Citation: Aleena, & Sultana, A. (2022). Traditional Water Fetching Practices, Water Usage, and Scarcity). *Global Political Review, VII*(I), 35-47. <u>https://doi.org/10.31703/gpr.2022(VII-I).05</u>



Traditional Water Fetching Practices, Water Usage, and Scarcity

* Aleena

- † Aneela Sultana
- Vol. VII, No. I (Winter 2022)
- **Pages:** 35 47
- p- ISSN: 2521-2982
- e-ISSN: 2707-4587

Key Words: Experiences, Maternal child health, Perceptions, Psychological stress, Water fetching, Water Scarcity, Water stress. Abstract: This study analyzes the traditional water fetching practices, water usage, and scarcity in the Village Kumar Bandi Muzaffarabad. Overall, 93 respondents of the local community of Kumar Bandi were approached. Data has been collected through an interview guide by convenient and purposive sampling. A descriptive model of data collection has been used for acquiring the information. The study draws essential attention to the most critical factor: the abnormal impacts of water fetching on different aspects of water fetching an individual's life, the most important of which is health. The issue of water scarcity has caused damage to religious and traditional local practices besides the danger of whether the water utilized is recommended for use or not. Along with women's health and the educational development of children, Water fetching has adverse effects on people's social, religious, economic, kinship, and cultural life of people.

Introduction

Water scarcity is a neglected social issue related to a more significant segment of the population living in rural areas of Pakistan and Azad Jammu and Kashmir (AJK). The scarcity of civic amenities like education, health, and water is causing underdevelopment in these areas. Water is an essential natural resource for all the living things on the face of the earth. Water has remained a vital element in every civilization and society for the survival of human beings. Access to enough drinking water has remained a challenge in every era (Chaudhary, 2017). Achievement of safe water is essential not only for drinking purposes but also for personal hygiene and agriculture production resulting in income generation (Neves-Silva, Oliveira Lopes, & Heller, 2020). In addition to involvement in production and income generation activities, reducing water collecting challenges will lead the women to have a dignified, healthy, and respectful life (Irianti & Prasetyoputra, 2019). A maximum of drinkable water is available in glaciers and ice caps. The groundwater is available at 30% or more, and the rest of 0.3% is available on surface water resources (Khalid & Khan, Water Scarcity - A Major Human Security Challenge to Pakistan, 2016) (Azizullah A., Khattak, Richter, & Häder, 2011). According to some estimates, a single individual in the western region is consuming 1500-2000 tons of water annually, affecting the hydrology of regions nationally and internationally (Wolters, 2019). Globally approx. 1.1 billion humans are unable to have clean water for drinking, peoples facing sanitation issues are 2.5 billion, and 10 billion peoples face death due to water-borne diseases annually. This mortality rate is 10 times more than the people killed in wars (Azizullah A., Khattak, Richter, & Häder, 2011) (Abedin, Habiba, & Shaw, 2014) (Mohsin, Jamal, Safdar, & Asghar, 2013). International regulations do not include many human rights as important ones, but their governing bodies are mutually convinced that access to safe drinking water is among them (Khan et al., 2013). Water is not just necessary for the survival and life of the people. However, it also injects happiness, prosperity, disease causes (if drinking water is not safe), colors

• URL: <u>http://dx.doi.org/10.31703/gpr.2022</u> (VII-I).05

^{*} MPhil Scholar, Department of Anthropology, Quaid e Azam University, Islamabad, Pakistan. †Assistant Professor, Department of Anthropology, Quaid e Azam University, Islamabad, Pakistan.

Email: aneela@gau.edu.pk

in life, and its scarcity impact society. (Chaudhary, 2017).

Another important aspect of water is cultivating homeopathic and other health-related herbs and plants that help fight against many diseases. The lack of water thus leads the local people non-access to the traditional medication for specific diseases (Neves-Silva, Oliveira Lopes, & Heller, 2020). Even after considering renewable resources, the increase in water demand has created the risk to maintainable development in numerous parts of the world, mainly due to climate change and increasing demand because of the increase in population. Water scarcity influences a particular area's agriculture, domestic and industrial aspects. These risks are often termed green and blue water scarcity, i.e. green water scarcity is the non-availability of the minimum amount of moisture required for sustainable cropping and production.

In contrast, blue water scarcity is the little water available on the surface for the utilization of humans (Huang, Yuan, & Liu, 2021). The United Nations Convention to Combat Desertification in its 2009 report explains that water scarcity is a long-standing imbalance between demands and existing water reserves. When the communities are in a water shortage for their basic requirements like drinking, cooking, bathing, and washing, they are in water scarcity conditions (Ortiz & Inomata, 2009). The need for water varies from area to area and community to community, depending upon the life pattern and philosophy of the natives. In rural areas, people having no land are different depending upon water compared to urban areas, i.e., in addition to drinking and other livelihood activities, water is needed for products that became the source of food sustainability and livelihood (Neves-Silva, Oliveira Lopes, & Heller, 2020).

Despite the Millennium development goals (MDGs) being over, 2.4 billion people still lack access to better sanitation, and 664 million (half living in Sub-Saharan Africa) to clean drinking water, resulting in health challenges. Parallel to water-borne disease, the disease which is related to water like malaria, dengue, schistosomiasis, trypanosomiasis, and guinea worm have significant adverse impacts on the lives of helpless people in devolving countries (Wrisdale, Mokoena, Mudau, & Geer, 2017) (Otufale & Coster, 2017) (Mosa, Grethe, & Siddig, 2020). The usage of extra water

available quantity than causes problems that negatively impact society's social, cultural, and economic dimensions. (White, Brewis, Wutich, Stotts, & Larson, 2016). In Pakistan, there are multi-sources of drinking water for extraction, and 60% of all those sources are extracted through big tube wells and boreholes to a utilization unit, i.e., big water tanks, from where it is further distributed through pipelines to different clusters and societies under district administration. Another critical source of water supply through these pipelines is groundwater in the shapes of rivers and lakes. In hilly areas of the country, the only source of safe drinking water is sprinkled and extracted through a gravity flow scheme (Khalid & Khan, Water Scarcity - A Major Human Security Challenge to Pakistan, 2016). Water scarcity is a concept defined in two ways by the researcher, i.e., the first is the quantity of water extraction to be performed from the existing water resources, and the second is the escalation in further water extraction requirements from the sources. This can also help in developing an understanding of the level of scarcity. A more significant percentage of extraction from the available resources will double the future demand, making it more severe and vice versa (Amarasinghe, Mutuwatta, & Sakthivadivel, 1999). Women are more vulnerable and exposed to violence, sexual exploitation, and natural disasters due to fundamental inequalities in societies that prohibit their rights on finances and other resources. This makes their condition more vulnerable (Durrani, 2020). Pakistan is ranked 36 among the countries facing severe water scarcity issues worldwide. The main reason for the scarcity is the fast rise in population and not having proper management and utilization mechanisms to provide safe drinking water. As a result, 35% of the population lacks access to clean water. The per capita annual availability in Pakistan is declining rapidly. As per the UN (United Nations) warning, this decline will make the country water-stressed in the future (Khalid & Khan, Water Scarcity - A Major Human Security Challange to Pakistan, 2016).

The households must cover long distances on foot or through animals to fetch water from the sources. This water importance is not limited to drinking purposes only but other household functions like cooking, washing, and personal hygiene. Water scarcity is not the sole reason for growing imbalances amongst different social groups but also disparities between sexes. Not every human being is influenced by climate change in the same pattern. Climate change has a more significant and disproportionate impact on women, further boosted by political uncertainty and war situations. The families must spend a maximum of their time collecting water from the source daily, ignoring childcare and education's vital functions (Nygren et al., 2016).

Literature Review

The concept and perception of human beings to drink safe, fresh and excellent quality water have been found for thousands of years. In this regard and from the history and beliefs of peoples, good drinking water should be potable, nutritive, transparent, and cold. However, they were not having a clear understanding of chemical and biological water quality. After it has been proved that human health has a deep connection with the quality of drinking water, the WHO (World Health Organization) has been stressing on "all people, despite from any economic and social condition or whatever their stage of development is, having the basic right to access to ample drinkable safe water" (Maitland, 1990). The two fundamental reasons for child death and infant mortality are, I) the duration of household reaching the water source and ii) quality of the source water and its utilization for household purposes, i.e., drinking purposes or home use (Lu, 2014). Water scarcity leads to wastage of valuable time in arranging water, compromise on privacy of children and women due to insufficient water leading to open defecation and most of the time, quarrels at the point of the water source. In India, this resulted in sexual harassment, attack, and anxiety amongst women (Bisung & Elliott, 'Everyone is Exhausted and Frustrated': Exploring psychosocial impacts of the lack of access to safe water and adequate Sanitation is Usoma, Kenya, 2016)

In Pakistan, we know that 21 million people have no access to safe drinking water throughout the country. This gradual increase in the water crisis is a growing division between social classes – In which 98% of the rich people have access to safe drinking water in their homes while 79% of the poor do not have this access. Still, the WASH (Water Sanitation and Hygiene) facilities have improved since 2000, and 44 million citizens got access to water across the country. As the rich have significantly got an advantage in this regard, one amongst every five individuals is still coming across the water shortage challenges in the poor (Durrani, 2020). Water shortage is riskier for poor people as it is not just concerned with money and belongings but deficiency of hygiene, sanitation, and food (Brewis, Choudhary, & Wutich, Household water insecurity may influence common mental disorders directly and indirectly through multiple pathways: Evidence from Haiti, 2019). It remained an important reason for the unity or conflict of societies in every part of history till the present era. Water has also been magnified in its cultural context in its portrayal of architecture and sculpture, i.e., it has been part of folk songs relating, its flow to the passage of time and history (Demie, Bekele, & Seyoum, 2016) (Chaudhary, 2017). It is essential to plan and govern the fair distribution of water, and such policies shall formulate that ensure adequate supply as power can be exercised based on water (Neves-Silva, Oliveira Lopes, & Heller, 2020).

Methodology

Both primary and secondary data have been gathered for the study. The qualitative research method has been used to consider the nature of the topic due to the sight of in-depth nonnumerical data. In this research, the ninety-three respondent's sample size is taken. These ninety-three respondents comprised fifty-five females, twenty males, eleven girls, and seven boys. In modern research studies, Convenient and purposive sampling is used to abstract samples from the population. A local key informant remained of vital importance in data collection. In this research, the researcher conducted semi-structured face-to-face interviews, including Informal interviews and focus group discussions.

 Table 1. Socio-Demographic Profile of the Respondents

	0 1	-	
Categories		Water fetcher	Percentage
Male		600	55.1 %

Categories	Water fetcher	Percentage	
Female	1000	86.8 %	
Children	1400	49.5 %	
Married Female	650	65 %	
Unmarried Female	350	30.3 %	

Table 2.	Research	Findings
----------	----------	----------

Themes	Findings		
	Α	В	С
Perceptions of Natives	Disease Water as a cause of the fight Females' interaction patterns	Social distancing and ignorance from modern trends Escape from Normative Values	Economic disadvantages Cost of Productive time Effect on personality development
Impacts of water scarcity	Health, Economic, Poor sanitation, and Agriculture	zifficulties in maintaining a social life	Socio-cultural life, education, Psychological
Impacts of Water Fetching on fetchers health	Impact on children's care Water fetching burden on children Fears of fetching alone Impacts on education	Impacts on Domestic work Impact on children's care Cleanliness	Psychological Impact, Physical exhaustion and stress Gender Distribution in water fetching

Discussion

Socio-cultural impacts of water scarcity

The association among culture, society, and water is intricate and robust in specific ways. For different areas, the significance of water is considered different. As per Islamic guidelines, wastage of water, although sitting on the bank of the river, is considered a sin, but there is no such consideration in many other societies. Culturally, the importance of water can be described in specific backgrounds, i.e., how and why water is necessary for the people, is definite. The importance of water in light of cultural complexities is different from one society to another.

Difficulties in Maintaining a social life

As per data, people are deeply concerned with their social life roles and events. Marriages, funerals, and other social events are celebrated throughout hospitably. Clean water provision is a critical responsibility of the host families in such events. People need much water for domestic purposes. In happiness occasions where the people are already aware of the volume of people and time of need, water is arranged in advance. The families with stable economic backgrounds arrange water tankers from the central city to fulfill the need for water on such occasions. In the happiness event celebrated by low-income families, the arrangement of water is a challenging activity. These people start gathering water weeks before the event starts.

Poor Sanitation

Another important use of water is for sanitation purposes. In the absence of proper water supply schemes, the culture of home latrines is diminished to a greater extent. The practice of open defecation has evolved, which is culturally and socially unpleasant. Women and girls must wait for nighttime so that no one sees them. In this regard, they must hold themselves for hours, sometimes resulting in adverse health conditions. These practices make them vulnerable to animal attacks and sexual exploitation as well. Open defecation has an overall harmful impact on water resources and the environment. Respondents communicated.

"We have washrooms in our homes, but these are locked in a long time due to insufficient water for sanitation purposes."

Psychosocial Distress for landowners

Lack of resources exaggerates awful feelings. Likewise, most of the respondents also replied that they are facing anxiety, stress, and depression as they cannot fulfill their basic needs. Moreover, that is negatively affecting their mental and physical health.

Native's opinion and approaches concerning water storage

principal opinion behind approaches The concerning water storage is the lack of facilities for storing ample quantity of water in large containers or well-constructed tanks/ponds for the storage mechanism. People build separate rectangularshaped ponds which are filled with rainwater in their villages. Separate drain lines are also connected to the pond so that the rainwater from near about can easily be diverted to the pond. The water stored in the pond is not used in routine but saved for hard days when the Chashma gets dry or the route to the source is blocked due to snow. People build the roof of houses from tin material and give passage to melted ice going directly into these tanks. On rainy days, the lid is removed to fill the rainwater directly into this tank. When the water in Chashma got dry, and people became restricted from new fetching, they utilized the stored water. The culture of procuring and medium constructing small and water tanks exists for water storage. These tanks are placed or constructed in a space where the water from available sources is easily poured. The water stored in such facilities is used for domestic purposes like toilets, bathing, washing, live stocks, and trim level agriculture like kitchen gardening.

Economic Disadvantages

Water is the backbone of the economy as it is the central part needed to yield agriculture, generate power, and run industries. No or less water means poor agriculture, water generation, and less production leading to a poor economy. The Village and adjacent areas are very fertile where several types of vegetables and fruits can be produced. People own pieces of land inherited from them from their ancestors. These lands can work as a valuable source of income generation if they crop fruits and vegetables. The water shortage restrains these people from utilizing these lands for agricultural production. They cannot even do kitchen gardening from natural water resources due to non-accessibility. These people own land but cannot produce vegetables and fruit for their consumption, hence facing an economic burden.

Utensils for Water storage

Almost all the water sources are located far from the houses in the Village. Due to this lengthy distance, people have to make arrangements for water storage in their houses for odd and emergencies. Different sizes of water storage utensils are managed by the natives considering the family size and number of water fetchers. If there are more family members, more water fetchers will need large-capacity vessels and utensils for storage. The most commonly used storage utensils in prominent families are drums, cemented tanks, water ponds, Gaghar, plastic tubs, and other clay vessels in small families. These vessels are mostly placed near the house's main door in courtyards: the stock water to perform laundry and home cleanliness.

Adapted water Consumption

Based upon the quantity of the available water, the natives have changed their behaviors accordingly. They are working on the strategy of optimum use of the resource and try to achieve a few purposes simultaneously in the hard days. The domestic water used for bathing and washroom usage is diverted towards the kitchen gardening. In the same way, the water used in the laundry is utilized further for home cleaning. The people have psychologically become conscious about the proper utilization of water and fulfill the very needed and unavoidable tasks. Further, these people have fixed times and schedules for batching and laundry activities. In dry seasons, the children are not allowed to drink water themselves because they are conscious of wasting some.

Distress of Theft

Water scarcity is such a critical issue in Village that it leads to the theft of resource time. When the Chashma's became dry, and there was no way to get water from other sources, cases of water theft occurred. The distress is not only due to the theft of water but also other household commodities. They have to leave their houses for hours unattended due to fetching water from the resource. The respondents shared their experience of water and commodities theft when they were sleeping at night or outside for the quest for water.

Practices, Perceptions, and Impacts of Water Fetching on Fetcher's Health

In this chapter, the researcher has discussed the practices and perceptions connected to water fetching after discussion with respondents. It is discussed with the respondents how they manage their domestic responsibilities with water fetching and maintain a balance between other essential tasks of life. The researcher further explores the impacts of water fetching on individual fetchers' health. In Village, most people are poor and do not have sufficient finances to pipeline this water independently. As a result, the females must cover long distances on foot to fetch water from the sources. This has drastic impacts on their health, social life, childcare, and financial resources. The financially stable families somehow purchase water tanks on a daily/weekly basis depending upon their needs. This financed water is only used for drinking and cooking purposes. These people use stored rainwater for other domestic purposes like washing, livestock, and other household activities. These females used "Gaghar," a particular utensil used for water fetching in addition to canes and gallons. Males use big Gallons while children and young girls use bottles and small Gaghars. These females and children must visit the water source multiple times depending upon the number of households. A single lapse takes up to 2-3 hours from the source to the house of these females. The time mentioned is double or sometimes reached to a full day as the water at the source is flowing in less quantity, and they must wait for their turns.

Source of Water

Chashma, rainfall, and snow melting are three traditional water resources available to the people of Kumar Bandi. To complete all sorts of domestic and non-domestic needs, they had to go or take support of the Chashma. These needs include but are not limited to cooking, cleanliness, washing, bathing, livestock, agriculture, and plantation. There used to be a time when all the needs were fulfilled solely by the Chashma water in summer and severe winter water shortages. The families must travel a long way several times a day to fulfill their water needs and, in this way, come across many challenges. The people of Kumar Bandi do not have enough facilities for storage water for daily base domestic purposes. Another reason for multiple trips to the collection point is the water pressure at Chashma, the water flow is good sometimes, and other times it slows down, and people must wait for hours in the queue. Enough water cannot be stored due to these challenges, and people cannot perform the water fetching all day through multiple trips.

Approaches of Water Covering Water Containers

Covering the water collection/storage utensils in the Village is not considered necessary. The water used for drinking and cooking is somehow covered with wooden, metallic, or plastic lids and plates. Ghaghers are usually placed in wooden or metallic rakes covered with wooden plates or cloth. The water stored for washing and cleaning purposes is not covered chiefly. Some water containers have their lids like gallons, canisters, bottles, small tanks, and water coolers and serve the purpose. Buckets, drums, and plastic or metallic tubs do not have covers and are mainly used for washing and cleaning.

Perceptions connected to water fetching Communal Water Resources

When everyone is going to the same point for collecting water, there are chances of transferring germs and disease. Some people might have contiguous diseases, so there are chances of transferring such diseases to other water fetchers. In Covid situations, people become vulnerable. Despite the risk of disease spread, people were supposed to go water fetching and became vulnerable to getting infected by the virus.

Hameeda, age 32, who got Covid discussed her story;

"In the Covid days, we never sat at home and continued water fetching. We have limited water resources, and many people are going to every source to collect water. People were not practicing precautionary measures on the way to the source and at the source. When I returned from fetching water, I had flu, cough, and sneezing, which later turned into temperature. My husband took me to Muzaffarabad for the test along with the local dispenser. When the results came, I was Covid positive. I had to stay in isolation from my family members. This was the toughest time of my life as all my family members were dependent upon me for domestic needs."

One of the perceptions to get rid of long waiting ques and slow water is to collect water early morning or late night. In this way, water fetching duty is on their heads day and night, and they cannot sleep and rest well. Collecting water currently makes these women vulnerable to animal attacks and other accidents.

Water fetching does not affect the present situation of the people but also the future of young girls and boys. People of other villages where water scarcity is not very severe are not ready to accept any marriage proposal for the girls of this Village. Their primary demand behind such bonding is proper and nearby water sources and good sanitation facilities besides other income generation sources and stability.

Gender Distribution in water fetching

In families with no vehicles, males are fetching water through them, but in Village Kumar Bandi, females are responsible for water fetching. This is because women are responsible for looking after all household activities. Water is almost necessary for all household activities like cooking, laundry, and overall family hygiene. Water fetching has become their responsibility to perform these activities without interruption. People with good economic backgrounds also purchase water through local suppliers. Males are responsible for arranging water in a social gathering like marriage or death events where they need ample water to perform the event smoothly. However, for females, this is not the case of any event but a daily duty to perform and, most of the time, have to listen to harsh comments from parents and spouses.

Fears of Fetching alone

The women prefer to go in groups for water fetching. They have a fixed time for fetching in a day. Sometimes the women go inside houses to call their fellows water fetcher to accompany them. This group fetching builds a social bond amongst these women. These women can help each other in case of an accident. This bonding helps them cover long distances by gossiping and sharing family matters.

Escape from Normative Values

Diverse cultures have different values and norms regarding male and female interaction. In the Village, the interactions between boys and girls are not appreciated. Water fetching works as an opportunity for this interaction to turn into beneficial relationships in the future. This has resulted in negative consequences because many disputes and fights have erupted amongst families in response to these interactions. During one of the focus group discussions, it was revealed that due to this interaction and relationships, an incident of serious nature occurred where one of the boys approached a girl for friendship. When the family of girls learned about the incident, they went into a fight with the boy's family, which resulted in a murder from one of the families.

Water fetching burden on children

This is the wish of every child to enjoy her/his childhood and spend unbounded time with fellow children. The children in Kumar Bandi are parallels involved with their parents in fulfilling their families' water needs, and most of the time, they are substitutes for arranging waters. The valuable time of playing with friends and acquaintances is spent accompanying their parents in bringing water. This responsibility has been coming to their heads by default since childhood. They feel waterfetching is a significant burden as it restrains them from going to school.

Water as a cause of the fight

Water scarcity is considered one of the reasons for many conflicts and fights between families. The women often fight on their turn when they reach Chashma at the same time. Most of them break the queue in this situation, resulting in a dispute. Sometimes, the fight erupts when a woman accompanied by children fills multiple containers, and other women start complaining that the water will be finished or slow down.

Females' Interaction patterns with other water Fetchers

Some of the females during the FGD (Focus Group Discussion) appreciated water fetching somehow as this is a good activity to make them healthy and work as an opportunity to meet with other females. They gossip and share their family's matters. They also discuss their issues and look for some solutions from elders females in the group. For these females, meeting and interacting with other females worked as a catharsis of their minds and hearts.

Administering water fetching with other life necessities

Water fetching is a time-consuming activity that is why its management is difficult with lots of other household activities and necessities of life. This is because people must travel a long way to the source of their homes. The minimum time for one side distance covered for water fetching is 30-40 minutes. Waiting in the queue for collection bears additional time.

Cost of Productive time

As water fetching is a time-consuming activity, its execution with other household activities and family commitments is challenging. In this way, many important productive activities like income generation, if they had a nearby source of water lots of time, would have been saved for them. People of hilly areas are famous for small business and income generation activities like kitchen gardening, rugs weaving, shawl preparation, and small agriculture on the available land. The most important and productive aspect in this regard is childcare and education.

Impacts on education

Nobody wants their children are always involved in non-productive activities like their own self they want to ease them well-educated and have a good job and business. One of the respondents.

Samina aged 32:

"I want my children to become well educated that can ease our family and their selves. I do not want my children shall suffer the way I am or the people of our Village. I will bear an extra burden over my shoulders on the cost of my children's well grooming and education." Many girls in the Village stop studying due to extensive absenteeism and late coming as they must go to the source early morning to fetch water. The teachers in schools do not allow students after so many days of absenteeism and regular late coming. Education is becoming incredibly challenging in these situations where survival is more important than the future and desires.

Effect on Personality Development

Personality development is a continuous process starting from very childhood for the rest of life and making an individual different from others due to some life experiences and practices. The people involved in water fetching have very few opportunities to mentor and demonstrate to their children on various aspects of life that help them groom their personalities. Initially, the parents are involved in water fetching and have less in-person interaction with their children, and later when they are raised, their parents sit at home due to aging, and the children shoulder the responsibility hence lacking the basics for personality development. The children's confidence level remains on the lower side in the absence of the necessary guidance that they need from their parents. In absence of parents, the children get skipped from their sight and interact with outsiders resulting in the development of negative and slang personality traits.

Impact on children's care

Children are sensitive and need extra care and time from their parents in the early years of their childhood. The parents are busy with income generation and water fetching, so they are unable to get enough time and care. The water sources are usually located at heights and distant places, the mothers are unable to carry their children along with water containers and there are chances of falling in difficult and inclined pathways. Therefore, they do not take their children with them and lock or tie them with ropes inside their homes. The children remain hungry for many hours as there is no one to feed them when parents are outside collecting water.

Naheed aged 27

"I left my 1-year-old son at home with my aged motherin-law. She went somewhere to perform some tasks at home and my child fell out of bed. He got injured very badly. We took him to hospital, but the injuries were inside his head, due to which he became abnormal. He is 5 years old now and unable to communicate or respond to us''.

She became very emotional while communicating her story as this is her only child and she has restrained herself from water fetching as something would happen to her child in her absence.

Social distancing and ignorance from modern trends

The people are busy for the maximum part of the day in water fetching. They are unaware of the news and affairs of the rest of the world. Even they do not know what is happening in the nearest city i.e., Muzaffarabad, until and unless someone tells the news in person. In a time when social media is the main source of entertainment and awareness of volumes, these people are miles away from such platforms.

Impacts on Domestic work

The women are facing challenges due to water scarcity in performing their domestic life activities i.e., maintaining and organizing their home and its vicinities. A well-organized and administered environment is the dream of every married woman, where they can spend peaceful time with their spouse and children. In the current situation of Kumar Bandi, the women are deprived of properly and hygienically maintaining their houses due to shortage of time and scarcity of water as the task of collecting water roams around their heads. Water fetching is a hectic and time-consuming activity, as communicated by

Tahira, aged 36:

"Water fetching has made our bodies lethargic and after performing this activity, we are unable to perform anything else at home. I am not bothered even about cooking something special for my husband and children and prefer to serve whatever is available most of the time. My home and laundry have remained uncleaned for weeks and I am unable to wash the dishes and other kitchen items properly. Whenever any guest visits our home, I feel ashamed over the unhygienic and dirty condition of my home and children."

Water fetching impacts on Fetcher's health

Water fetching is a phenomenon that negatively impacts women's health besides other domestic challenges. The women involved in regular water fetching face lifetime health issues like disc displacement in the backbone, complexities in maternal and child health, Headache, mental distress, muscular pain, hair falling, permanent disabilities due to falling from hills and road accidents, snakes, insects, and other insects' bites in the Village of Kumar Bandi. Water fetching became extremely risky on rainy and initial snowfall days as the paths became more slippery hence the probability of falling is multiplied.

Sajida aged, 43:

"In July, I went for routine water fetching along with my neighbor women. On our way back from the water source, the rain started suddenly. There was no shelter on the way to get rid of the rain and we continued to walk. Suddenly, my leg slipped, and I fell from a small, inclined hill. The container full of water came over me and my leg was injured very badly. I was unable to move and was in severe pain there for 2 hours. One of the women went and called my brother about my accident. My brother along with other cousins came with charpai (Cot) and took me home. Later it was confirmed that my left leg was fractured. I remained in bed for 2 months and was unable to fetch water for an additional 2 months. It's been one year since the accident, but I am unable to walk properly"

Psychological Impact

All the health issues in a human being route their way to psychological distress. Water fetching has direct psychological impacts on people who are involved in water fetching. They are having mood swings and behave abnormally with family members due to stress and anxiety. The insecurity of shortage of water is holding their nerves leading to less sleep and mental disturbance. The impression of unclean houses and the personal hygiene of family members in front of others causes psychological distress and unease in the people. One of the respondents communicated,

"In the menstrual period, women and girls need rest and privacy, here women and girls are not even at rest during these days. These women are not having water for personal hygiene due to which they become victims of restlessness and stress" The persons with disabilities face lots of stress and helplessness due to the scarcity and noncontributive role in fetching. It is their physical state which restrains them to perform water fetching.

Abdul Karim aged 37 and polio-affected:

"I have to tolerate many comments daily for utilizing water but not able to add my share in fetching for my domestic needs. I have to be extra conscious than other family members while using water. Sometimes there is extreme need but I am unable to use water because the water fetcher has preliminary rights on using the water"

Physical Exhaustion and Stress

The women are facing extreme fatigue and muscular strain as they carry the weight of both water and the container and children sometimes. The weight of the metallic container is 2 kg, and the water capacity varies from 5 liters to 15 liters. This much weight in hilly steep ways causes muscular pain. Severe leg pain is a challenge for most women as this complete weight is borne by the legs. This practice is continued most of the time, from early morning till late evening. These women have no time to give rest to their muscles and limbs.

Abida age, 31:

"Fetching water from a distant location is not just a difficult job, it is very painful as well. Most of my hair went off due to carrying the water vessels on my head. I have a continuous headache due to carrying heavy Gaghar. My 15 years daughter

Cleanliness and Gender

Provision and access to water, hygiene, and gender have significant associations. The hygiene situation and facilities for both males and females are the same in water-scared areas. Due to certain biological and social reasons, more hygiene is necessary for the women and in water shortage situations this became a heavy burden for them. This additional burden consists of performing the menstrual cleanup, washing menstrual cloths, and self-hygiene. In the same way, mothers who deliver and do breastfeeding need extreme personal hygiene for the safety of newborns. Insufficient water availability for all the hygiene activities mentioned is not only necessary to safeguard yourself from diseases but is also a reason for disgrace, shame, and psychological stress. One respondent Saima communicated her post-natal situation.

"When I delivered my baby one year ago, I went into mental stress and anxiety due to my unhygienic situation. I was unable to take my post-natal bath due to the nonavailability of water as it was snowing season and the water available was only for drinking purposes. In the same days, my son became ill, and I was very worried about him. We went to the doctor for a check-up in the city. The doctor said that my son became ill due to germs intake with mother feed. The doctor strictly advised me that I should properly wash myself before feeding my child otherwise he will become more ill. I was so much unhygienic situation that my family members stopped coming near me."

Conclusion

Life is the most precious gift to humankind and other living beings. Life on earth is because of water and no water on earth means there will be no life on earth. This notion is more than alarming and human beings at individual, family, community, and institutional levels need to bring together ideas about effective water management and put those ideas into action. Whether it is the Sub Sahara region of the African continent or Asia, the impacts of water scarcity and fetching are hugely impacting the lives of natives in a variety of ways i.e., cultural, economic, Social, Religious, Health, educational, and many more aspects of society are influenced. Pakistan is one of the countries facing severe consequences of a shortage of water having many areas facing severe drought and a lack of water throughout the year. The main issue is not only the availability of good quality water but the quantity to fulfill domestic needs and agriculture production. To explore all the issues and challenges connected to water scarcity, the researcher conducted the current study in the Village Kumar Bandi located in the hills of district Muzaffarabad, the capital of Azad Kashmir.

The limited water resources in the Village compel the people to do the practice of water fetching. Women and children are involved in the practice of water fetching, as Men are dedicated to the income generation of the family. The native women must manage the duty of water fetching beside number of other household activities. The women usually use Ghaghers for water collection and carry them on their heads from the source to their homes in the hilly and difficult terrain. The researcher observed that water fetching is not an easy activity like other domestic ones, here the water fetcher met with many challenges of accidents, exploitation, and animal attacks. To fulfill the necessities of water i.e., drinking, washing, cooking, they must fetch water regularly. Their troubles are multiplied due to long-distance water resources and lack of storage capacities. The continuous fetching practices directly impact the education, childcare, personalities, health. domestic work, income generation as this activity requires most of their time and energy. In one-toone interviews, the women share their problems related to physical health situations like joint pains, miscarriages, pre-and post-natal challenges, hair fall, and back pain due to carrying heavy waterfilled vessels on their heads. Insufficient water for personal hygiene after menstruation compels the women towards facing various skin issues.

Women prefer to go to water fetching in groups for which they interact which supports them in safeguarding against harassment and exploitation in comparison to single women. Water scarcity is hugely impacting the cultural aspects of the society i.e., migrating from the Village, minimal social interaction, and relations. This further multiplies the practices of open defecation and sanitation challenges which are culturally and socially unpleasant and nonacceptable. Due to a deficiency of water, women are unable to maintain personal and children hygiene and are reluctant to socialize. Many conflicts are erupted due to fights over breaking the queues amongst the females which sometimes get worse and are extended towards family fights. The incidents of water theft were also discussed by respondents which is a social failure in the Village due to the scarcity of water. Due to the reasons for water scarcity, people are unable to perform religious practices. An effective water management policy and working mechanism would help resolve communal and state levels conflicts. If water is not managed properly, the agriculture sector will suffer greatly and resultantly bring suffering and deprivation among poor communities. Poor water management means there will be too few crops and agricultural and dairy products which would further lead to low or little access to food items. No or less effective water management policy or a lack of effective operational mechanisms for fruitful water management is a nightmare for any government. A state and government remain the key responsible stakeholder to ensure there is a workable policy available for better water management substantiated by a regular operational mechanism. This research is a step towards the determination of how the local community is coping with the challenge of water scarcity throughout different phases and circumstances of their life. This research can work as a milestone for different local and international organizations working on health, education, water, and sanitation and different much other public and private sector organizations working on human rights. As per native's approaches and history, the gravity-fed schemes can be the most suitable and beneficial phenomenon of water supply in village Kumar Bandi

References

- Chaudhary, T. (2017). Understanding water scarcity in the socio-cultural context in Thar Desert of Pakistan. *Journal of International Development and Cooperation*, 23(1.2), 15-25.
- Neves-Silva, P., Lopes, J. A. D. O., & Heller, L. (2020). The right to water: Impact on the quality of life of rural workers in a settlement of the Landless Workers Movement, Brazil. *PLOS ONE*, *15*(7), e0236281. <u>https://doi.org/10.1371/journal.pone.0236</u> <u>281</u>
- Irianti, S., & Prasetyoputra, P. (2019). The struggle for water in Indonesia: the role of women and children as household water fetcher. *Journal of Water, Sanitation and Hygiene* for Development, 9(3), 540–548. https://doi.org/10.2166/washdev.2019.005
- Khalid, I., & Khan, M. A. (2016). Water Scarcity - A Major Human Security Challenge to Pakistan. A Research Journal of South Asian Studies, 525-539.
- Azizullah, A., Khattak, M. N. K., Richter, P., & Häder, D. P. (2011). Water pollution in Pakistan and its impact on public health — A review. *Environment International*, 37(2), 479– 497.

https://doi.org/10.1016/j.envint.2010.10.00 7

- Wolters, E. A. (2014). Attitude–behavior consistency in household water consumption. *The Social Science Journal*, 51(3), 455–463. <u>https://doi.org/10.1016/j.soscij.2013.10.00</u> 3
- Abedin, M. A., Habiba, U., & Shaw, R. (2014). Community Perception and Adaptation to Safe Drinking Water Scarcity: Salinity, Arsenic, and Drought Risks in Coastal Bangladesh. *International Journal of Disaster Risk Science*, 5(2), 110–124. <u>https://doi.org/10.1007/s13753-014-0021-</u> 6
- Mohsin, M., Jamal, F., Safdar, S., & Asghar, F. (2013). Assessment of drinking water quality and its Impact on residents health in Bahawalpur City. *International Journal of Humanities and social science*, 114-128.
- Khan, S., Shahnaz, M., Jehan, N., Rehman, S., Shah, M. T., & Din, I. (2013). Drinking water quality and human health risk in Charsadda

district, Pakistan. Journal of Cleaner Production, 60, 93–101. https://doi.org/10.1016/j.jclepro.2012.02.0 16

- Huang, Z., Yuan, X., & Liu, X. (2021). The key drivers for the changes in global water scarcity: Water withdrawal versus water availability. *Journal of Hydrology*, 601, 126658. <u>https://doi.org/10.1016/j.jhydrol.2021.126</u> 658
- Ortiz, E. F., & Inomata, T. (2009). Assessment of the Global Machanism of the United Nations Convention to Combat Desertification. Geneva: Joint Inspection Unit.
- Wrisdale, L., Mokoena, M. M., Mudau, L. S., & Geere, J. A. (2017). Factors that impact on access to water and sanitation for older adults and people with disability in rural South Africa: An occupational justice perspective. *Journal of Occupational Science*, 24(3), 259–279. https://doi.org/10.1080/14427591.2017.13 38190
- Otufale, G. A., & Coster, A. S. (2012). Impact of Water Scarcity and Drudgery of Water Collection on Women' Health in Ogun of Nigeria. *Journal of Human Ecology*, 39(1), 1–9. <u>https://doi.org/10.1080/09709274.2012.11</u> <u>906493</u>
- Mosa, A., Grethe, H., & Siddig, K. (2020). Economy-wide effects of reducing the time spent for water fetching and firewood collection in Ethiopia. *Environmental Systems Research*, 9(1). <u>https://doi.org/10.1186/s40068-020-00189-y</u>
- Larson, K. L., Stotts, R., Wutich, A., Brewis, A., & White, D. (2016). Cross-Cultural Perceptions of Water Risks and Solutions Across Select Sites. Society & Natural Resources, 29(9), 1049–1064. <u>https://doi.org/10.1080/08941920.2015.11</u> 22132
- Amarasinghe, U. L., Mutuwatta, L., & Sakthivadivel, R. (1999). Water Scarcity Variations Within a Country - A Case Study of Sri Lanka. Colombo: International Water Management Institute.
- Durrani, Z. K. (2020). Water Scarcity and Social Vulnerabilities: A Multi-Dimensional Perspective of Water Challenges in Pakistan. *The Journal of Sustainability Education.*

Nygren, B. L., Vulule, J., Breiman, R. F., Jaron, P., Nasrin, D., Ayers, T. L., Ombok, M., Lash, R. R., Moke, F., Laserson, K., Levine, M. M., Rajasingham, A., Mintz, E. D., Derado, G., Nataro, J. P., Awuor, A. O., Kotloff, K. L., Farag, T. H., Omore, R., & O'Reilly, C. E. (2016). The Relationship Between Distance to Water Source and Moderate-to-Severe Diarrhea in the Global Enterics Multi-Center Study in Kenya, 2008–2011. The American Journal of Tropical Medicine and Hygiene, 94(5), 1143–1149.

https://doi.org/10.4269/ajtmh.15-0393

- Maitland, P. S. (1990). *Biology of Fresh Waters*. New York: Chapman and Hal.
- Lu, Y. (2014). Water Source and water Fetching time on Infant Mortality in Sub Saharan Africa. 1-54.
- Bisung, E., & Elliott, S. J. (2016). 'Everyone is exhausted and frustrated': exploring

psychosocial impacts of the lack of access to safe water and adequate sanitation in Usoma, Kenya. *Journal of Water, Sanitation and Hygiene for Development, 6*(2), 205–214. https://doi.org/10.2166/washdev.2016.122

- Brewis, A., Choudhary, N., & Wutich, A. (2019). Household water insecurity may influence common mental disorders directly and indirectly through multiple pathways: Evidence from Haiti. Social Science & Medicine, 1-10.
- Demie, G., Bekele, M., & Seyoum, B. (2016). Water accessibility impact on girl and women's participation in education and other development activities: the case of Wuchale and Jidda Woreda, Ethiopia . *Environmental System Research*, 1-12