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Sacred Springs:

Perceptions of Religion and Water in Village Communities of Uttarakhand

Juliet Risko

Anjali Capila, PhD.

Manoj Pande, Himalaya Consortium for Himalaya Conservation

SIT Study Abroad India: Public Health, Gender, and Community Action

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Abstract

This study explores the rural area of Pauri Garhwal in Uttarakhand to gain an understanding of the relationship between traditional societies and their natural environment – including perceptions of water in the community, the aspect of religious rituals involving such resources, and the impact that these factors have on the overall health of the community. Originally, the water body of interest was the Ganga, with the complex layers of spirituality surrounding her waters. However, upon visitation to the community, it was discovered that natural springs held a much greater importance to the individual and collective lives in the area. Through personal interviews, observations, and case studies, it became apparent that springs have a larger significant value in the lives of people in the villages – in ways that are functional, spiritual, ritualistic, as well as a combination of these factors. The water from the Ganga is still important in the lives of individuals in aspects of religious rituals and for purification purposes but in Pauri Garhwal, springs are both more accessible and integrated into the lives of the community. The findings of this study include that water in the Uttarakhand region is perceived as a manifestation of god, and natural springs are pure and unpolluted as the water comes untouched from the earth. It is necessary in the village communities that the water be worshipped – in its designation as the only water that can be used for drinking and cooking, its vital role in Hindu religious celebrations and recognition of deities, as well as in important lifecycle events. It was also found that individuals have observed changes in the quality of these natural sources and the relationship the community has with them, touching on issues such as migration, resource conservation, and shifting priorities.

Introduction

In this paper, the argument is made that the health of rural villages in the Garhwal Himalaya is directly related to the continuation of natural springs. From trends observed in the qualitative data, it seems that individuals in Pauri Garhwal are dependent on the springs, as springs are dependent on the worship and maintenance of the village, thus creating a mutual relationship. Spring water is considered to be pure, unaffected by outside forces as it comes untouched from the earth, and necessary to be protected. The relationship between water and the community present in the Garwhal Himalayas is mutual, requiring action on the part of the villages to protect and conserve the natural sources in return for its use.

Other aspects of life are also interconnected in this traditional environment. The relationship between factors such as community livelihood, the continuation of rituals through generations, migration, and the conservation of forests are reoccurring themes that surfaced in interviews and observations during this exploration. Thus, aspects of village life which are not independent from each other and people have knowledge about these connections and the ways in which they are impacted. Therefore, to conserve these natural springs which are so crucial to the livelihood of this region requires not only one solution but rather adopting a holistic model in which many aspects of village life are considered, including the health and livelihood of the individuals in the village community, protection of natural resources and the forests in which they reside, as well as the conservation of rituals that have carried on through many generations.

Research Question

Research Question:

To what extent is there a relationship between religion and water in the
 Uttarakhand region and how do people's perceptions impact this intersection?

Sub Questions:

- How do these perceptions impact the holistic health of the village community?
- What are the beliefs about springs as a natural resource? As a site of religious rituals?
- o To what extent have these beliefs changed over time with modernization?
- o Is there a sense of sustainability within the culture of the community?
- What affect do specific religious or spiritual practices have on the perception of water in general?
- o To what degree is the community dependent on the natural springs?
- o What are the specific water uses and storage practices of the community?
- How is the daily lifestyle of the community members affected by the springs and their quality?

Objectives of Study

This study aims to explore the relationship between the perspectives surrounding the natural springs and their practical uses among rural communities, as well as how this relationship affects individuals' lifestyle and general health. In order to truly investigate this question, this study is required to acknowledge the presence of communities' communal and individual perceptions of water, its role in the greater ecosystem, elements of sustainably in using natural springs as a resource or finite supply of water, and stewardship toward these sources as an example of nature's power and beauty beyond human consumption. This study aims to investigate to what degree the perceptions and religious rituals, water management practices, and health of the community are connected, as well as the nature of the relationship between the village communities and natural springs.

Region



Figure 1: Map demonstrating the location of the Uttarakhand region in Northern India, as well as the location of Pauri Garhwal in the southwest of the region (http://uttaranchal.org/uttarakhand).



Figure 2: Map showing the route of the Ganges River, from the mouth of the in Gangotri in the top left corner, moving west across the country to open into the Bay of Bengal in the lower right corner (Mallet, *River of Life River or Death*).

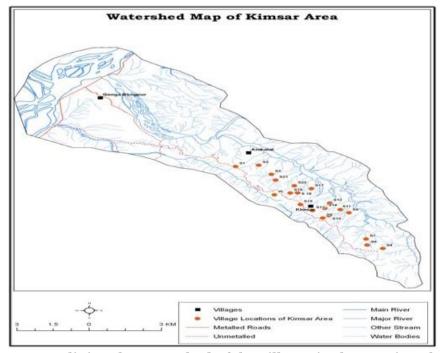


Figure 3: Image outlining the watershed of the villages in the Pauri Garhwal region, including villages, roads, major rivers, streams, and other water bodies (HIMCON).



Figure 4: Topographical map demonstrating the locations of villages in Pauri Garhwal. The scope of this paper covers from Talla Banas village to Dharkot (HIMCON).

Methodology

This study was completed through fifteen interviews with members of several village communities, personal observations, and interactions with members of the HIMCON (Himalaya Consortium for Himalaya Conservation) organization.

The interviews were conducted in an informal, semi-structured style. Communication was achieved through a translator, as language was a barrier. Each interview was recorded and transcribed (available upon request). Though each interview was different, the researcher guided the questions to focus on individuals' relationship with and perceptions about water, what religious practices are involved with water in their lives, and how these impact community health.

*The names of individuals in this study have been changed for the purpose of confidentiality.

Personal observations involved the researcher absorbing information and compiling thoughts and reactions in personal notes. These are meant to be as objective as possible. Observations included interactions between village members, the daily routine and lifestyle of individuals, watching rituals and ceremonies both in the villages and at the Devprayag, and listening to stories and information that others imparted for the purpose of this study.

Interactions with HIMCON included learning about their mission, ongoing projects, and influence in the area. The information about HIMCON in this paper comes from conversations with members of the organization's team, as well as their personal data and materials.

The combination of these methods are what contribute to the findings and conclusions in this study.

Bias

It is important to note the possible sources of bias in this study. There may be moderator bias in the unconscious reactions and expressions of the researcher, in the use of a translator, the influence of other individuals present in the interview space, and any other unrecognized sources.

Results and Discussion

Water as More Than a Resource

What is water? "Water is needed for the survival of life on this earth. It is an important factor in every sphere of human activity," but how one defines and perceives this natural element sets the stage for how one obtains, uses, and shares water (Kumar, 1996, p.15). In traditional societies, water was not readily available in taps and in packaged plastic bottles. It was gathered and used as needed, perhaps requiring walking to a natural source or retrieving it from a distant location. This encouraged a connection between people and the environment, fostering local knowledge about the quality of the natural sources in their area, where to locate them, and their cycles of change. Now in modern societies with the arrival of pipelines, water harvesting, and government-owned aquatic resources, the understanding of nature's cycles and the connection to environmental resources which sustain our society are less than clear, if existent at all.

Author of a book on the intersections between nature, religion, and water, Sylvie Shaw warns that in "failing to acknowledge the deeper connections inherent in ancient and indigenous cultures," we will also "fail to grasp the underlying spiritual roots of the current ecological crisis and the need to develop holistic, sustainable relationships with waterways and other ecosystems" (2014, p.2). Society lives in a global community, now more than ever with the ease of technology, but it often forgets that humans are not the only aspect of the world that make it alive; "We must also speak to people's hearts and ask them to believe once more in the beauty and sacredness of water and the wider ecosystems within which all life revolves" (Shaw, 2014, p. 6). There are examples to learn from – communities which still value the relationship between individuals and natural resources. One such example exists in the villages of Pauri Garhwal,

Uttarakhand, in northern India. Here, water is revered through religious worship, used in rituals through the stages of life, and protected in return for its use.

The River that Embodies Religion

Another widely known example of water being worshipped for its sacred properties, which must be noted for this study, is the Ganges river (or *Ganga* in Sanskrit). Running from northwest India from a glacier in the Himalayas to snake its way across the country and eventually open into the Bay of Bengal, the Ganga is both fed by other rivers and splits off into smaller tributaries along the way. It is unique because of its holiness, worshipped as the Mother Goddess, providing for her children and punishing those who are deserving, explains Vinay. In the words of environmental researcher C. McLeod:

"There is perhaps no other river in the world that is loved and respected like Ganga. People believe the river is a goddess, our mother. She supports the life of 300 million people. There is no other river basin in the world that sustains so much life...no river is as strained to this extent as Ganga" (1994).

The Ganga is seen as an embodiment of the Hindu religion, and there are multiple versions of her creation – the most popular one including Lord Shiva catching the water from the heavens and releasing it in the locks of his hair, thus giving life to the river (Eck, 1996, p. 145).

In his book about the Ganga, Victor Mallet fittingly quotes scholar of religious studies Diana Eck by explaining, "'The Ganges,' Eck writes, 'is the liquid essence of the scriptures, the gods, and the wisdom of the Hindu tradition'" (2017, p. 33). The Ganga is worshipped by many who believe it to be self-cleansing and pure, despite its physical pollution and waste. It is the site of many religious festivals, pilgrimages, and personal

devotion, especially on holy days like Kumbh Mela, "reputed on occasion to be the largest concentrated gathering of humans anywhere" and " is a month-long celebration of holy waters [...] attracting Hindu pilgrims and holy men from across the country and the world" (Mallet, 2017, p. 23). This particular festival occurs at the Devprayag, where the confluence between the Alaknanda and Bhagirathi rivers form what is considered to be the beginning of the Ganga. The meeting point of these two rivers does not disappoint; the intermingling currents causing a whirlpool motion in the center of the river, accentuated by the limestone grey rocks surrounding it.

It was apparent that "River confluences are considered especially sacred" (Mallet, 2017, p. 24), as upon visitation to the Devprayag, people of all ages and socio-economic statuses were observed worshipping the spring in different ways. Some prayed silently, dipped their feet, others splashed water on themselves and drank with their hands, other still submerged their entire bodies into the rushing water while they clung to ropes. "When they had bathed they felt cleansed: not just bodily, but in spirit.' – The Ramayana" (Mallet, 2017, p. 23). As the Ganga is pure and has cleansing properties, bathing in her water is considered to absolve personal sins and cleanse the soul. A priest later came at sunset to perform the nightly *aarti*, a prayer ceremony involving flames.



Image 1: The nightly *aarti*, or prayer ceremony, on the banks of the Ganga at sunset. The ceremonial flames are accompanied by singing and musical instruments (Author).

These ceremonies are performed all along the river, especially in concentrated religious sites like Rishikesh and Varanasi. Standing at the banks of the Ganga, it is easy to understand how this powerful river is revered and worshipped by millions. With its thunderous roar, strange pastel blue-green color, and mystical qualities, it seems almost "other-worldly."

Ganga water is also used to purify individuals and homes. People bottle it up at the source and take it home with them. On special occasions or after any auspicious event, individuals will tap into their household reserve of Ganga water and sprinkle it around the home and on people's heads. It is also used for worship on certain religious days. And this water will never lose its purification properties or go bad. Ganga water has almost magical properties of purity. "The water of Ganga can never be destroyed or spoiled,' he says. 'If you open the bottle after ten years, the water will be the same.'" (Mallet, 2017, p. 20).

Life in Uttarakhand

But the Ganga is not the only instance of water representing religious entities or site of rituals associated with the spirituality of individuals. Like the Ganga flows purely from the heavens, natural spring water rises untouched from the earth. "Springs are also considered to be pure, as pure as the Ganges water, maybe even more," explains a woman who was interviewed in the villages. They possess the same purifying qualities, and are made quite distinct from water from other man-made sources. As stated in the abstract, this paper makes the argument that the perceptions and ritual use of the springs, water management practices in the region, and the holistic health of the community are interconnected and constantly impact each other. The foundation for

this claim comes from interviews and observations of village members in the Garhwal Himalaya.

Life in the villages of Pauri Garhwal in the Uttarakhand region of northern India (also known as the Garhwal Himalaya) is hard work. Many families have livestock or agricultural fields, waking with the sun to tend to the associated responsibilities. The terrain in the mountains is challenging and walking is the main mode of transportation. The reward is a beautiful landscape of rolling mountain peaks, dense green forests, interspersed pastures, and brilliantly painted homes. In the words of Sadaf, "our mountains and water are good, no one doesn't like this place." The other thing this region possesses is several of scattered natural springs.

The major religion of the region and the individuals interviewed is Hinduism. Religion plays a large role in the communities of Pauri Garhwal, laying the foundation for the rituals that are explained in this study, dictating certain days of worship, and providing answers for certain life questions. But Hinduism acts more as cultural guidelines rather than an organization devoted to one cause. As explained by Vinay, his religion is not the religion of politics that drives people apart, but "My religion is a culture. Family is an integral unit, a part of that culture. And all our values and all are related to that culture which come down from tradition." He emphasizes that he is devoted to the religion that connects, rather than divides. This sentiment is echoed in the words of Seema, who explains that to her, being Hindu means having positive values in life, respecting one's family, and respecting guests and visitors. These trends of religion as a motivation for respect and sustaining culture continue throughout the study.

Upon observing the life of a family in the Malla Banas Village and interviewing fifteen other individuals in the surrounding villages, it becomes clear that natural springs are the most important water source in the area. There is great local knowledge about water sources and natural cycles that maintain them. From early development of the villages, the springs, or *shrute* in Garhwali, were named according to their quality of water. For example, dhumat ghara is the "good spring," whereas there are others that people know to stay away from due to their uncleanliness. Local knowledge of the region has also led to innovative solutions to make everyday tasks more efficient. One example is the creation of water catchment ponds placed meticulously at the base of mountains. When it rains, the water makes a predictable path down the mountain and thus into the ponds. Thus, runoff can be collected and used in the community. Another example is the maintenance of small ponds located near springs – not to be used for water consumption but to allow moisture recharge or seepage back into the earth and replenish the spring. Thirdly, the community has established the use of designated ponds for certain water needs. Neha describes that in her village, those lined with mud are for livestock and animals while the pond lined with stones are for bathing and washing clothes. These creative techniques not only improve every tasks but also draw upon a knowledge specific to the village members.

This community, especially the women who have contributed their voices to this paper, are extremely hard-working. Their daily routine includes walking miles to collect fodder from the forest for the livestock, collecting branches for firewood to cook, performing other necessary tasks in the household, and making the journey to the spring multiple times a day to retrieve water, bathe, and wash clothes. Sadaf summarizes her lifestyle with: "God will not give anything without hard work."



Image 2: Two women carry bundles of fodder on top of their heads on the side of the road in Talla Banas village. They walked several kilometers to collect the materials from the forest for their livestock (Author).

This daily strain, however, seems to have brought the women together in a tightly-knit community. It was common to see several women walking to collect water from the source together, forming a shared space to socialize and perhaps make the task more enjoyable. Tanu says of the spring, "I am happy to go there because it is a routine and a meeting point."



Image 3: Village women return together from the spring, gracefully balancing heavy plastic and copper vessels filled with water on top of their heads (Author).

Springs as Sacred

When asked about their perceptions about water, many women responded that the water is alive and pure because it comes from the earth – a manifestation of the gods. In Hindu mythology, *Jaldevta* is considered the god of water. Vinay, A journalist from Tehri Garhwal who had been working in the region explains, "the water is considered so pure, it is considered a manifestation of the god itself because it comes from the earth. And there is no intervening force to pollute it, it is the purest water." Because the water from the spring is believed to be completely untouched, there is no need for any filtration techniques. The one exception is the use of copper vessels, which serve as more of a secondary purification than a filtration method. The vessels "remove impurities and have properties to relieve stomach pain and gas," explains Neha as she gestures to her own. The water is collected in these and placed in the house until the water is needed for cooking or drinking, or any other religious ritual.

The religious rituals involved with water have a great significance in the individual and communal lives of the people in the villages. In this study, rituals are defined as "symbolic performances' that unite a particular group of people together in a shared event that underlies a common belief system and communal practice" (Shaw, 2014, p. 11), and the results of the study reinforce this idea of shared events binding the community together. By discussion with and observing individuals in the community, certain trends have appeared. First, rituals follow and correspond with certain lifecycle events. On the twenty-first day after a baby is born, the priest comes for the name-giving ceremony and prayer service at the site of the spring. After the birth, Vinay explains that the mother and child are considered impure until they are purified with spring water at

this ceremony. It was also mentioned in all of the interviews that after a marriage, the new bride is taken directly to the spring in her husband's village. Before seeing the livestock and field, being shown the forest, or meeting the house, she must first be introduced to the village source. There the bride performs a ritual which involves the pouring of water from a small copper vessel. Only after this is she able to cook with the water. One mother emphasizes, "My son and daughter will go to the source when they are married, just like I did" (Mahima). It is clear that this is a strong religious ritual in the community, symbolizing the joining of two families and the celebration of the local natural water source which holds a great importance in the family's lives. On the day of the wedding, it is also customary for the bride and groom to receive five copper vessels, a symbolic gift-giving known as *panch bandii*. These are the vessels that will be used by the family to retrieve spring water for the household. Vinay also mentions another lifecycle ritual involving the spring is when a death occurs in the community. After the cremation ceremony, people will go to bathe in the spring to purify themselves and ward off any negative energy.

Although the water from the Ganga does not have the same importance in the lives of people in the villages as does water from the local natural source, it is still used for certain religious rituals in a similar capacity to the spring water. "Ganga is 'Mother' and we have to get water from the confluence even though the springs are Ganga water. It is used for any religious event, bad incident, or lunar eclipse to cleanse the area. After death, the rituals take place at the springs but Ganga water is still needed," Mahima explains. Even though it is bottled up and stored in the worship space of the home, the religious embodiment of the water is still innately present, as the women still refer to the water as coming from the mother. It is crucial that there is always a supply of the water

from the river; as Tanu states, "This water is something that is needed at all occasions for purification. Every home has a supply of water from the Ganga."

But the water cannot come from any tributary of her aquatic path. Rather, the water used for rituals must be retrieved from the main body of the Ganga. Just as there are designated areas around the site of the spring to perform certain tasks, there is location of the water that is considered more sacred: "It is only officially Ganga water when it meets the original flowing source, coming from the glaciers. It must be water from the main stream. The purity of the water comes from the meeting, like meeting of the minds," Sadaf responds regarding the collection of water from the Ganga. For religious ritual purposes, it becomes clear that both spring water and a household supply of water from the Ganga are required for purification purposes as well as to mark the meaningful life events.

Water, specifically from the natural spring, plays a large role in the stages of life for the community of the Garhwal Himalaya. Not only in the events of human life, as demonstrate in the rituals associated with birth, marriage and death, but also corresponding with the events of the Hindu calendar. Another reoccurring trend observed in this study connects the use of springs and certain auspicious days of the year. On days such as lunar eclipses, negative events in the family, or days of worship for local deities, the members of the family sprinkle spring water around the house and on their relatives' heads to purify all that it touched. Meals are especially cooked using solely spring water. Vinay explains that the area around the spring is cleaned, as "when local gods and goddesses need to be worshipped, it is done at the spring and the spring is also cleaned thoroughly, and the *puja* (a devotional worship or prayer ritual to one or more deities in Hinduism) is performed at the site of the spring. "My family and young

children even go with me when they could walk, carrying small vessels for water," Tanu says. All of the family members go to the spring to collect water together on special occasions, involving everyone in the ritual.



Image 4: One of the natural springs in the Malla Banas Village. A bucket lies under the water stream to collect water for washing clothes. Members of the community were seen at the site bathing and collecting water (Author).

The Importance of Location

Another trend emerging from the interviews and observations performed in the villages is the perception that location is sacred. Not only the water itself, but the physical location of the spring in its natural setting has certain mystical qualities to it.

The community members emphasize that the source is not to be disturbed or interrupted in any way – that it must flow from the earth on its own, retaining its innate purity. Prachi makes these special rules clear:

"We keep the spring source clean and don't disturb the area until the water comes out naturally. The spring is untouched by all of the village who follow this rule. If people try to use cement to reinforce the spring, they will dislocate it and lose the source."

This highlights the importance of location, or the importance of geographical space. The spring is sacred in its original location because it has been untouched by humans or any other intervening force. This brings the community together in the way of a communal protection and worship of the site. It is in the best interest of the entire village that the spring is sustained. Pauri Garhwal is one illustration of how "Natural holy places – holy groves, holy trees, springs and sacrificial stones – form a major part of the cultural heritage and of folklore and unite historical, archaeological, folkloristic and ecological values" (Bergmann, 2009, p.224). There are certain unwritten laws about the location of certain springs, as well as where to bathe, wash clothes, and use the restroom in proximity to the spring. This stays with consistent with the communal protection of the spring, sustaining the shared space in a responsible way, that has been seen throughout this study.

However, there is a division of the village springs based on caste, which is one aspect that defies the community's concept of shared, communal, and unharnessed water source. There are designated springs for the families of lower castes, depending on their location or quality, and decided by the Pauri Garhwal community together.

According to Mahima, this is one aspect of the community's relationship with the spring and perception about water resources that has not changed over time:

"There is discrimination based on caste because the springs are divided – even after so much education, it is still this way. There is still a mindset of discrimination, even around water! We have to wash the source of the upper caste if we use it. Even the new generation is not changing."

If there is need for the members of a lower caste to use a spring designated for the upper castes, they may but are then requires to wash the spring area after they use it. The issue of caste discrimination makes it way even into the most basic necessities of the community in the form of resource distribution. Although the springs may be communally protected, they are still being controlled in some aspect.

Water Health in the Community

One positive trend that the Pauri Garhwal community has recognized is the lack of illness due to contamination of the water source, the quality of the water, or other water-borne diseases. This is attributed to the strong work ethic of the villages and the physical labor that working with the land requires. Tanu explains "People were not sick because they worked hard," adults and children perform the tasks required of them, whether they be taking care of the animals, gathering water, grinding flour, harvesting vegetables, whatever is necessary around the house. Only those who are studying or working in the city and giving less importance to the "reap what you sow" lifestyle are becoming sick, one village elder remarks (Seema). But for those who grew up in the village and maintain a relationship with the natural environment of the Garhwal Himalaya like Seema has,

"there were no water-borne diseases even during the monsoon season. Now there are more diseases, in those days there were none. We would not even strain the water. We used to go to the forests for fodder and drink from the springs and nothing happened to us – we grew up strong."

While people may not have appeared to become ill due to the quality of water or water-borne illnesses in the community, it is apparent that not all the water sources in the region are created equal. While some springs are clean and constantly flowing with moisture recharge, like the "good spring" *dhumat ghara*, others are saturated with mud or have been displaced. In an interaction with women from Sonarkot village, which has

extreme water scarcity, women raised their voices on the issue. Here there is no natural water source and families are limited to two pots of water per day. The women rightfully wanted to know how they could stretch a mere two pots to cover the needs of the animals, bathing, washing, cooking, and drinking. As important as springs are in the lives of the community – for consumption, religious worship, and emotional wellbeing, these natural sources are not endless and the constant demand for water in the villages has needed to be addressed by other methods of water supply. This is where HIMCON plays a significant role.

Water Access and Activism

HIMCON, or the Himalaya Consortium for Himalaya Conservation, is an organization which has been active in the Garhwal Himalaya since 1991 and its focus includes natural resource conservation and livelihood promotion. Their projects in the are include low-cost water harvesting tanks, slow-sand filters, rainwater harvesting tanks, and livelihood projects such as oyster mushroom harvesting. The former head of the Indwal village in Uttarakhand explained how he managed to shift the perspective of the community members to focus on water conservation and responsible use of resource. Indwal village has struggled with acute water scarcity in the past and was required to bring water in on trucks from other areas. After reaching out to HIMCON and creating a partnership with them, however, the community was able to take this issue into their own hands by helping to create water harvesting and storage containers, irrigation tanks, and other resource conservation techniques like the replenishing of broad-leaf species oak trees.

These trees, recognized from local knowledge of the community, are valued for their water-conserving roots and shading capacities, which retain water in the ground for the rejuvenation of springs. According to Singh and Pande, "It has long been recognized that forests tend to enhance soil-water retention by reducing surface runoff, by increasing the permeability of the soil, by decreasing evaporation, and by enhancing the absorbing and holding capacity of the soil" (1989). This native species was reinforced in the forests around natural water sources by the community members. Thus, with these efforts, the village was able to revive the natural springs of the area, create a reliable communal water supply, and establish techniques to conserve these recourses. This is also a success story for other villages, as Indwal has maintained these projects over time. HIMCON's mission and projects are still functioning well and continue to serve their original purpose of improving the livelihood of the village.

Many households in the villages of Pauri Garhwal also have rainwater harvesting tanks constructed in their homes, such as the one below.



Image 5: A decoratively painted HIMCON water storage tank in a village home. The tank is constructed from low-cost Ferro-cement and can hold up to 5000 litres of water. This tank has a pipe connected to it for harvesting rainwater from the roof (Author).

As observed in the family of Malla Bana and through the personal interviews, it is a consensus that the water from these tanks is used for washing clothes, cleaning utensils, washing animals, and everything else besides drinking and cooking. These two necessities were reserved for the pure spring water. There is also a pipeline which supplies water to individual households. The overall attitude toward these modern conservation techniques: "Three or four year ago we got 5,000 litre tanks with HIMCON and we also have piped water. This has made life much better and less problematic" responds Diya. They seem to make life easier in such a demanding environment by reducing the number of times individuals need to go to the spring to collect water for other uses. But the distinction between the pure water from the natural source and stored water is reinforced:

"The access to piped water made a major change. With no water in the taps, everyone goes to the spring to bathe, defecate, clean, and bring water back. With access to water, people still collect water from the spring but most of the piped water is going to the toilet and for baths. Now we use the HIMCON rainwater harvesting tanks and water collection tanks – but not for drinking, for other things like toilets. We still go to the spring for drinking water" (Tanu).

Some individuals recognize that this increased access to water is changing some aspects of traditional life, but the importance of the rituals associated with the spring is still deeply engrained in the community. According to Sadaf, "Some people will use the tap when they are married but the spring is more auspicious. Even if the piped water stopped coming, it's ok, but we need the spring water to stay."

There are also hand pumps in some villages, which the community regularly pays to maintain. Mahima admits these "are a very big relief because I don't have to walk to

the spring and it is the same water" however, "the pump is dependent on electricity but the spring is not dependent on anything. So we worship the spring because it is independent." Again, people welcome the use of techniques that make water collection easier and a supply more readily available. Regardless, the distinction between what is pure spring water and what is not is continuously made clear. This stays consistent with the trend that water conservation and with drawl techniques are welcome to ease some of the burden of a rural lifestyle and thus make space for individuals to improve their livelihoods, but these techniques remain distinct from the purity and religious importance of spring water. The mutual relationship between water and spiritual health remains strong, even if the practicality of the rituals has lessened over time.

The Future of Tradition

Although storage tanks, pipelines, and hand pumps may make life slightly less demanding and create space for livelihood projects or other activities, the women interviewed in the Garhwal Himalaya confidently say that tradition will continue. But these traditions, with their original association with a lifestyle of hard work, demanding agricultural labor, and religious importance, may not be as relatable to younger generations. Many of the youth in the villages study outside of the area, in Dehradun or Rishikesh, and spend little time in the fields. It is also common for men to work in the city and be gone for long periods of time. Migration is a common issue in many traditional societies, where individuals leave to search for what is perceived as better opportunities in metropolitan areas. This region is not an exception, and it has an effect on the livelihoods, health, rituals, and relationship with water in the villages.

When asked whether they had observed any changes in the relationships people had with the spring or with the source itself, the individuals interviewed in this study respond by explaining the relationship between migration and their community's relationship with water. In this case, it is the earth's natural supply of groundwater, which supplies the spring source, that is directly affected by people migrating out of the area. It was stated by one of the village women:

"People are not using the traditional agricultural practices anymore, they are leaving. The village used to be so plentiful and people did not have any time because they were always working. Now everyone works in the city and there is no community cooperation. It is all connected: no ploughing of the land leads to less water seepage and no moisture recharge of the source" (Tanu).

This cycle of working with the land and the sustainability of the source was reinforced by other women in the village, reinforcing the perception that agriculture directly influences the natural supply of water, which is perhaps one of the reasons why agriculture is so valued in the community. And this lack of water underground to replenish the source is a great concern no only in this region, but in the greater scope of India: "Groundwater is a problem everywhere, especially in northern India [...] the water table is going down" (Mallet, 2017, p. 153). Regardless of the reason behind it, members of the village are aware of this negative trend of reducing groundwater and realize the implications it may have on future generations. With almost half of the Indian population using groundwater in some capacity, it is unknown just how long these original sources of water will last (Bhat et. al, 2010).

However, it is assumed that the natural sources will still exist many years in the future and that traditions will continue along with it. The reasoning behind carrying on these traditions is simply because they have been passed down in the family, and it's just what you do. "My son and daughter will go to the source when they are married, like I

did," Mahima responds, even if they are not aware of the original reasoning behind it. Preeti and Lavanya, two young women in the Dharkot Village who were educated at the local school and now work at home, addressed the importance of rituals associated with the spring in their lives. They say they will carry these traditions on with their own families once they are married because "that's what we are told." But their friends who have moved to the city and other young adults often receive blame from older generations for the shifting priorities in the community. One elder of the village explains, "The new generation is spoiled and are not getting the value of working hard while they are staying in cities which are modernized, Americanized" (Sadaf). Others attribute the desire for formal education to the increased number of people migrating out of Pauri Garhwal.

Shifting Perceptions and Priorities

Regardless of individuals' level or location of education, however, one thing that was observed in the villages was the wealth of local knowledge about the area. Individuals in the community are learned in the way of the land, the cycles and seasons of nature, which water sources are best, how to navigate through the forest – the list continues. This is not the type of knowledge that can be acquired in schools, but only from living in this environment, truly listening to and being connected with one's surroundings. It is this awareness of nature and its many gifts that allows for a mutual relationship to be formed where humans receive ad protect in return. One mother poses the question regarding her nephew who works in the fields and her son who studies in the city, "who has more knowledge?" (Tanu).



Image 6: Pastures on the hillside with a view of the Himalayas in the background. This is a normal view from the villages in Pauri Garhwal (Author).

When asked whether there has been a change in the community's use of the spring over time, there is a response of agreement from the participants although their reasoning for the shift differ. While some attribute the physical migration of individuals out of the region, others say it is the general change in perspective of the community – to a more individualistic mindset which prioritizes personal profit rather than communal success. Or even a combination of both the physical and mental migration away from a traditional lifestyle. When asked about noticeable changes in the village, Tanu reflects, "There is a change in the attitude and water consumption patterns of the village [...]. Men and women used to be a team and work together as a family. Nobody went hungry, there was a relationship between people." Regardless of the reason, it is becoming apparent that many aspects of the rural life in the villages are becoming less popular for new generations when modernized areas have a sense of instant gratification, as opposed to the physical labor required in livestock and agriculture. The exception, however, is the draw of rituals that bring distant family members home.

Although they may live in the city, relatives are expected to come home for the religious rituals that have been integrated into the family as traditions. Sons and daughters will return to their home villages with their spouse to introduce them to the spring. Back to the original source, physically and metaphorically.

Maintaining a Way of Life

But there is no way to know how long will people return to their villages to worship the springs or what lasting impact will this perspective shift in the communities have on the natural resources of the Garhwal Himalaya. One effect may be that the reducing importance of tradition in the lives individuals of the villages will result in a diminished connection with the natural springs. In the mutual relationship present between the source and society, the traditions of religious worship, maintenance, and protection of the source is the what is given in return for the supply of water. It is these actions, more than the religious belief itself that is keeping the springs alive. Not Hinduism as an organized or labeled entity, but as Vinay mentioned earlier in the paper, the religion of culture, of respecting one's surroundings, that is so important to the conservation of the natural resources of the area. And this is evident in the desire of the village elders for their children and grandchildren to continue the relationship with the land, the forests, and the springs that they have. They have recognized that to be worthy of receiving nature's gifts, and in turn sustain the community's health and livelihood, one must return the hard work. Tanu highlights this connection by saying, "I tell my children, 'We don't eat money, we eat food. We need to take care of the forests, the springs, the land.' I remember my mom saying to me, 'Work now, it will come in handy later." It is this relationship with the land that allows village communities to be selfsustainable and live off of the resources that have available. Hence, the larger context of

this study suggests that preservation of the forests, rivers, and springs is crucial due to their integral role in the greater ecosystem. This paper argues that in order to continue this community's relationship with the land, the rituals and worship that connect them must also be preserved.

Conclusion

Overall, this study was successful in the exploration of the relationship between religion and water, people's perceptions of water, and how these influence community health. It is apparent that natural springs are the most influential water source in the Pauri Garhwal region, although water from the Ganga still holds a significance for individuals in the religious aspect of their lives. It was, however, surprising to find that the manifestation of religion in the village communities was less of the devotion to Hinduism itself, but more in the performance of rituals and traditions that are associated with it. This culture of using springs as necessary components in the rituals seem to bring families and communities together, highlighting their importance in village life. The springs are still used for everyday needs — most importantly drinking and cooking, and tasks like bathing, washing, cleaning, and so on can use spring water or water from other sources.

The community as a whole has welcomed the presence of hand pumps and pipelines and have formed a beneficial relationship with HIMCON who have helped construct water storage tanks, rainwater harvesting tanks, slow-sand filter, and other conservation techniques in the region. This was an unexpected result to observe the positive collaboration between the use of modern water storage techniques alongside the preserved use of natural water sources. It was also interesting to see the difference in

perspectives and opinions of the older generation compared to the young adults in Pauri Garhwal. While there was general agreement on some issues such as the importance of natural springs, there was a great difference in others issues like studying in cities and agriculture.

Although the results of this study did not produce as many specific examples of religious rituals and details of celebrations as desired, the personal statements and from interviews proved to be a greater source of information about the importance of these traditions in the lives of individuals. There is a general sense of determination of the community to pass on these rituals to younger generations, whether or not they understand the original religious significance. Therefore, the theme of migration and possibility of traditions leaving with people moving out of the community was a concern that reoccurred in many interviews.

Although it was difficult to gauge indicators of health in the village, it became apparent that the livelihood of the community members and their connection to the natural springs are crucial aspects of positive health. The people of Pauri Garhwal are connected to the land; therefore, their health is reflected in the health of the resources that are a part of it. There was a clear trend in this study that the livelihood, specifically the physical and spiritual health of individuals in the community, is directly linked to the preservation of natural springs and thus their continued worship and religious use.

The results of this study also point to the conclusion that these aspects of life in the Garhwal Himalaya are not mutually exclusive, but are interconnected in this traditional environment. The interaction between the community's relationship with the land, its natural springs, and worship of these resources so crucial to their sustainability and the holistic health of the community.

Further Research

Further research on this topic could include more specific investigation of the reasons for the shift in perspective and uses of the springs over time. The interesting connection between continuation of rituals and the protection of natural water sources was made in this study and could be further expanded on in this region as well as in other traditional societies. There is existing research on the importance on involving native communities in governmental and other large-scale wildlife conservation efforts (Sekhar, 2003, p. 344). Current conservation policy would only benefit from having the strong voices of the local population (Sen, 2016). The communities which have survived by forming a relationship with the natural landscape in which they live obviously have many reasons for wanting to conserve their homeland.

Additionally, the comparison of perceptions of water and its relationship with religion in other regions of India where springs are not the dominant water source would be interesting to explore. By creating a larger research scope, the trends in responses may reflect or differ from what has been concluded in this study.

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Appendix 1: Interview Questions

Demographics and Water Interaction

- 1. What is your name?
- 2. What is your age?
- 3. What do you do?
- 4. Who all is in your family?
- 5. Who is the head of the household?
- 6. Are you married? If so, do you have kids?
- 7. What is your religion?
- 8. Is religion important in your life?
- 9. Do you use water from the Ganges River in your life?
- 10. Is this water kept separately from water of other sources?

Personal Interaction With and Perceptions About Springs

- 11. Where do you get water from?
- 12. How often and how do you retrieve it?
- 13. Are there other water sources in the area?
- 14. How much water does your household use per day?
- 15. Do you filter it or make it clean in any way?
- 16. How do you store the water?
- 17. Do people get sick from the water? How do you treat this?
- 18. How is the spring connected to the health of the community?
- 19. How has the village's relationship with HIMCON changed access to water?

Life Cycle and Health Connections

- 20. What does that water source mean to you?
- 21. Do you consider the water to be alive?
- 22. Is it sacred? How do you worship it?
- 23. What religious ceremonies are associated with the spring?
- 24. What life cycle events are associated with the spring?
- 25. How are the natural springs connected to the Ganga?
- 26. How has the source or people's perceptions about it changed over time?
- 27. How does migration affect the spring and worship of it?
- 28. How do you think the springs should be protected?

Contact Information

HIMCON (Himalaya Consortium for Himalaya Conservation)
Milan Kendra
Sabli, Tehri Garhwal
249191, Uttarakhand
+919719583170
himconindia@gmail.com
www.himcon.net

Manoj Pande manojhss@gmail.com

Rakesh Bahuguna rakeshbahuguna rakeshbahuguna rakeshbahuguna rakeshbahuguna rakeshbahuguna rakesh Bahuguna rak

UJJS (Uttarkhand Jan Jagrati Sansthan) Khadi, Tehri Garhwal

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