/12/09 14:14:00]			

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring Piped water



Spring #109 of Tawi River Catchment

Spring ID	Spring Name	Nature
TS181	Baw	Perennial
Latitude	Longitude	Altitude
52.79058° N	75.52676° E	1054 m (a.m.s.l.)
Discharge	pH	EC
8 lpm	7.4	640 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS181 [mapped on 2020/12/09 14:30:00]			

Village	Gram Panchayat	Tehsil	District
Sownather	Sownather	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water



Spring #102 of Tawi River Catchment

Spring ID	Spring Name	Nature		
TS182	Baw	Seasonal		
Latitude	Longitude	Altitude		
52.798° N	75.52401° E	1005 m (a.m.s.l.)		
Discharge	pH	EC		
-	NA	-		
Taste	Colour	Odour		
Unobjectionable	Muddy	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	None	High		
				
Spring : TS182 [mapped on 2020/12/09 14:49:00]				
Village		Gram Panchayat	Tehsil	District
Ramnagar		Ramnagar	Ramnagar	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 50		Medium	Decreased	Spring Piped water



Spring ID	Spring Name	Nature
TS185	Bawli	Perennial
Latitude	Longitude	Altitude
32.78545° N	75.29218° E	781 m (a.m.s.l.)
Discharge	pH	EC
6.4 lpm	7.3	813 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High



Spring : TS185 [mapped on 2020-12-09 15:55:00]

Village	Gram Panchayat	Tehsil	District
Kermulim	Ramnagar	Ramnagar	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Piped water

Spring ID	Spring Name	Nature
TS413	Khoo Bawli	Perennial
Latitude	Longitude	Altitude
32.824° N	75.18756° E	592 m (a.m.s.l.)
Discharge	pH	EC
66.7 lpm	7.5	342 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS413 [mapped on 2021-10-26 12:50:00]			

Village	Gram Panchayat	Tehsil	District
Chanunta	Chanunta	Ramnagar	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 400	Medium	No Change	Spring Piped water

Spring ID	Spring Name	Nature
TS427	Bawli	Perennial
Latitude	Longitude	Altitude
32.80805° N	75.21224° E	615 m (a.m.s.l.)
Discharge	pH	EC
1.8 lpm	7.6	288 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	N/A	High



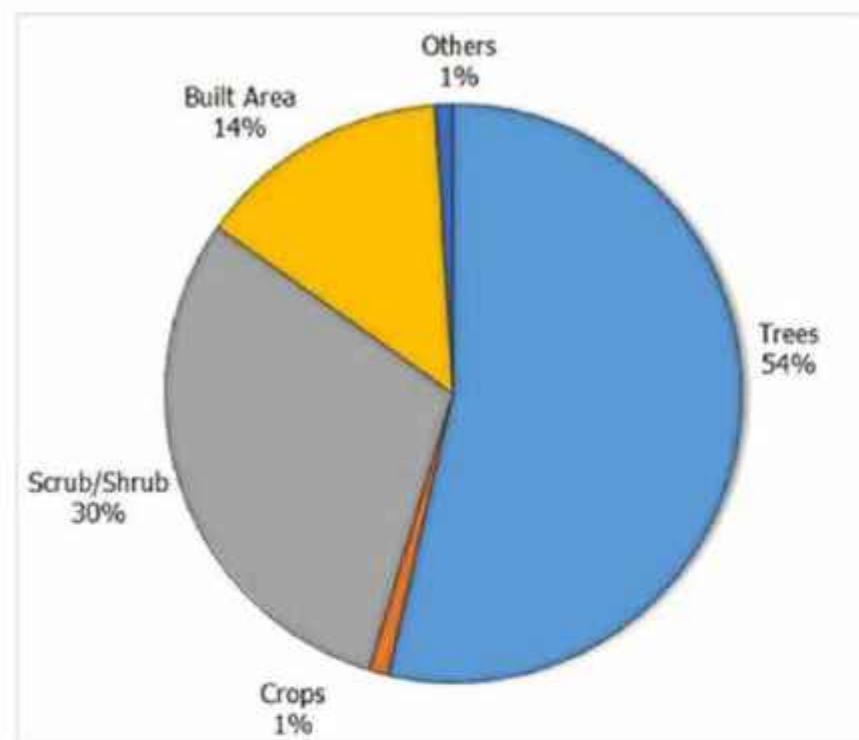
Spring : TS427 [mapped on 2021-10-27 15:15:00]

Village	Gram Panchayat	Tehsil	District
Khalote	Khalote	Ramnagar	Udhampur

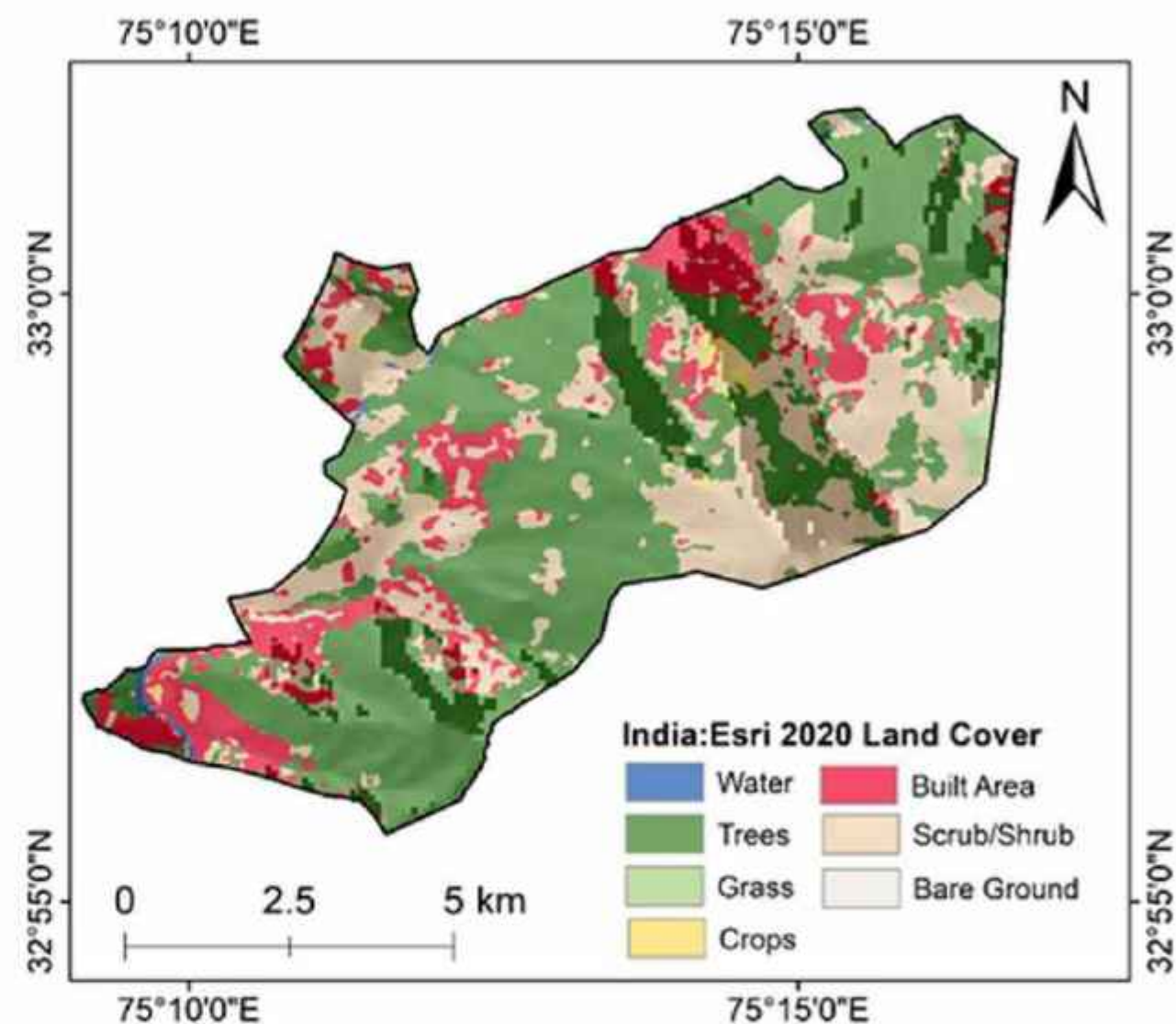
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	No Change	Spring

Tawi River Catchment

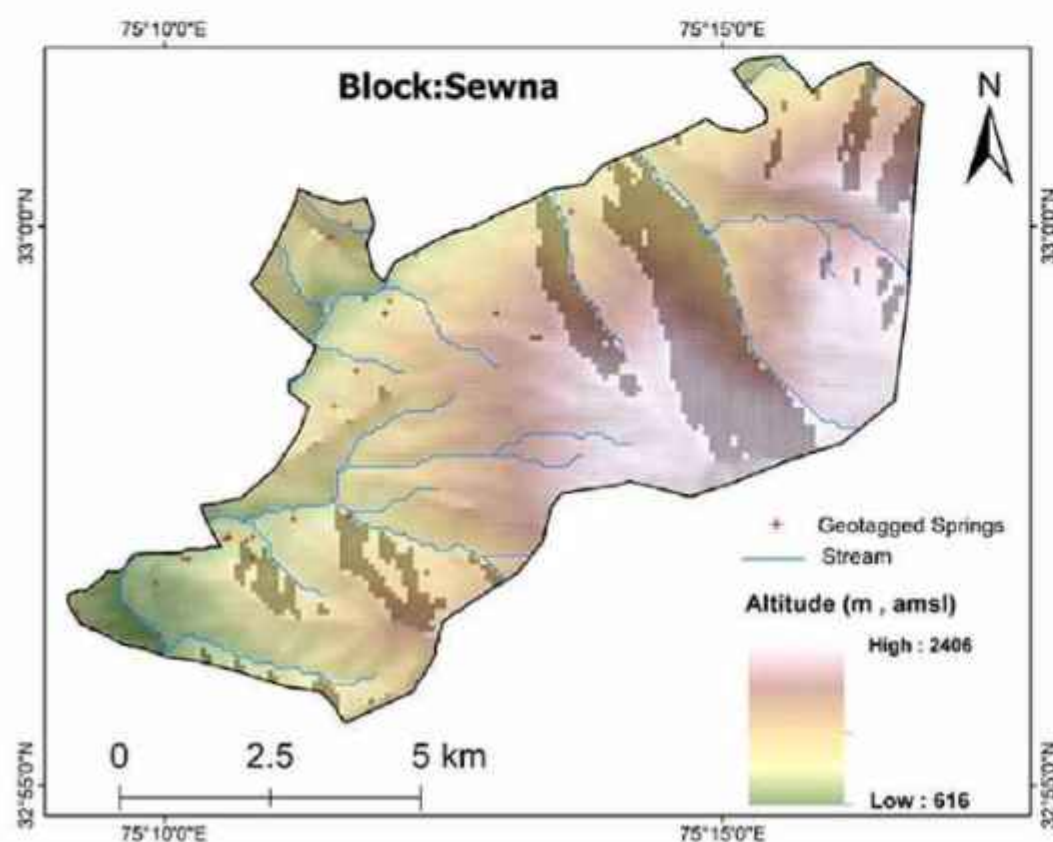
Sewna Block, Udhampur



Landuse landcover pattern of Sewna block



Landuse land cover map of Sewna block



Topographic map of Sewna block

The Sewna block of Udhampur district comprises 05 Panchayats and 08 villages. According to 2011 Census, it has a population of 11,315. With an area of approximately 61.02 sq. km, the latitudinal extent of the Sewna block ranges from 32.925914 N to 33.025425 N, while the longitudinal extent ranges from 75.152172 E to 75.279891 E. In the Sewna block of the Udhampur district, 22 springs were geotagged, covering various villages. The altitude in this block varies from 616 to 2406 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO42	Demp	Perennial
Latitude	Longitude	Altitude
52.9964° N	75.19153° E	1175 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	8	450 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	High

			
Spring : TSO42 [mapped on 2020-01-26 13:55:47]			

Village	Gram Panchayat	Tehsil	District
Gangera	Bali Upper Dalah	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO45	Nadu	Perennial
Latitude	Longitude	Altitude
53.00047° N	75.19436° E	980 m (a.m.s.l.)
Discharge	pH	EC
55.3 lpm	7.9	625 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Low	Moderate

			
Spring : TSO45 [mapped on 2020-01-27 12:39:34]			

Village	Gram Panchayat	Tehsil	District
Cheunti	Nasoo	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 32	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO44	Bawli	Perennial
Latitude	Longitude	Altitude
32.98662 ° N	75.20052 ° E	912 m (a.m.s.l.)
Discharge	pH	EC
2.1 lpm	7.9	657 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TSO44 [mapped on 2020-01-27 15:13:27]			

Village	Gram Panchayat	Tehsil	District
Samoli	Samoli	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 20	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO45	Bawli	Perennial
Latitude	Longitude	Altitude
52.98701° N	75.21625° E	1450 m (a.m.s.l.)
Discharge	pH	EC
24 lpm	7.9	615 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TSO45 [mapped on 2020-01-27 14:00:28]			

Village	Gram Panchayat	Tehsil	District
Samoli	Samoli	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 40	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3046	Bawli	Perennial
Latitude	Longitude	Altitude
32.98701° N	75.19958° E	990 m (a.m.s.l.)
Discharge	pH	EC
1.3 lpm	7.9	610 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : T3046 [mapped on 2020-01-27 15:00:00]			

Village	Gram Panchayat	Tehsil	District
Bant	Charat	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 28	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3085	Raman Sula Bawli	Perennial
Latitude	Longitude	Altitude
32.94233° N	75.15568° E	804 m (a.m.s.l.)
Discharge	pH	EC
1.3 lpm	7.7	820 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Moderate	Moderate

			
Spring : T3085 [mapped on 2020-07-07 09:37:12]			

Village	Gram Panchayat	Tehsil	District
Jakhani	Ossu	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 2000	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3184	Pastu di Baw	Perennial
Latitude	Longitude	Altitude
32.95539° N	75.1859° E	847 m (a.m.s.l.)
Discharge	pH	EC
6 lpm	7.3	333 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : T3184 [mapped on 2020-12-10 10:18:00]			

Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3185	Baado	Perennial
Latitude	Longitude	Altitude
32.95539° N	75.1799° E	817 m (a.m.s.l.)
Discharge	pH	EC
6.4 lpm	7.3	545 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	High


Spring : T3185 [mapped on 2020-12-10 10:41:00]

Village	Gram Panchayat	Tehsil	District
Ossa	Ossa	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS186	Bantu	Perennial
Latitude	Longitude	Altitude
32.95309 ° N	75.17994 ° E	817 m (a.m.s.l.)
Discharge	pH	EC
9.6 lpm	7.5	569 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS186 [mapped on 2020/12/10 10:57:00]			

Village	Gram Panchayat	Tehsil	District
Ossu	Ossu	Chenani	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS187	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
32.95065 ° N	75.17972 ° E	868 m (a.m.s.l.)	
Discharge	pH	EC	
4 lpm	7.7	427 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Muddy	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	High	
Spring : TS187 [mapped on 2020/12/10 11:48:00]			
			
Village	Gram Panchayat	Tehsil	District
Ossu	Ossu	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS188	Amalan di Baw	Perennial
Latitude	Longitude	Altitude
32.95368 ° N	75.17628 ° E	781 m (a.m.s.l.)
Discharge	pH	EC
3.6 lpm	8.1	475 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Muddy	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TS188 [mapped on 2020/12/10 12:20:00]			

Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS189	Palmana di Baw	Perennial
Latitude	Longitude	Altitude
32.9535 ° N	75.17639 ° E	790 m (a.m.s.l.)
Discharge	pH	EC
4.8 lpm	8.2	460 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Muddy	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	High



Spring : TS189 [mapped on 2020/12/10 12:33:00]

Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS190	Bantu	Perennial	
Latitude	Longitude	Altitude	
52.95355° N	75.17572° E	775 m (a.m.s.l.)	
Discharge	pH	EC	
15.4 lpm	7.4	575 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Muddy	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	High	
Spring : TS190 [mapped on 2020/12/10 12:45:00]			
Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS191	Baga di Baw - 1	Perennial	
Latitude	Longitude	Altitude	
52.95039° N	75.16949° E	758 m (a.m.s.l.)	
Discharge	pH	EC	
12.8 lpm	7.2	520 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS191 [mapped on 2020/12/10 13:00:00]			
Village	Gram Panchayat	Tehsil	District
Ossu	Ossu	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS192	Baga di Baw - 2	Perennial	
Latitude	Longitude	Altitude	
52.95035° N	75.17051° E	769 m (a.m.s.l.)	
Discharge	pH	EC	
8 lpm	7.5	501 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	High	
Spring : TS192 [mapped on 2020/12/10 13:10:00]			
Village	Gram Panchayat	Tehsil	District
Ossu	Ossu	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS193	Baw	Perennial	
Latitude	Longitude	Altitude	
52.9468° N	75.16547° E	690 m (a.m.s.l.)	
Discharge	pH	EC	
3.8 lpm	7.6	643 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	Moderate	
Spring : TS193 [mapped on 2020/12/10 13:37:00]			
Village	Gram Panchayat	Tehsil	District
Ossu	Ossu	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS435	Bawi	Perennial
Latitude	Longitude	Altitude
32.95669° N	75.19433° E	899 m (a.m.s.l.)
Discharge	pH	EC
-	7.7	228 (µS/cm)
Taste	Colour	Odour
NA	NA	NA
Major Stressor	Degree of Threat	Vulnerability
NA	NA	High

			
Spring : TS435 [mapped on 2021-10-28 9:47:00]			

Village	Gram Panchayat	Tehsil	District
NA	NA	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Low	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS436	Bawi	Perennial
Latitude	Longitude	Altitude
52.97516 ° N	75.192 ° E	1074 m (a.m.s.l.)
Discharge	pH	EC
10.7 lpm	7.5	309 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	NA	Moderate



Spring : TS436 [mapped on 2021-10-28 10:47:00]

Village	Gram Panchayat	Tehsil	District
Pakhali	Pakhali	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS437	Mandir Nadu	Perennial
Latitude	Longitude	Altitude
32.97849° N	75.19533° E	1077 m (a.m.s.l.)
Discharge	pH	EC
2.4 lpm	7.4	169 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS437 [mapped on 2021-10-28 10:57:00]			
Village	Gram Panchayat	Tehsil	District
Pakhlai	Pakhlai	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS438	Nadu	Perennial
Latitude	Longitude	Altitude
53.00216° N	75.22738° E	1071 m (a.m.s.l.)
Discharge	pH	EC
0.9 lpm	7.3	265 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS438 [mapped on 2021-10-28 11:30:00]			

Village	Gram Panchayat	Tehsil	District
Thatiyal	Pakhilaj	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	No Change	Spring Piped water

Spring ID	Spring Name	Nature		
TS439	Sewna Bawli	Perennial		
Latitude	Longitude	Altitude		
33.00754 ° N	75.25673 ° E	1019 m (a.m.s.l)		
Discharge	pH	EC		
40 lpm	7.8	201 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	NA	Moderate		
				
Spring : TS439 [mapped on 2021-10-28 11:47:00]				
Village		Gram Panchayat	Tehsil	District
Sewna		Sewna	Chenani	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 250		Medium	No Change	Spring Piped water



Spring ID	Spring Name	Nature	
TS440	Mandir Bawli	Perennial	
Latitude	Longitude	Altitude	
33.00873 ° N	75.23311 ° E	996 m (a.m.s.l.)	
Discharge	pH	EC	
83 lpm	8	482 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS440 [mapped on 2021-10-28 11:54:00]			
Village	Gram Panchayat	Tehsil	District
Sewna	Sewna	Chenani	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring Piped water

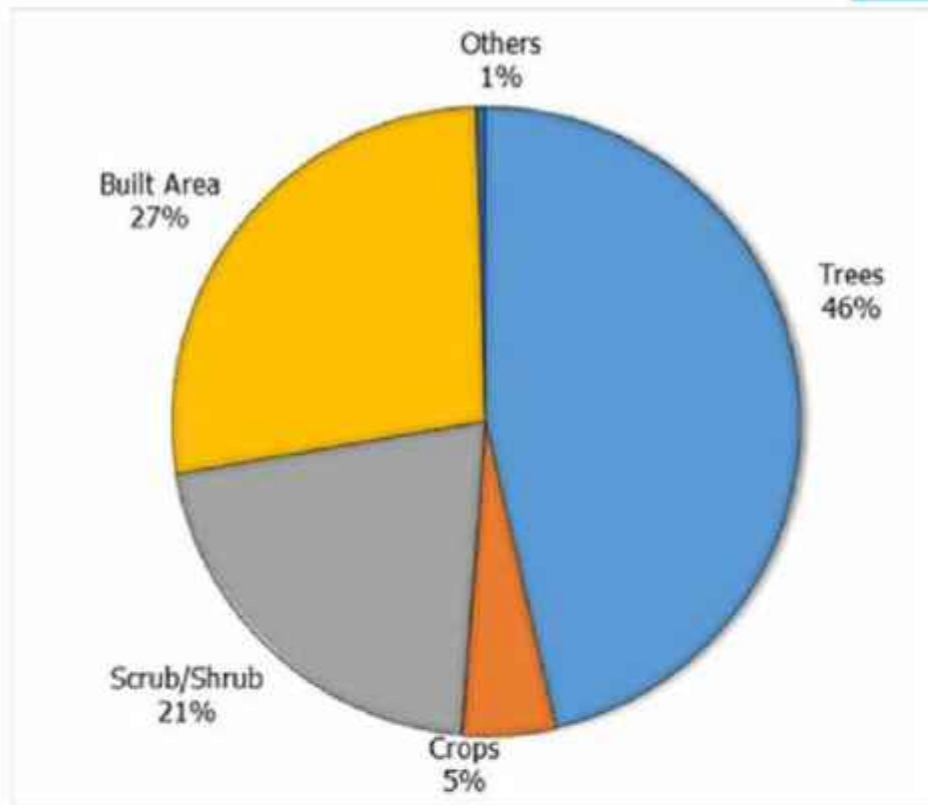


A photograph showing a person in a blue shirt and dark pants, carrying a green backpack, filling a blue plastic bucket from a stone-lined well. The well is built with rough-hewn stones and has a concrete apron at the bottom. The background shows lush green trees and foliage.

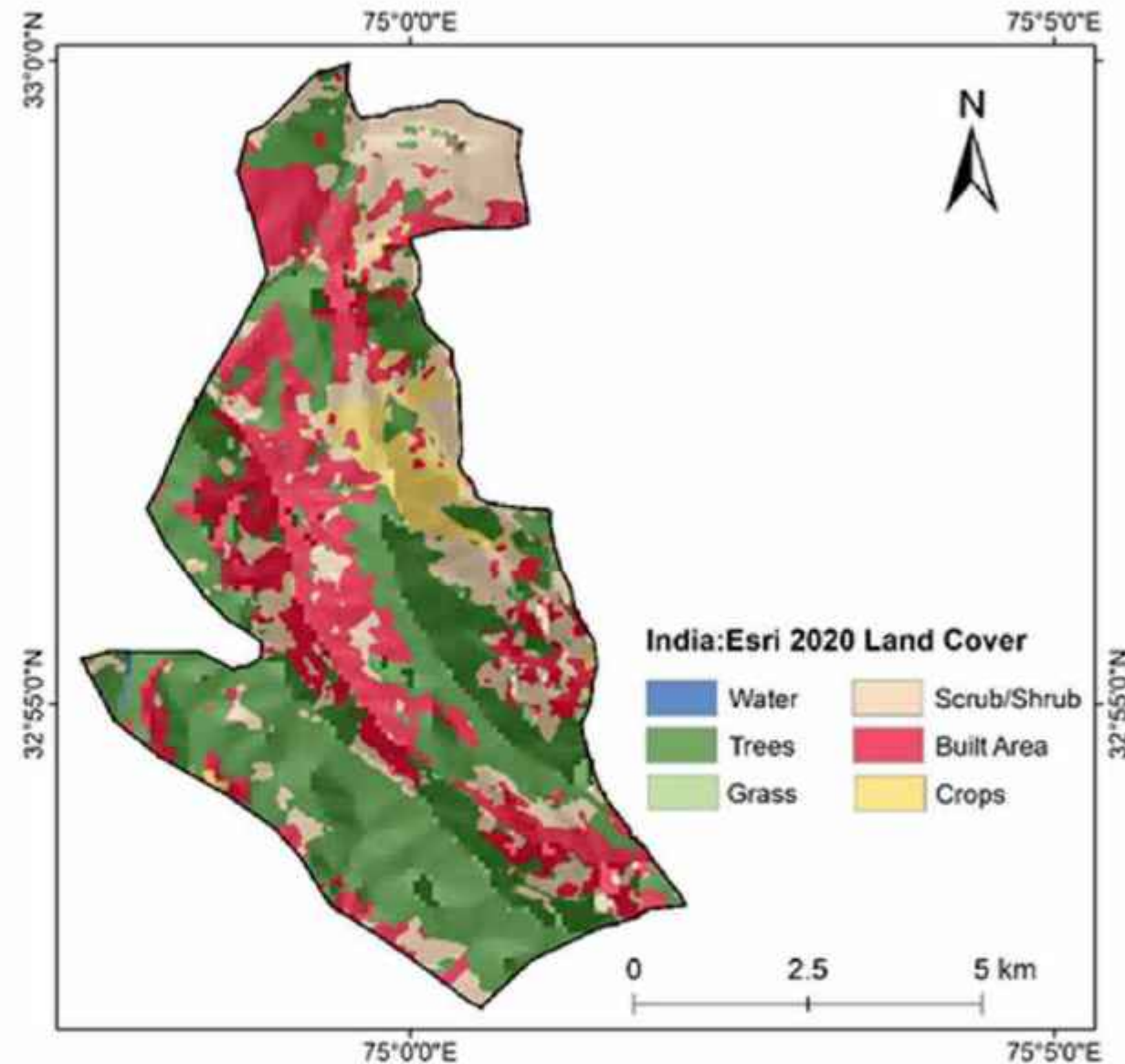


Tawi River Catchment

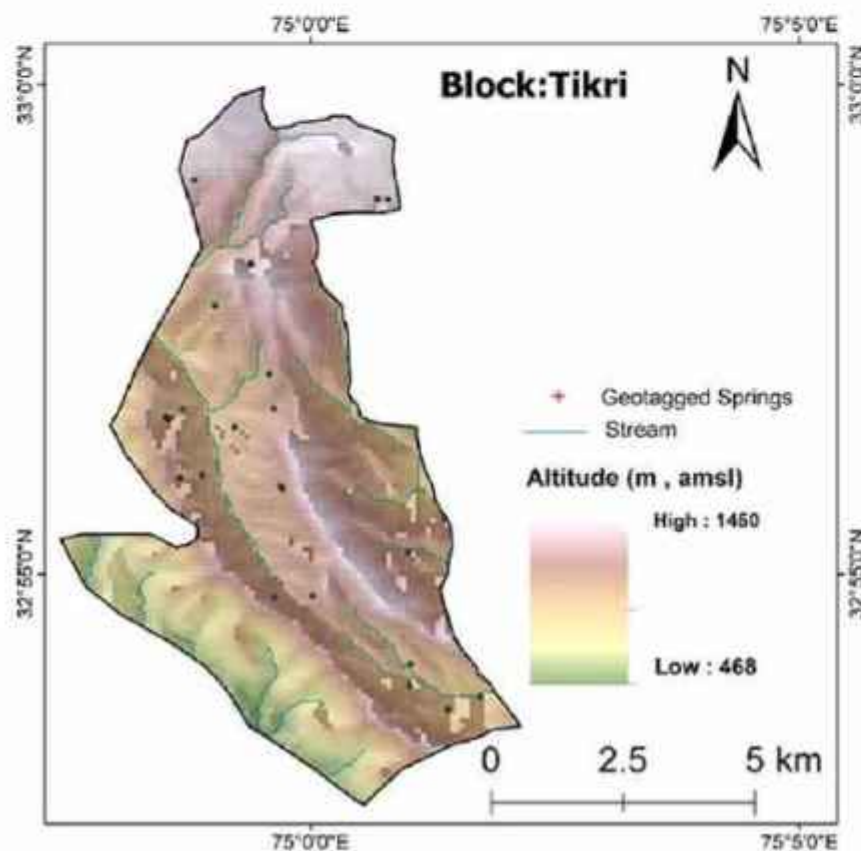
Tikri Block, Udhampur



Landuse landcover pattern of Tikri block



Landuse land cover map of Tikri block



Topographic map of Tikri block

The Tikri block of Udhampur district comprises 10 Panchayats and 09 villages. According to 2011 Census, it has a population of 19,238. With an area of approximately 47.07 sq. km, the latitudinal extent of the Tikri block ranges from 32.877429°N to 32.999564°N, while the longitudinal extent ranges from 74.957407°E to 75.035698°E. In the Tikri block of the Udhampur district, 28 springs were geotagged, covering various villages. The altitude in this block varies from 468 to 1450 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS116	Kaga	Perennial	
Latitude	Longitude	Altitude	
32.98046° N	75.01311° E	964 m (a.m.s.l.)	
Discharge	pH	EC	
56.5 lpm	8.1	381 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Moderate	High	
Spring : TS116 [mapped on 2020-07-22 11:52:38]			
Village	Gram Panchayat	Tehsil	District
Muttal	Muttal	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS117	Giragayari	Perennial	
Latitude	Longitude	Altitude	
32.98065° N	75.01152° E	958 m (a.m.s.l.)	
Discharge	pH	EC	
27.4 lpm	8.2	390 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS117 [mapped on 2020-07-22 12:17:29]			
Village	Gram Panchayat	Tehsil	District
Muttal	Muttal	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS118	NA	Perennial	
Latitude	Longitude	Altitude	
32.98048° N	75.01148° E	955 m (a.m.s.l.)	
Discharge	pH	EC	
5.6 lpm	8.2	396 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS118 [mapped on 2020-07-22 12:27:19]			
Village	Gram Panchayat	Tehsil	District
Muttal	Muttal	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS208	Banya Bawli	Perennial	
Latitude	Longitude	Altitude	
32.98378° N	74.9802° E	947 m (a.m.s.l.)	
Discharge	pH	EC	
137.1 lpm	7.6	540 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS208 [mapped on 2021-01-21 14:34:00]			
Village	Gram Panchayat	Tehsil	District
Ladda	Ladda	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS204	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.96954° N	74.98992° E	910 m (a.m.s.l.)	
Discharge	pH	EC	
3.8 lpm	7.5	531 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	High	
			Spring : TS204 [mapped on 2021-01-21 15:59:00]
Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS205	Bansa di Baw	Perennial	
Latitude	Longitude	Altitude	
32.96941° N	74.98994° E	918 m (a.m.s.l.)	
Discharge	pH	EC	
3.1 lpm	7.3	550 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TS205 [mapped on 2021-01-21 16:08:00]			
Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS205	Lehru Baw	Perennial
Latitude	Longitude	Altitude
32.96234° N	74.98365° E	805 m (a.m.s.l.)
Discharge	pH	EC
3.2 lpm	7.3	710 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	Moderate

			
Spring : TS206 [mapped on 2021-01-21 16:25:00]			

Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Vāhampur	Vāhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS388	NA	Perennial
Latitude	Longitude	Altitude
32.95119° N	74.99519° E	898 m (a.m.s.l.)
Discharge	pH	EC
1.2 lpm	NA	-
Taste	Colour	Odour
NA	NA	NA
Major Stressor	Degree of Threat	Vulnerability
NA	NA	Moderate



Spring : TS388 [mapped on 2021-10-16 11:58:00]

Village	Gram Panchayat	Tehsil	District
Batal	Batal	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Low	Decreased	Spring Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3389	Bawli	Perennial
Latitude	Longitude	Altitude
32.95159° N	74.99484° E	834 m (a.m.s.l.)
Discharge	pH	EC
0.1 lpm	7.3	450 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	Moderate

			
Spring : T3389 [mapped on 2021-10-16 12:15:00]			

Village	Gram Panchayat	Tehsil	District
Coal	Coal	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 42	Low	No Change	Tubewell

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3390	Bawli	Perennial
Latitude	Longitude	Altitude
52.94168° N	74.98699° E	772 m (a.m.s.l.)
Discharge	pH	EC
2.5 lpm	7.2	398 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3390 [mapped on 2021-10-16 12:40:00]

Village	Gram Panchayat	Tehsil	District
Tikri	Tikri	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 300	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
T3391	Bawli	Perennial		
Latitude	Longitude	Altitude		
52.9507° N	74.99294° E	824 m (a.m.s.l.)		
Discharge	pH	EC		
3 lpm	7.6	340 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	NA	Moderate		
				
Spring : T3391 [mapped on 2021-10-16 13:08:00]				
Village		Gram Panchayat	Tehsil	District
Tikri sansu		Tikri	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
— 120		Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T3392	Bawli	Perennial
Latitude	Longitude	Altitude
32.95071° N	74.99294° E	824 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	7.3	365 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3392 [mapped on 2021-10-16 13:19:00]			

Village	Gram Panchayat	Tehsil	District
Tikri sansu	Tikri	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 42	Medium	No Change	Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS393	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94493° N	74.99366° E	795 m (a.m.s.l.)	
Discharge	pH	EC	
2.5 lpm	7.4	347 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS393 [mapped on 2021-10-16 13:47:00]			
Village	Gram Panchayat	Tehsil	District
Jakhed	Jakhed	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	High	No Change	Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS394	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.93331° N	74.98151° E	785 m (a.m.s.l.)	
Discharge	pH	EC	
0.8 lpm	7.3	371 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS394 [mapped on 2021-10-16 14:30:00]			
Village	Gram Panchayat	Tehsil	District
Jakhed	Jakhed	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Low	No Change	Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS395	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.93304° N	74.97774° E	805 m (a.m.s.l.)	
Discharge	pH	EC	
2 lpm	7.5	353 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	Low	Moderate	
Spring : TS395 [mapped on 2021-10-16 14:51:00]			
Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Low	No Change	Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS396	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94345° N	74.9755° E	784 m (a.m.s.l.)	
Discharge	pH	EC	
3 lpm	7.4	404 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS396 [mapped on 2021-10-16 15:13:00]			
Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 240	Medium	No Change	Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature
T3397	Bawli	Perennial
Latitude	Longitude	Altitude
32.94326° N	74.97558° E	782 m (a.m.s.l.)
Discharge	pH	EC
2.5 lpm	7.5	369 (µS/cm)
Taste	Colour	Odour
Objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	Medium	Moderate

			
Spring : T3397 [mapped on 2021-10-16 15:25:00]			

Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 28	Low	No Change	Piped water Spring

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature
T3398	Bawli	Perennial
Latitude	Longitude	Altitude
32.94321° N	74.976° E	781 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	7.5	398 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3398 [mapped on 2021-10-16 15:35:00]			

Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 120	Medium	No Change	Spring Piped water

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature
T3399	Bawli	Perennial
Latitude	Longitude	Altitude
32.94478° N	74.97817° E	752.493550611104 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	7.4	325 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3399 [mapped on 2021:10:16 15:45:00]			

Village	Gram Panchayat	Tehsil	District
Seen Brahmana	Seen Brahmana	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 120	Medium	No Change	Piped water Spring

Spring Btlar of Tawi River Catchment

Spring ID	Spring Name	Nature		
T3441	Bawli	Perennial		
Latitude	Longitude	Altitude		
32.8959° N	75.02897° E	727 m (a.m.s.l.)		
Discharge	pH	EC		
3.3 lpm	6.7	304 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	NA	Moderate		
				
Spring : T3441 [mapped on 2021:11:12 11:28:00]				
Village		Gram Panchayat	Tehsil	District
East Mand		East Mand	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
— 150		Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS442	Bawli	Perennial
Latitude	Longitude	Altitude
32.99355 ° N	75.02355 ° E	736 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	6.6	400 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS442 [mapped on 2021-11-12 11:50:00]

Village	Gram Panchayat	Tehsil	District
Mand	Mand	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS443	Bawli	Perennial
Latitude	Longitude	Altitude
32.99759° N	75.01684° E	745 m (a.m.s.l.)
Discharge	pH	EC
5 lpm	6.2	397 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS443 [mapped on 2021.11.12 12:19:00]			

Village	Gram Panchayat	Tehsil	District
Mand	Mand	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 300	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS444	Bawli	Perennial
Latitude	Longitude	Altitude
32.91259° N	74.99382° E	829 m (a.m.s.l.)
Discharge	pH	EC
3.3 lpm	6.2	310 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS444 [mapped on 2021.11.12 12:46:00]			

Village	Gram Panchayat	Tehsil	District
West mand	Mand	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 90	Medium	No Change	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS445	Nadu	Perennial
Latitude	Longitude	Altitude
32.91292° N	75.00025° E	834 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	6.5	445 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	High	Moderate



Spring : TS445 [mapped on 2021.11.12 13:20:00]

Village	Gram Panchayat	Tehsil	District
Mand	Mand	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 30	Medium	Decreased	Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS446	Bawli	Perennial
Latitude	Longitude	Altitude
32.90135 ° N	75.01698 ° E	751 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	6.6	347 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS446 [mapped on 2021.11.12 13:41:00]			

Village	Gram Panchayat	Tehsil	District
Mand	Mand	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS448	Bawli	Perennial
Latitude	Longitude	Altitude
52.92038 ° N	75.01662 ° E	811 m (a.m.s.l.)
Discharge	pH	EC
3.3 lpm	6.4	330 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS448 [mapped on 2021-11-12 14:57:00]

Village	Gram Panchayat	Tehsil	District
Seen thakran	Seen thakran	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS449	Bawli	Perennial
Latitude	Longitude	Altitude
32.92057 ° N	75.01662 ° E	811 m (a.m.s.l.)
Discharge	pH	EC
3.3 lpm	6.2	339 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS449 [mapped on 2021.11.12 15:17:00]			

Village	Gram Panchayat	Tehsil	District
Seen thakran	Seen thakran	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Low	No Change	Spring Piped water



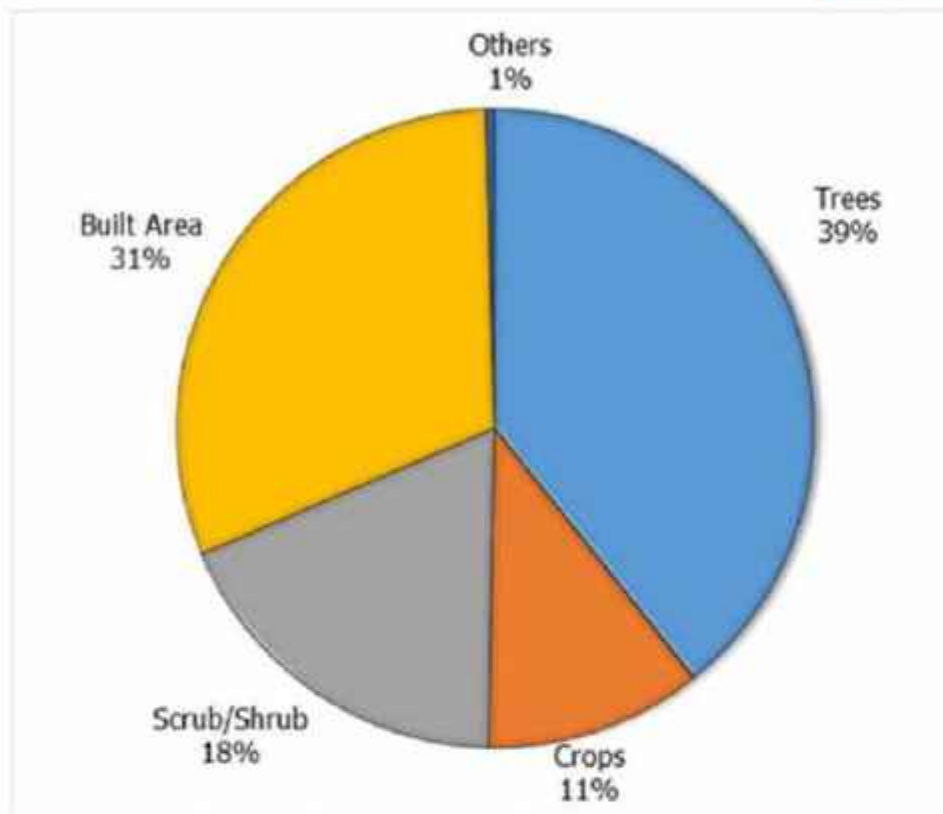
Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TS450	Bawli	Perennial		
Latitude	Longitude	Altitude		
52.92619 ° N	75.02285 ° E	742 m (a.m.s.l.)		
Discharge	pH	EC		
3.3 lpm	6.5	318 (µS/cm)		
Taste	Colour	Odour		
Unobjectionable	Clear	Unobjectionable		
Major Stressor	Degree of Threat	Vulnerability		
None	NA	Moderate		
				
Spring : TS450 [mapped on 2021.11.12 15:54:00]				
Village		Gram Panchayat	Tehsil	District
Seen thakran		Seen thakran	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 240		Medium	No Change	Spring

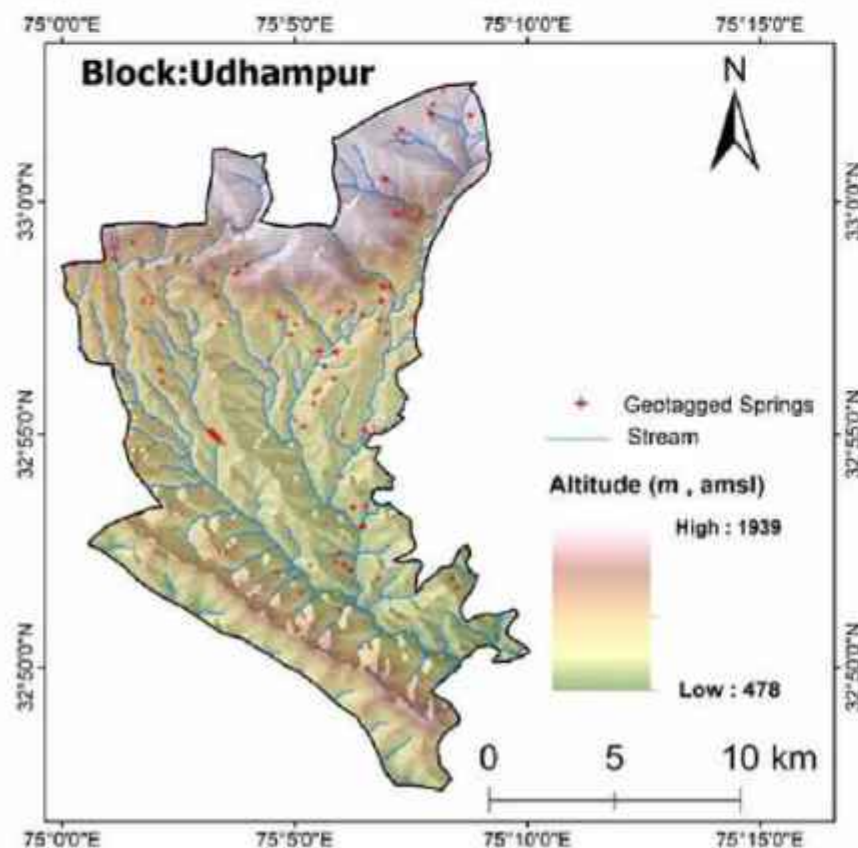


Tawi River Catchment

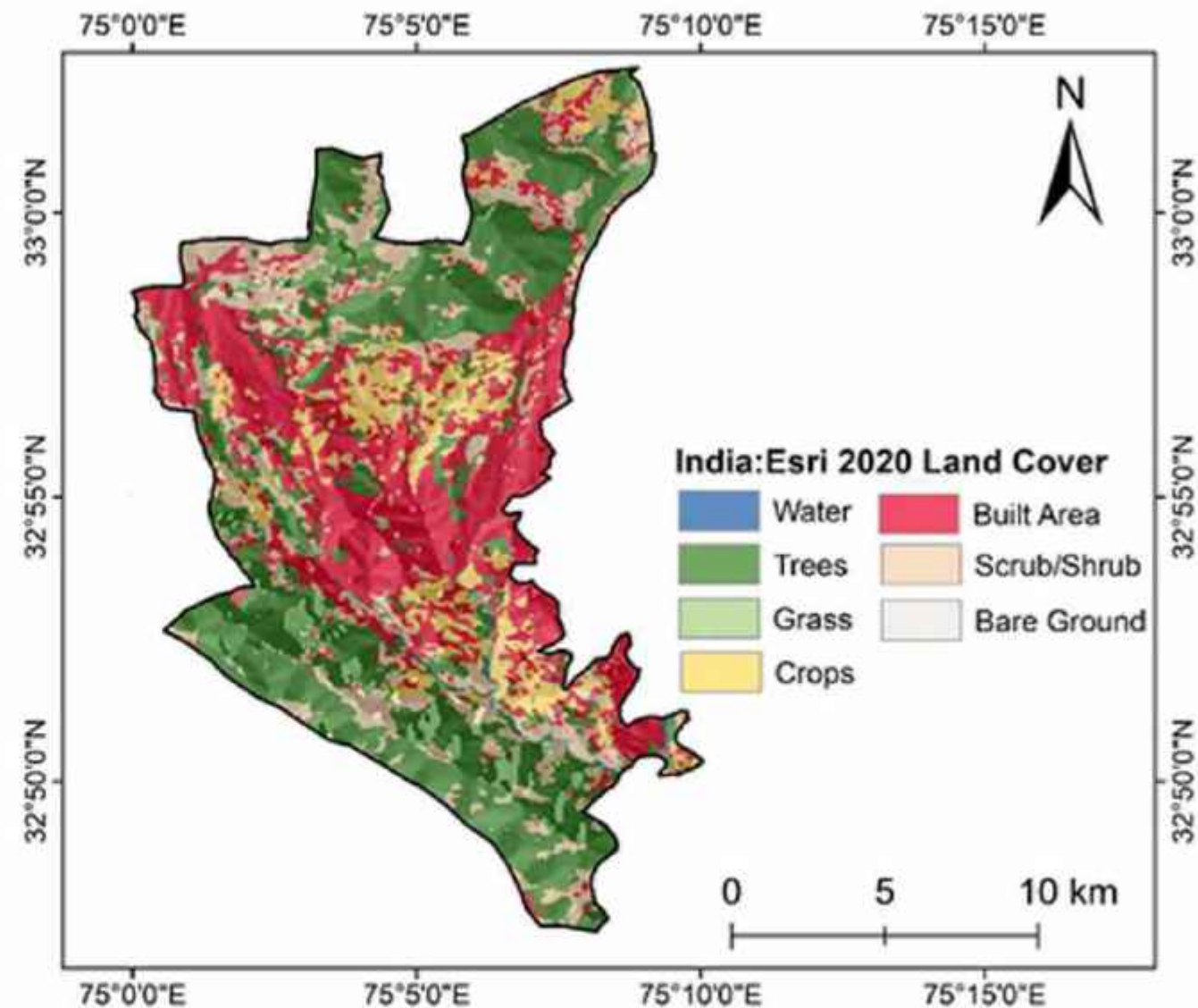
Udhampur Block, Udhampur



Landuse landcover pattern of Udhampur block



Topographic map of Udhampur block



Landuse land cover map of Udhampur block

The Udhampur block of Udhampur district comprises 47 Panchayats and 89 villages. According to 2011 Census, it has a population of 75,781. With an area of approximately 216.22 sq. km, the latitudinal extent of the Udhampur block ranges from 32.789366°N to 33.042394°N, while the longitudinal extent ranges from 74.999924°E to 75.167346°E. In the Udhampur block of the Udhampur district, 115 springs were geotagged, covering various villages. The altitude in this block varies from 478 to 1939 meters above mean sea level.

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO22	Kott Pogal wale Bawli	Perennial
Latitude	Longitude	Altitude
32.91633° N	75.11011° E	669 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	7.8	246 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Both	Moderate	Moderate


Spring : TSO22 [mapped on 2019/12/05 14:45:05]

Village	Gram Panchayat	Tehsil	District
Dhnaori	Dhnaori	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 600	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TSO23	Balwal Bawli	Perennial		
Latitude	Longitude	Altitude		
32.91653° N	75.10077° E	673 m (a.m.s.l.)		
Discharge	pH	EC		
76.8 lpm	7.1	248 (µS/cm)		
Taste	Colour	Odour		
Un-objectionable	Clear	Un-objectionable		
Major Stressor	Degree of Threat	Vulnerability		
Anthropogenic	Moderate	Moderate		
				
Spring : TSO23 [mapped on 2019-12-05 15:21:26]				
Village		Gram Panchayat	Tehsil	District
Dhnaori		Dhnaori	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 500		Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO24	Rani Ki Bawli	Perennial
Latitude	Longitude	Altitude
32.93656° N	75.09749° E	751 m (a.m.s.l.)
Discharge	pH	EC
-	7.8	335 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Both	Moderate	Moderate

			
Spring : TSO24 [mapped on 2019/12/05 15:51:37]			
Village	Gram Panchayat	Tehsil	District
Lansi	Dabwali	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature		
TSO26	Upala Saula	Perennial		
Latitude	Longitude	Altitude		
32.91806° N	75.11611° E	683 m (a.m.s.l.)		
Discharge	pH	EC		
3.2 lpm	7.4	847 (µS/cm)		
Taste	Colour	Odour		
Un-objectionable	Clear	Un-objectionable		
Major Stressor	Degree of Threat	Vulnerability		
Anthropogenic	None	Moderate		
				
Spring : TSO26 [mapped on 2019/12/16 13:05:12]				
Village		Gram Panchayat	Tehsil	District
Shajala		Jakhani	Udhampur	Udhampur
No. of Dependent Population		Dependency Level	People Perception	Other Sources
~ 500		Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO27	Birma Bawli	Perennial	
Latitude	Longitude	Altitude	
32.91885° N	75.11175° E	672 m (a.m.s.l.)	
Discharge	pH	EC	
8 lpm	7.7	755 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	Moderate	
Spring : TSO27 [mapped on 2019/12/16 14:02:13]			
Village	Gram Panchayat	Tehsil	District
More	T.more	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO28	Toop Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94093° N	75.09436° E	712 m (a.m.s.l.)	
Discharge	pH	EC	
32 lpm	7.8	446 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TSO28 [mapped on 2019/12/16 15:58:14]			
Village	Gram Panchayat	Tehsil	District
Tope	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 3500	High	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO29	Bawli	Seasonal	
Latitude	Longitude	Altitude	
32.94092° N	75.09422° E	710 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TSO29 [mapped on 2019/12/16 15:55:15]			
Village	Gram Panchayat	Tehsil	District
Tope	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO30	Rajdev Bhag Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94632° N	75.09834° E	757 m (a.m.s.l.)	
Discharge	pH	EC	
3.2 lpm	6.9	470 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TSO30 [mapped on 2019/12/17 11:40:15]			
Village	Gram Panchayat	Tehsil	District
Sajal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 600	Medium	Increased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO31	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94639° N	75.09825° E	742 m (a.m.s.l.)	
Discharge	pH	EC	
7.2 lpm	6.5	240 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	
Spring : TSO31 [mapped on 2019/12/17 12:17:16]			
Village	Gram Panchayat	Tehsil	District
Sayal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	Increased	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO33	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.94587° N	75.09831° E	785 m (a.m.s.l.)	
Discharge	pH	EC	
4.9 lpm	6.2	237 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	
Spring : TSO33 [mapped on 2019/12/17 12:58:18]			
			
Village	Gram Panchayat	Tehsil	District
Sayal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO34	Bawli	Perennial
Latitude	Longitude	Altitude
32.94618° N	75.09803° E	780 m (a.m.s.l.)
Discharge	pH	EC
2.1 lpm	6.5	236 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate
		
Spring : TSO34 [mapped on 2019/12/17 13:02:19]		

Village	Gram Panchayat	Tehsil	District
Sayal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~18	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO47	Lansi Bawli	Perennial
Latitude	Longitude	Altitude
32.95839° N	75.12517° E	798 m (a.m.s.l.)
Discharge	pH	EC
80 lpm	7.6	555 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : TSO47 [mapped on 2020-02-26 11:04:06]			

Village	Gram Panchayat	Tehsil	District
Chakhar	Lansi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO48	Lansi Main	Perennial
Latitude	Longitude	Altitude
32.94079° N	75.12188° E	719 m (a.m.s.l.)
Discharge	pH	EC
10.7 lpm	7.9	400 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	High

			
Spring : TSO48 [mapped on 2020-02-26 11:50:25]			

Village	Gram Panchayat	Tehsil	District
Chakhar	Dabria	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO49	Sola	Perennial
Latitude	Longitude	Altitude
32.95839° N	75.12517° E	788 m (a.m.s.l.)
Discharge	pH	EC
9.6 lpm	7.5	444 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TSO49 [mapped on 2020-02-26 12:11:55]			

Village	Gram Panchayat	Tehsil	District
Chakhar	Chakhar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS050	Chimbu ki Bawli	Perennial
Latitude	Longitude	Altitude
32.94079° N	75.12188° E	719 m (a.m.s.l.)
Discharge	pH	EC
47.3 lpm	7.5	499 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate

			
Spring : TS050 [mapped on 2020-02-26 12:38:01]			

Village	Gram Panchayat	Tehsil	District
Chakhar	Chakhar	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 300	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO51	Chimbi ki Bawli	Seasonal
Latitude	Longitude	Altitude
32.95839° N	75.12517° E	788 m (a.m.s.l.)
Discharge	pH	EC
-	7.4	418 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	High	Moderate

			
Spring : TSO51 [mapped on 2020-02-26 12:58:41]			

Village	Gram Panchayat	Tehsil	District
Chakhar	Chakhar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSO52	NA	Perennial
Latitude	Longitude	Altitude
32.96425 ° N	75.11365 ° E	795 m (a.m.s.l.)
Discharge	pH	EC
6.6 lpm	7.6	894 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	Moderate

			
Spring : TSO52 [mapped on 2020-02-26 15:15:55]			

Village	Gram Panchayat	Tehsil	District
Candala	Candala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Tubewell

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS053	NA	Perennial
Latitude	Longitude	Altitude
32.96434° N	75.11459° E	796 m (a.m.s.l.)
Discharge	pH	EC
3.2 lpm	7.9	762 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	None	Moderate

			
Spring : TS053 [mapped on 2020-02-26 15:25:57]			

Village	Gram Panchayat	Tehsil	District
Gandala	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 30	Low	Decreased	Tubewell

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS054	Raja ki Bawli	Perennial
Latitude	Longitude	Altitude
32.95957° N	75.10765° E	769 m (a.m.s.l.)
Discharge	pH	EC
80 lpm	7.7	391 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate

			
Spring : TS054 [mapped on 2020-02-26 15:56:20]			

Village	Gram Panchayat	Tehsil	District
Candala	Candala	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS055	NA	Perennial
Latitude	Longitude	Altitude
32.96434° N	75.11459° E	796 m (a.m.s.l.)
Discharge	pH	EC
7.1 lpm	7.7	764 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Moderate	Moderate
		
Spring : TS055 [mapped on 2020-02-26 16:26:27]		

Village	Gram Panchayat	Tehsil	District
Gandala	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 140	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO56	Basant Bai	Perennial	
Latitude	Longitude	Altitude	
32.96456° N	75.11459° E	796 m (a.m.s.l.)	
Discharge	pH	EC	
-	7.8	767 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	Spring : TSO56 [mapped on 2020-02-26 16:44:19]
Village	Gram Panchayat	Tehsil	District
Gandala	Gandala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO75	NA	Perennial	
Latitude	Longitude	Altitude	
32.96164° N	75.14125° E	627 m (a.m.s.l.)	
Discharge	pH	EC	
7.8 lpm	8.3	543 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Muddy in Season	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	Moderate	Spring : TSO75 [mapped on 2020-07-08 11:24:47]
Village	Gram Panchayat	Tehsil	District
Kroha	Sunai	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO75	Jatta di Baw	Perennial	
Latitude	Longitude	Altitude	
32.86468° N	75.13992° E	625 m (a.m.s.l.)	
Discharge	pH	EC	
0.2 lpm	7.5	380 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	Moderate	Spring : TSO75 [mapped on 2020-07-06 12:01:10]
Village	Gram Panchayat	Tehsil	District
Kroha	Sunai	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TSO98	Chalo di Baw	Perennial	
Latitude	Longitude	Altitude	
32.8739° N	75.09909° E	615 m (a.m.s.l.)	
Discharge	pH	EC	
18.4 lpm	7.4	591 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Muddy in Season	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Moderate	High	Spring : TSO98 [mapped on 2020-07-08 11:20:05]
Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3099	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.86987° N	75.10108° E	608 m (a.m.s.l.)	
Discharge	pH	EC	
1 lpm	7.5	524 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : T3099 [mapped on 2020-07-08 11:41:25]			
Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3100	Latti di Bawli	Perennial	
Latitude	Longitude	Altitude	
32.87087° N	75.09792° E	624 m (a.m.s.l.)	
Discharge	pH	EC	
-	7.2	623 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	Moderate	
Spring : T3100 [mapped on 2020-07-08 12:11:45]			
Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3101	Balgota da Salla	Perennial	
Latitude	Longitude	Altitude	
32.86813° N	75.10558° E	586 m (a.m.s.l.)	
Discharge	pH	EC	
-	7.3	554 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Natural	Moderate	Moderate	
Spring : T3101 [mapped on 2020-07-08 12:55:02]			
Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3102	NA	Seasonal	
Latitude	Longitude	Altitude	
32.86813° N	75.10502° E	600 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both	Moderate	High	
Spring : T3102 [mapped on 2020-07-08 12:40:32]			
Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Low	Decreased	Spring

Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS103	NA	Seasonal
Latitude	Longitude	Altitude
32.86912° N	75.10292° E	600 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Un-objectionable	Muddy	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
Both	None	High

			
Spring : TS103 [mapped on 2020-07-08 12:42:10]			

Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring



Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS104	Bawli Tundi	Perennial
Latitude	Longitude	Altitude
32.865° N	75.11512° E	626 m (a.m.s.l.)
Discharge	pH	EC
4.8 lpm	7.4	609 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS104 [mapped on 2020-07-08 13:41:22]			

Village	Gram Panchayat	Tehsil	District
Balian	Balian	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring



Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS105	Khavan	Perennial
Latitude	Longitude	Altitude
32.85373° N	75.09968° E	630 m (a.m.s.l.)
Discharge	pH	EC
5.6 lpm	7.7	424 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS105 [mapped on 2020-07-08 13:56:07]			

Village	Gram Panchayat	Tehsil	District
Malhar	Malhar	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring



Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS106	Bawli	Perennial
Latitude	Longitude	Altitude
32.86025° N	75.08557° E	647 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	7.2	563 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS106 [mapped on 2020-07-08 14:53:25]			

Village	Gram Panchayat	Tehsil	District
Malhar	Malhar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	No Change	Spring



Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSI07	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.96737° N	75.07676° E	650 m (a.m.s.l.)
Discharge	pH	EC
57.6 lpm	7	475 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TSI07 [mapped on 2020-07-08 14:50:18]			

Village	Gram Panchayat	Tehsil	District
Malhar	Malhar	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS119	NA	Perennial
Latitude	Longitude	Altitude
32.96427° N	75.02917° E	650 m (a.m.s.l.)
Discharge	pH	EC
12.8 lpm	7.3	329 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS119 [mapped on 2020-07-22 13:22:56]			

Village	Gram Panchayat	Tehsil	District
Patta	Patta	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Low	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS120	NA	Perennial
Latitude	Longitude	Altitude
32.98515° N	75.02552° E	964 m (a.m.s.l.)
Discharge	pH	EC
4.9 lpm	8	312 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High



Spring : TS120 [mapped on 2020-07-22 13:41:51]

Village	Gram Panchayat	Tehsil	District
Samole	Samole Round	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TSI23	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.97946° N	75.01895° E	865 m (a.m.s.l.)
Discharge	pH	EC
6.4 lpm	7.8	485 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

Spring : TSI23 [mapped on 2020-07-22 13:17:57]

Village	Gram Panchayat	Tehsil	District
Samole	Samole Rount	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 45	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS124	NA	Perennial	
Latitude	Longitude	Altitude	
52.98511° N	75.01859° E	987 m (a.m.s.l.)	
Discharge	pH	EC	
28.2 lpm	7.6	475 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS124 [mapped on 2020-07-22 15:58:47]			
Village	Gram Panchayat	Tehsil	District
Samole	Samole Rount	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS125	Girjatu di Sawli	Perennial	
Latitude	Longitude	Altitude	
52.97719° N	75.00442° E	922 m (a.m.s.l.)	
Discharge	pH	EC	
36 lpm	7.2	618 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	None	High	
Spring : TS125 [mapped on 2020-07-22 15:59:21]			
Village	Gram Panchayat	Tehsil	District
Kotlipijan	Patta	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 400	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS126	NA	Perennial	
Latitude	Longitude	Altitude	
52.91327° N	75.05813° E	696 m (a.m.s.l.)	
Discharge	pH	EC	
14.8 lpm	7.1	808 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Moderate	High	
Spring : TS126 [mapped on 2020-07-27 12:08:10]			
Village	Gram Panchayat	Tehsil	District
Padanoo	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 300	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS127	Narsingh Sawli	Perennial	
Latitude	Longitude	Altitude	
52.91704° N	75.05414° E	689 m (a.m.s.l.)	
Discharge	pH	EC	
73.8 lpm	7.2	617 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS127 [mapped on 2020-07-27 12:30:25]			
Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS128	NA	Perennial	
Latitude	Longitude	Altitude	
52.91727° N	75.05592° E	690 m (a.m.s.l.)	
Discharge	pH	EC	
27.4 lpm	7.2	617 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS128 [mapped on 2020-07-27 12:40:07]			
Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 500	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS129	NA	Perennial	
Latitude	Longitude	Altitude	
52.9165° N	75.05446° E	693 m (a.m.s.l.)	
Discharge	pH	EC	
120 lpm	7.3	625 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS129 [mapped on 2020-07-27 12:57:27]			
Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS130	NA	Perennial	
Latitude	Longitude	Altitude	
52.91568° N	75.05508° E	681 m (a.m.s.l.)	
Discharge	pH	EC	
43.6 lpm	7.4	630 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	Moderate	High	
Spring : TS130 [mapped on 2020-07-27 13:07:00]			
Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS131	Anup di Baw	Perennial	
Latitude	Longitude	Altitude	
52.91572° N	75.05505° E	681 m (a.m.s.l.)	
Discharge	pH	EC	
30 lpm	7.5	590 (µS/cm)	
Taste	Colour	Odour	
Un-objectionable	Clear	Un-objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	None	High	
Spring : TS131 [mapped on 2020-07-27 13:10:50]			
Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 240	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS132	NA	Perennial
Latitude	Longitude	Altitude
32.91358° N	75.05542° E	684 m (a.m.s.l.)
Discharge	pH	EC
118.7 lpm	7.3	610 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS132 [mapped on 2020-07-27 13:28:14]			

Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 450	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS133	Baba Bairh	Perennial
Latitude	Longitude	Altitude
32.91541° N	75.05545° E	676 m (a.m.s.l.)
Discharge	pH	EC
-	7.4	625 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High



Spring : TS133 [mapped on 2020-07-27 13:39:42]

Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 350	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS134	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.91511° N	75.05555° E	678 m (a.m.s.l.)
Discharge	pH	EC
32 lpm	8.2	348 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS134 [mapped on 2020-07-27 13:38:07]			

Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 2	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS135	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.91531° N	75.05595° E	685 m (a.m.s.l.)
Discharge	pH	EC
50.5 lpm	7.3	580 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS135 [mapped on 2020-07-27 14:07:51]			

Village	Gram Panchayat	Tehsil	District
Kalta	Padanoo	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS156	NA	Perennial
Latitude	Longitude	Altitude
32.91446° N	75.05681° E	680 m (a.m.s.l.)
Discharge	pH	EC
11.1 lpm	7.3	520 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	None	High

			
Spring : TS156 [mapped on 2020-07-27 14:25:51]			

Village	Gram Panchayat	Tehsil	District
Padanoo	Padanoo	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 5	Low	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS239	Bawli	Perennial
Latitude	Longitude	Altitude
32.94652° N	75.09851° E	742 m (a.m.s.l.)
Discharge	pH	EC
3.4 lpm	6.6	114 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Muddy	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	NA	Moderate



Spring : TS239 [mapped on 2021-03-08 17:14:00]

Village	Gram Panchayat	Tehsil	District
Sayal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS240	Bawli	Perennial
Latitude	Longitude	Altitude
32.94657° N	75.09851° E	742 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	6.8	158 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS240 [mapped on 2021-03-08 17:25:00]

Village	Gram Panchayat	Tehsil	District
Sayal	Sial-jattan	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS241	Bawli	Perennial
Latitude	Longitude	Altitude
32.94589° N	75.0982° E	740 m (a.m.s.l.)
Discharge	pH	EC
3.9 lpm	7.4	145 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS241 [mapped on 2021-03-08 17:38:00]			

Village	Gram Panchayat	Tehsil	District
Sayal	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS242	Baw	Perennial	
Latitude	Longitude	Altitude	
32.99554° N	75.11912° E	1153 m (a.m.s.l.)	
Discharge	pH	EC	
3.7 lpm	7.4	398 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Medium	Moderate	
Spring : TS242 [mapped on 2021-03-09 13:54:00]			
Village	Gram Panchayat	Tehsil	District
Phangara	Mansar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS243	Baw	Perennial	
Latitude	Longitude	Altitude	
32.99513° N	75.12022° E	1155 m (a.m.s.l.)	
Discharge	pH	EC	
3.6 lpm	7.3	350 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS243 [mapped on 2021-03-09 13:54:00]			
Village	Gram Panchayat	Tehsil	District
Phangara	Mansar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 40	Medium	No Change	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS244	Bawli	Seasonal	
Latitude	Longitude	Altitude	
32.99595° N	75.12214° E	1080 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS244 [mapped on 2021-03-09 14:07:00]			
Village	Gram Panchayat	Tehsil	District
Phangara	Mansar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS245	Nadu	Perennial	
Latitude	Longitude	Altitude	
32.99412° N	75.12798° E	975 m (a.m.s.l.)	
Discharge	pH	EC	
2.4 lpm	7.6	393 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS245 [mapped on 2021-03-09 15:48:00]			
Village	Gram Panchayat	Tehsil	District
Phangara	Mansar	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS246	Mandir Bawli	Perennial
Latitude	Longitude	Altitude
32.96944° N	75.11522° E	825 m (a.m.s.l.)
Discharge	pH	EC
4.2 lpm	7.1	510 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS246 [mapped on 2021-03-09 17:40:00]			

Village	Gram Panchayat	Tehsil	District
Krimchi	Krimchi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS247	Bawli	Seasonal
Latitude	Longitude	Altitude
32.96991° N	75.11477° E	838 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	High

			
Spring : TS247 [mapped on 2021-03-09 17:51:00]			

Village	Gram Panchayat	Tehsil	District
Krimchi	Krimchi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS255	Sula	Perennial
Latitude	Longitude	Altitude
32.95597° N	75.05652° E	808 m (a.m.s.l.)
Discharge	pH	EC
3.1 lpm	7.4	265 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate

			
Spring : TS255 [mapped on 2021-03-17 12:09:00]			

Village	Gram Panchayat	Tehsil	District
Sunadi	Candala	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Piped water Spring

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS254	Baw	Perennial
Latitude	Longitude	Altitude
32.97728° N	75.06642° E	1022 m (a.m.s.l.)
Discharge	pH	EC
2.1 lpm	7.4	295 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS254 [mapped on 2021-03-17 13:21:00]			

Village	Gram Panchayat	Tehsil	District
Hartaryan	Hartaryan	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS255	Baw	Seasonal	
Latitude	Longitude	Altitude	
32.97489° N	75.06318° E	971 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	Spring : TS255 [mapped on 2021-05-17 13:39:00]
Village	Gram Panchayat	Tehsil	District
Hartayen	Hartayen	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS256	Jamal Baw	Perennial	
Latitude	Longitude	Altitude	
32.97394° N	75.06221° E	937 m (a.m.s.l.)	
Discharge	pH	EC	
2.3 lpm	7.1	320 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : TS256 [mapped on 2021-05-17 13:49:00]
Village	Gram Panchayat	Tehsil	District
Hartayen	Hartayen	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 60	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS257	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.97022° N	75.0544° E	903 m (a.m.s.l.)	
Discharge	pH	EC	
0.9 lpm	7.1	395 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	Spring : TS257 [mapped on 2021-05-17 14:09:00]
Village	Gram Panchayat	Tehsil	District
Kajer	Chak Rakhvalan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS258	Baw	Perennial	
Latitude	Longitude	Altitude	
32.96614° N	75.05515° E	873 m (a.m.s.l.)	
Discharge	pH	EC	
2.5 lpm	7.2	310 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	NA	High	Spring : TS258 [mapped on 2021-05-17 14:27:00]
Village	Gram Panchayat	Tehsil	District
Kajer	Chak Rakhvalan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS259	Baw	Perennial
Latitude	Longitude	Altitude
32.95874° N	75.07749° E	765 m (a.m.s.l.)
Discharge	pH	EC
1.6 lpm	7.3	210 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS259 [mapped on 2021-03-17 14:54:00]

Village	Gram Panchayat	Tehsil	District
Chak Rakhwala	Chak Rakhwala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS260	Baw	Perennial
Latitude	Longitude	Altitude
32.96096 ° N	75.078 ° E	781 m (a.m.s.l.)
Discharge	pH	EC
2 lpm	7.3	340 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate



Spring : TS260 [mapped on 2021-03-17 15:07:00]

Village	Gram Panchayat	Tehsil	District
Chak Rakhwala	Chak Rakhwala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS261	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.95868° N	75.08011° E	758 m (a.m.s.l.)
Discharge	pH	EC
2.6 lpm	7.1	365 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate

			
Spring : TS261 [mapped on 2021-03-17 15:52:00]			

Village	Gram Panchayat	Tehsil	District
Chak Rakhwala	Chak Rakhwala	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS262	Nadu wali Bawli	Perennial
Latitude	Longitude	Altitude
32.95876° N	75.07822° E	761 m (a.m.s.l.)
Discharge	pH	EC
2.9 lpm	7.3	375 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High



Spring : TS262 [mapped on 2021-03-17 16:01:00]

Village	Gram Panchayat	Tehsil	District
Chak Rakhwala	Chak Rakhwala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1500	High	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS263	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.95228° N	75.0819° E	747 m (a.m.s.l.)	
Discharge	pH	EC	
8.6 lpm	7.5	333 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS263 [mapped on 2021-03-17 16:22:00]			
Village	Gram Panchayat	Tehsil	District
Chak Rakhwala	Chak Rakhwala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 65	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS264	Lansi Bawli	Perennial	
Latitude	Longitude	Altitude	
32.95265° N	75.1165° E	738 m (a.m.s.l.)	
Discharge	pH	EC	
17.6 lpm	7	251 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	Moderate	
Spring : TS264 [mapped on 2021-03-18 12:21:00]			
Village	Gram Panchayat	Tehsil	District
Lansi	Dabrial	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 400	High	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS265	Baw	Seasonal	
Latitude	Longitude	Altitude	
32.95275° N	75.11635° E	736 m (a.m.s.l.)	
Discharge	pH	EC	
-	NA	-	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	
Spring : TS265 [mapped on 2021-03-18 12:52:00]			
Village	Gram Panchayat	Tehsil	District
Lansi	Dabrial	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 90	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS266	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
32.95768° N	75.11391° E	775 m (a.m.s.l.)	
Discharge	pH	EC	
4 lpm	7.2	300 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS266 [mapped on 2021-03-18 12:47:00]			
Village	Gram Panchayat	Tehsil	District
Dabrial	Dabrial	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 75	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS267	Baw	Perennial	
Latitude	Longitude	Altitude	
32.94642° N	75.0914° E	738 m (a.m.s.l.)	
Discharge	pH	EC	
6.4 lpm	7.5	325 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS267 [mapped on 2021-05-18 15:25:00]			
Village	Gram Panchayat	Tehsil	District
Mela	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 200	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS268	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
32.94619° N	75.09276° E	721 m (a.m.s.l.)	
Discharge	pH	EC	
2 lpm	7.4	356 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS268 [mapped on 2021-05-18 15:39:00]			
Village	Gram Panchayat	Tehsil	District
Mela	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 90	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS269	Baw	Perennial	
Latitude	Longitude	Altitude	
32.94676° N	75.09271° E	725 m (a.m.s.l.)	
Discharge	pH	EC	
1.4 lpm	7.3	343 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS269 [mapped on 2021-05-18 15:49:00]			
Village	Gram Panchayat	Tehsil	District
Mela	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 95	Medium	No Change	Spring Piped water

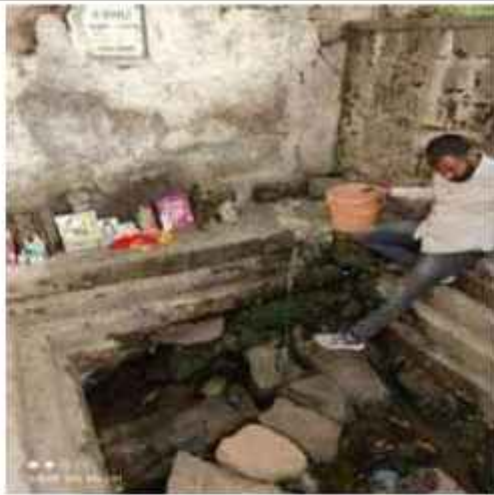
Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS270	Sola	Perennial	
Latitude	Longitude	Altitude	
32.9527° N	75.09221° E	735 m (a.m.s.l.)	
Discharge	pH	EC	
4 lpm	6.2	51 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	Moderate	
Spring : TS270 [mapped on 2021-05-18 15:18:00]			
Village	Gram Panchayat	Tehsil	District
Mangote	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS271	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.95145° N	75.09071° E	724 m (a.m.s.l.)	
Discharge	pH	EC	
3 lpm	6.5	33 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	NA	High	
Spring : TS271 [mapped on 2021-05-18 15:42:00]			
Village	Gram Panchayat	Tehsil	District
Mangote	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS272	Nadi di Bawli	Perennial	
Latitude	Longitude	Altitude	
32.92744° N	75.09022° E	736 m (a.m.s.l.)	
Discharge	pH	EC	
13.5 lpm	NA	-	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Spring : TS272 [mapped on 2021-05-18 16:05:00]			
Village	Gram Panchayat	Tehsil	District
Mangote	Sial-Jattan	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	Increased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS273	Bawli	Perennial	
Latitude	Longitude	Altitude	
33.02674° N	75.1529° E	1488 m (a.m.s.l.)	
Discharge	pH	EC	
4.2 lpm	7.5	179 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Medium	High	
Spring : TS273 [mapped on 2021-04-05 13:31:00]			
Village	Gram Panchayat	Tehsil	District
Pathi	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS274	Bawli	Perennial	
Latitude	Longitude	Altitude	
33.05113° N	75.15213° E	1525 m (a.m.s.l.)	
Discharge	pH	EC	
2.6 lpm	7.5	337 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	
Spring : TS274 [mapped on 2021-04-05 13:55:00]			
Village	Gram Panchayat	Tehsil	District
Pathi	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 15	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS275	Bawli	Perennial
Latitude	Longitude	Altitude
33.0318° N	75.1379° E	1555 m (a.m.s.l.)
Discharge	pH	EC
4 lpm	7.6	236 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS275 [mapped on 2021-04-05 14:13:00]			

Village	Gram Panchayat	Tehsil	District
Pathi	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 75	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS276	Baw	Perennial
Latitude	Longitude	Altitude
33.02132° N	75.12216° E	1442 m (a.m.s.l.)
Discharge	pH	EC
2.7 lpm	7.3	257 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	High



Spring : TS276 [mapped on 2021-04-05 15:11:00]

Village	Gram Panchayat	Tehsil	District
Pathi	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 25	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS277	Salad Pathi	Perennial
Latitude	Longitude	Altitude
33.02403° N	75.1199° E	1494 m (a.m.s.l.)
Discharge	pH	EC
1.7 lpm	7.8	207 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

			
Spring : TS277 [mapped on 2021-04-05 15:29:00]			

Village	Gram Panchayat	Tehsil	District
Salad Pathi	Pathi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 80	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS278	Baw	Perennial
Latitude	Longitude	Altitude
33.02565° N	75.12192° E	1486 m (a.m.s.l.)
Discharge	pH	EC
3.4 lpm	7.7	232 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Both Natural and Anthropogenic	Medium	Moderate



Spring : TS278 [mapped on 2021-04-05 15:52:00]

Village	Gram Panchayat	Tehsil	District
Pathi	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
T5279	Gid Baw	Perennial
Latitude	Longitude	Altitude
33.03449° N	75.13283° E	1568 m (a.m.s.l.)
Discharge	pH	EC
2.1 lpm	7.6	369 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate



Spring : T5279 [mapped on 2021-04-05 16:14:00]

Village	Gram Panchayat	Tehsil	District
Pathi	Pathi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS280	Baw	Perennial
Latitude	Longitude	Altitude
33.04009° N	75.13685° E	1603 m (a.m.s.l.)
Discharge	pH	EC
3 lpm	8	243 (µS/cm)
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	Medium	High

			
Spring : TS280 [mapped on 2021-04-06 11:17:00]			

Village	Gram Panchayat	Tehsil	District
Kainth Gali	Pathi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 25	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS281	Pangera Baw	Perennial
Latitude	Longitude	Altitude
33.00785° N	75.11507° E	1295 m (a.m.s.l.)
Discharge	pH	EC
3.5 lpm	7.8	295 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	High



Spring : TS281 [mapped on 2021-04-06 11:54:00]

Village	Gram Panchayat	Tehsil	District
Pangera	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 70	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS282	Pangera Baw	Perennial	
Latitude	Longitude	Altitude	
33.00769° N	75.11602° E	1269 m (a.m.s.l.)	
Discharge	pH	EC	
0.4 lpm	7.6	324 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Spring : TS282 [mapped on 2021-04-06 12:06:00]			
Village	Gram Panchayat	Tehsil	District
Pangera	Pathi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS283	Baw	Perennial
Latitude	Longitude	Altitude
32.9964 ° N	75.12853 ° E	982 m (a.m.s.l.)
Discharge	pH	EC
2.7 lpm	7.1	358 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS283 [mapped on 2021-04-06 13:06:00]			

Village	Gram Panchayat	Tehsil	District
Pangera	Pathi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS284	Baw	Seasonal
Latitude	Longitude	Altitude
32.99659° N	75.1267° E	976 m (a.m.s.l.)
Discharge	pH	EC
-	NA	-
Taste	Colour	Odour
Objectionable	Muddy	Objectionable
Major Stressor	Degree of Threat	Vulnerability
Natural	High	Moderate

			
Spring : TS284 [mapped on 2021-04-06 13:10:00]			

Village	Gram Panchayat	Tehsil	District
Pangera	Pathi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 45	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS285	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.97003° N	75.11769° E	811 m (a.m.s.l.)
Discharge	pH	EC
2.7 lpm	7.3	353 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	Medium	Moderate



Spring : TS285 [mapped on 2021-04-06 13:51:00]

Village	Gram Panchayat	Tehsil	District
Mansar	Mansar	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS286	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.97006° N	75.11728° E	808 m (a.m.s.l.)
Discharge	pH	EC
4.2 lpm	7.4	352 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS286 [mapped on 2021-04-06 14:00:00]			

Village	Gram Panchayat	Tehsil	District
Krimchi Mansar	Krimchi	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 80	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS287	Rani di Baw	Perennial
Latitude	Longitude	Altitude
32.96051° N	75.1039° E	771 m (a.m.s.l.)
Discharge	pH	EC
42.7 lpm	7.4	407 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS287 [mapped on 2021-04-06 14:20:00]			

Village	Gram Panchayat	Tehsil	District
Himra	Candala	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 120	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS288	Baw	Perennial
Latitude	Longitude	Altitude
32.96039° N	75.09923° E	775 m (a.m.s.l.)
Discharge	pH	EC
0.8 lpm	7.5	477 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High



Spring : TS288 [mapped on 2021-04-06 14:31:00]

Village	Gram Panchayat	Tehsil	District
Dabrialh	Dabrialh	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 70	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS289	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.95629° N	75.0836° E	766 m (a.m.s.l.)
Discharge	pH	EC
0.5 lpm	7.1	121 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS289 [mapped on 2021-04-06 14:49:00]			

Village	Gram Panchayat	Tehsil	District
Pangara Jagir	Pangara Jagir	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 45	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS290	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.94334° N	75.07459° E	704 m (a.m.s.l.)
Discharge	pH	EC
15.5 lpm	7.2	350 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : TS290 [mapped on 2021-04-06 15:09:00]

Village	Gram Panchayat	Tehsil	District
Haterian	Haterian	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 100	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS291	Baw	Perennial	
Latitude	Longitude	Altitude	
52.91936° N	75.08615° E	659 m (a.m.s.l.)	
Discharge	pH	EC	
2.2 lpm	7.2	387 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	Spring : TS291 [mapped on 2021-04-06 15:41:00]
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	
Village	Gram Panchayat	Tehsil	District
Muthari	Lansi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 20	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS292	Bayi	Perennial	
Latitude	Longitude	Altitude	
52.91944° N	75.08705° E	679 m (a.m.s.l.)	
Discharge	pH	EC	
2.1 lpm	7.4	291 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	Spring : TS292 [mapped on 2021-04-06 15:56:00]
Major Stressor	Degree of Threat	Vulnerability	
Both Natural and Anthropogenic	Medium	Moderate	
Village	Gram Panchayat	Tehsil	District
Lansi	Lansi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 45	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS293	Nainsu Bawli	Perennial	
Latitude	Longitude	Altitude	
52.89067° N	75.10414° E	650 m (a.m.s.l.)	
Discharge	pH	EC	
96 lpm	7	300 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	Spring : TS293 [mapped on 2021-04-07 10:46:00]
Major Stressor	Degree of Threat	Vulnerability	
None	NA	High	
Village	Gram Panchayat	Tehsil	District
Naisoo	Naisoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 180	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS294	Bani	Perennial	
Latitude	Longitude	Altitude	
52.89059° N	75.10426° E	651 m (a.m.s.l.)	
Discharge	pH	EC	
115.2 lpm	6.8	220 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	Spring : TS294 [mapped on 2021-04-07 11:01:00]
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
Village	Gram Panchayat	Tehsil	District
Naisoo	Naisoo	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 145	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS295	Bawli	Perennial
Latitude	Longitude	Altitude
32.88342° N	75.1076° E	591 m (a.m.s.l.)
Discharge	pH	EC
18.3 lpm	7.1	382 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS295 [mapped on 2021-04-07 11:16:00]			

Village	Gram Panchayat	Tehsil	District
Naisoo	Naisoo	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS296	Baw	Perennial
Latitude	Longitude	Altitude
32.88387° N	75.10772° E	594 m (a.m.s.l.)
Discharge	pH	EC
14.1 lpm	7.1	327 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS296 [mapped on 2021-04-07 11:25:00]			

Village	Gram Panchayat	Tehsil	District
Gesai mohalla	Manpa	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 150	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature
TS297	Bawli	Perennial
Latitude	Longitude	Altitude
32.89096° N	75.10873° E	626 m (a.m.s.l.)
Discharge	pH	EC
38.4 lpm	6.5	171 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
Anthropogenic	NA	Moderate

			
Spring : TS297 [mapped on 2021-04-07 11:52:00]			

Village	Gram Panchayat	Tehsil	District
Rakh Badayli	Manpa	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
TS298	Mandir Baw	Perennial	
Latitude	Longitude	Altitude	
32.90132° N	75.10027° E	650 m (a.m.s.l.)	
Discharge	pH	EC	
2.7 lpm	6.9	167 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	
			
Spring : TS298 [mapped on 2021-04-07 12:10:00]			
Village	Gram Panchayat	Tehsil	District
Manpa	Manpa	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3311	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.92184° N	75.08332° E	654 m (a.m.s.l.)	
Discharge	pH	EC	
-	7	271 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : T3311 [mapped on 2021-04-14 16:07:00]
Village	Gram Panchayat	Tehsil	District
Lansi	Lansi	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 75	Medium	Decreased	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3312	Baw	Perennial	
Latitude	Longitude	Altitude	
32.91653° N	75.10083° E	673 m (a.m.s.l.)	
Discharge	pH	EC	
36.9 lpm	6.7	149 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : T3312 [mapped on 2021-04-14 17:05:00]
Village	Gram Panchayat	Tehsil	District
Supply Chowk	NA	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 700	Medium	No Change	Spring Piped water

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3313	Bawli	Perennial	
Latitude	Longitude	Altitude	
32.91654° N	75.10999° E	659 m (a.m.s.l.)	
Discharge	pH	EC	
5.5 lpm	7.5	175 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : T3313 [mapped on 2021-04-14 17:21:00]
Village	Gram Panchayat	Tehsil	District
Birma Pull	Birma Pull	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1200	Medium	Decreased	Piped water Stream/ Nallah

Spring Atlas of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3314	Baw	Perennial	
Latitude	Longitude	Altitude	
33.05071° N	75.14627° E	1364 m (a.m.s.l.)	
Discharge	pH	EC	
1.5 lpm	7.2	300 (µS/cm)	
Taste	Colour	Odour	
Unobjectionable	Clear	Unobjectionable	
Major Stressor	Degree of Threat	Vulnerability	
None	NA	Moderate	Spring : T3314 [mapped on 2021-07-08 11:17:00]
Village	Gram Panchayat	Tehsil	District
Naroor	Naroor	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 45	Medium	No Change	Spring

Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
T3349	Baw	Perennial
Latitude	Longitude	Altitude
32.91792° N	75.05326° E	691 m (a.m.s.l.)
Discharge	pH	EC
60 lpm	7.3	367 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : T3349 [mapped on 2021-09-14 11:56:00]			

Village	Gram Panchayat	Tehsil	District
Jib	Jib	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 1000	High	No Change	Spring

Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature	
T3350	Salan Bawli	Perennial	
Latitude	Longitude	Altitude	
32.93536° N	75.03595° E	784 m (a.m.s.l.)	
Discharge	pH	EC	
-	7.3	356 (µS/cm)	
Taste	Colour	Odour	
Objectionable	Muddy	Objectionable	
Major Stressor	Degree of Threat	Vulnerability	
Anthropogenic	Medium	Moderate	
Spring : T3350 [mapped on 2021-09-14 12:19:00]			
Village	Gram Panchayat	Tehsil	District
Barolla	Barolla	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 250	Medium	No Change	Spring

Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
T3351	Sule Bawli	Perennial
Latitude	Longitude	Altitude
32.93987° N	75.03521° E	786 m (a.m.s.l.)
Discharge	pH	EC
2.5 lpm	7.1	370 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate



Spring : T3351 [mapped on 2021-09-14 12:52:00]

Village	Gram Panchayat	Tehsil	District
Barolla	Barolla	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	No Change	Spring

Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
T3352	Mandir Baw	Perennial
Latitude	Longitude	Altitude
32.96334° N	75.03252° E	891 m (a.m.s.l.)
Discharge	pH	EC
1.6 lpm	7.4	324 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate


Spring : T3352 [mapped on 2021-09-14 12:57:00]

Village	Gram Panchayat	Tehsil	District
Thati	Barolla	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
~ 50	Medium	Decreased	Spring Stream/ Nallah

Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS452	Sora di Baw	Perennial
Latitude	Longitude	Altitude
32.86209° N	75.1264° E	624 m (a.m.s.l.)
Discharge	pH	EC
13.3 lpm	7.3	390 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	High

Spring : TS452 [mapped on 2021-10-27 17:13:00]			
Village	Gram Panchayat	Tehsil	District
Battal baliwa	Battal	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 250	Medium	No Change	Spring Piped water



Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS447	Bavli	Perennial
Latitude	Longitude	Altitude
52.9168° N	75.02351° E	784 m (a.m.s.l)
Discharge	pH	EC
3.3 lpm	6.3	359 (µS/cm)
Taste	Colour	Odour
Unobjectionable	Clear	Unobjectionable
Major Stressor	Degree of Threat	Vulnerability
None	NA	Moderate

			
Spring : TS447 [mapped on 2021-11-12 14:18:00]			

Village	Gram Panchayat	Tehsil	District
Seen thakian	Seen thakian	Udhampur	Udhampur

No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 120	Medium	No Change	Spring Piped water



Spring RRII of Tawi River Catchment

Spring ID	Spring Name	Nature
TS468	Nadu	Perennial
Latitude	Longitude	Altitude
32.91801° N	75.10853° E	672 m (a.m.s.l)
Discharge	pH	EC
66.5 lpm	7.25	660 (µS/cm)
Taste	Colour	Odour
Un-objectionable	Clear	Un-objectionable
Major Stressor	Degree of Threat	Vulnerability
None	Moderate	Moderate

			
Spring : TS468 [mapped on 2022-09-20 11:04:31]			

Village	Gram Panchayat	Tehsil	District
T.Moh	T.Moh	Udhampur	Udhampur
No. of Dependent Population	Dependency Level	People Perception	Other Sources
— 50	Medium	Decreased	Piped water



Project Team

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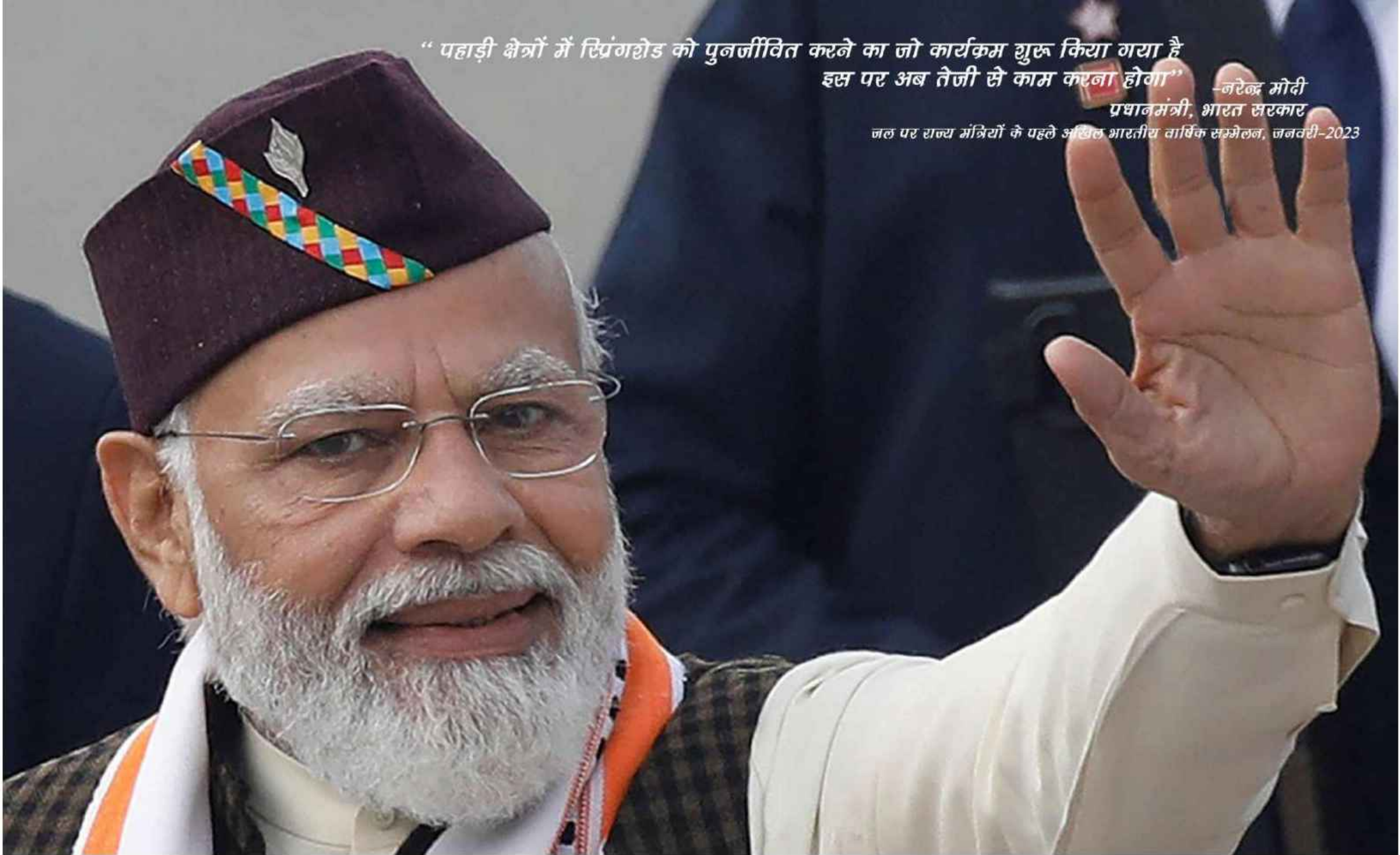
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“पहाड़ी क्षेत्रों में स्प्रिंगशेड को पुनर्जीवित करने का जो कार्यक्रम शुरू किया गया है
इस पर अब तेजी से काम करना होगा”

-नरेन्द्र मोदी

प्रधानमंत्री, भारत सरकार

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