Cover Page

DOI: http://ijmer.in.doi./2022/11.05.111

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

WATER BODIES AND DEMAND MANAGEMENT IN SWANKHA, RAMGARH, J&K UT

[1]Meeru Abrol, [2] Pinkey Rakwal, [3]Agrima Malhotra and [4]Arushi Malhotra
[1&2] Principal & Staff, Government Degree College, Ramgarh, UT JK, India
[3]Student, Computer Science Department, Thapar Institute of Engineering & Technology, Patiala, Punjab, India
[4]Assistant Professor, School of Architecture & Design, MAHE, Dubai

ABSTRACT

One of the major problems in Swankha is potable natural water due to water strain, water dearth, and water disasters due to human interference and/or natural reasons. This survey aims to focus on the main sources of water supply (natural and manmade), quality of natural resources of potable water, other purposes for which the natural resources of water are used, and reasons thereof. As a result of this review, means and ways are being explored to conserve the natural resources of water in Swankha.

Keywords: Water Bodies, Natural Sources of Water, Stream Water, Ponds, Pollution, Swankha.

1. INTRODUCTION

A body of water or waterbody means any significant accumulation of water on the surface of Earth or another planet. The term most often refers to oceans, seas, and lakes, but it includes smaller pools of water such as ponds wetlands, or more rarely, puddles. A body of water does not have to be still or contained; rivers, streams, canals, and other geographical features where water moves from one place to another are also considered bodies of water. Most are naturally occurring geographical features, but some are artificial. Some types can be either. For example, most reservoirs are created by engineering dams, but some natural lakes are used as reservoirs. Similarly, most harbors are naturally occurring bays, but some harbors have been created through construction. Navigable bodies of water are known as waterways. Some bodies of water collect and move water, such as rivers and streams, and others primarily hold water, such as lakes and oceans.

Water resources of the country are classified as rivers and canals; reservoirs; tanks & ponds; lakes, derelict water; and brackish water. Other than rivers and canals, total water bodies cover an area of about 7 M.Ha. Of the rivers and canals, Uttar Pradesh occupies the First place with the total length of rivers and canals as 31.2 thousand km, which is about 17 percent of the total length of rivers and canals in the country. Other union territories and states following Uttar Pradesh are Jammu & Kashmir and Madhya Pradesh. Among the remaining forms of the inland water resources, tanks and ponds have a maximum area (2.9 M.Ha.) followed by reservoirs (2.1 M.Ha.).

Most of the area under tanks and ponds lies in the Southern States of Andhra Pradesh, Karnataka, and Tamil Nadu. These states along with West Bengal, Rajasthan, and Uttar Pradesh, account for 62 percent of the total area under tanks and ponds in the country. As far as reservoirs are concerned, major states like Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, and Uttar Pradesh account for the larger portion of the area under reservoirs. More than 77 percent of the area under wells, oxbow, lakes, and derelict water lies in the states of Orissa, Uttar Pradesh, and Assam. Orissa ranks first as regards the total area of brackish water and is followed by Gujarat, Kerala, and West Bengal. The total area of inland water resources is, thus, unevenly distributed over the country with five states namely Orissa, Andhra Pradesh, Gujarat, Karnataka, and West Bengal accounting for more than half of the country's inland water bodies.

India is endowed with diverse and distinctive traditional water bodies. They support a large human population and biodiversity but are under continuous stress, caused primarily by demographic pressure and unplanned growth. There has been a decline in their water quality and quantity and several of them have vanished, thanks to improper monitoring of these water bodies. This research study was conducted in the Meerut district to help the government in identifying the status of traditional water bodies and suggest steps necessary for the protection of these water bodies. A similar research framework, with minor customization, could be applied to any other district in India. Meerut district, with a population of around 3.5 million people is in an abysmal state as the rivers and groundwater are highly polluted. The last resort—the traditional water bodies are also getting transformed into sewage ponds. Field-based research was undertaken—which involved an on-ground survey using GPS, GIS mapping & water quality testing of 120 ponds, distributed across 12 blocks of Meerut district to acquire a practical understanding of the status of these water bodies. The research team also did an informal discussion with around 500 residents, located nearby ponds, to understand the water situation of the locality. Results show that more than 50% of water bodies are severely polluted (with D.O below 5mg/l) and total dissolved solids (more than 100 NTU). Fecal contamination was observed in all the ponds that were analyzed. The major problems are excessive nutrient pollution, leading to

Cover Page

DOI: http://ijmer.in.doi./2022/11.05.111

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

eutrophication, and sewage contamination. The spatial analysis finds out that around half the ponds have reduced in area. With around 100 upcoming cities in India and most of the cities already experiencing water scarcity, it is essential to digitize, monitor, control & prevent pollution and most essentially make the people and grassroots institutions aware to protect these essential water bodies from getting extinct.

1.1 Water bodies in UT of Jammu and Kashmir

The Union Territory of Jammu and Kashmir is the northernmost state of India lying between 32°-17° to 36°-30° N latitude and 73°-26° to 80°-30° E longitude and comprises distinct areas viz Jammu, and Kashmir, each with unique physical, social and cultural features. The UT is bounded by Ladakh, and China in the northeast, Afghanistan in the northwest, and the west by Pakistan. The southern boundary is contiguous with Punjab and Himachal Pradesh. Borders on the north, east, and west have natural barriers; the state is normally accessible only from the south. The total area of the UT is 42,241 sq. km. The total population as per the 2020 census was 14,957,251. The present population (as per the projection) in 2021 is over 15,427,841. Himalayan Ranges extending northwest to southeast cover the maximum part of the UT with 300 to 6000 meters and above in height. Kashmir valley is separated by the Zanskar range (in Ladakh) by the river Indus and also blocks the southwestern Monsoons. PirPanjal range which has a height of 3420 meters separates Jammu province from Kashmir valley. The important rivers which flow through the UT are Tawi, Indus, Jhelum, Chenab, and Ravi. The source of Tawi is the Kailash Kund spring in Bhaderwah, the river flows through Chennani, Udhampur, and Jammu before joining the Chenab in Ranbir Singh Pora. Indus starts from Mansarovar at a height of 5100 meters in the Himalayas and flows diagonally towards North West. Jhelum, the other important river starts from a spring at Verinag which lies northeast of Anantnag Town, the river flows through the city of Srinagar and the town of Sumbal, Sopore, and Baramulla. The third important river is Chenab which also starts from the Himalayas. Ravi is a transboundary river flowing through northwestern India and northeastern Pakistan. The left bank of Ravi is in Punjab and the right bank is in J&K.

1.1.1 JAMMU REGION

Jammu is an ancient city. Both historically and culturally it has got a distinct identity. This region is home to the Dogras, whose name is derived from the Sanskrit word Derghart meaning land between two lakes Siroensar and Mansar, which are among the tourist attractions of the region. The Dogra rulers were great patrons of art. As is seen, most of the temples, forts, and palaces are the creation of Dogras, which are a great gift to their city. Holy places for the various manifestations of Devi (the Goddess) are found all over Jammu and Kashmir. The holiest cave shrine is the Vaishnodevi. It is about 60 km from Jammu.

1.1.2 KASHMIR REGION

Kashmir is known as the land of meadows, lakes, and springs. The oldest written account of Kashmir confirms that the valley was a large lake surrounded by towering snow-bound mountains. Geological findings also confirm that the valley with its fossil remains of aquatic animals and plants was once submerged underwater. Due to volcanic convulsion, this great lake was drained away. The supporting proof to this theory is the formation. Srinagar is the summer capital. The most famous Dal Lake, Nagin Lake, Hariparbat fort, Shankaracharya temple, Mughal Gardens (Nishat, Shalimar, Cheshmashahi, tulip gardens, Pari Mahal), and Hazratbal Mosque, are found within the vicinity of Srinagar city. Amaranth, the holy cave with a huge ice lingam, is situated at a height of 3880 meters and is 142 km to the northeast of Srinagar. The road to this holy cave passes through torrential streams, ice bridges, frozen glaciers, and a deep blue high-altitude lake of Sheeshnag. Another temple that is 21 km from Srinagar is Khir Bhavani. The DachigamNational Park, which is located to the east of Srinagar, is the home of Hangul. The other places worth seeing in the valley are Verinag, Kokerneg, Achabal, Pahalgam, Ahrabal Fall, Gulmarg, Sonamarg, Yousmarg, etc.

1.2 CLIMATE

The UT of Jammu and Kashmir lies in subtropical latitudes, the major part of the UT resembles the mountainous and continental parts of the temperate latitudes. Generally, the prevailing weather and climatic conditions of the UT have micro-level variations. The UT has distinct areas of Jammu, and Kashmir, though fall in sub-tropic but due to differences in altitude modifies the climate of these areas from temperate to arctic. The western part of the state faces more precipitation than the eastern part. The mountain ranges which run parallel to each other act as climatic barriers. Pirpanjal is the main barrier to the southwest monsoon. Factors responsible for the climate of the state are Latitude, Altitude, Terrain, and distance from the sea.

1.3 CLASSIFICATION OF LAKES AND WATER BODIES

The classification of Wetlands finalized by the Ministry of Environment and Forests Govt. of India is as follows: The classification system besides all the wetlands incorporates Reservoirs, Ash ponds/Cooling ponds, and abandoned Quarries. Lakes are larger bodies of standing water occupying distinct basins. The pond is a small, quiet body of standing water, usually shallow enough to permit the growth of rooted plants from one shore to another. Oxbow lakes are the remains of the bend in the river. The water does not

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

DOI: http://ijmer.in.doi./2022/11.05.111

flow into or out of them. They often become Swamp/marsh and often dry up as their water evaporates. Besides the classification given by the Ministry of Environment and Forests Govt. of India, the lakes and water bodies have been described as follows A lake is a body of relatively still fresh or salt water of considerable size, localized in a basin that is surrounded by land. Lakes are inland and not part of the ocean, and are larger and deeper than ponds. Lakes can be contrasted with rivers or streams, which are usually flowing. However, most lakes are fed and drained by rivers and streams. Natural lakes are generally found in mountainous areas, rift zones, and areas with ongoing glaciations. Other lakes are found in endorheic basins or along with the courses of mature rivers.

2. SAMBA DISTRICT

It is said that Samba was principally established somewhere in 1400 A.D. As per folklore, Malh Dev, the younger son of Rai Saidu of Lakhanpur was the founder of Samba, who married into the family of Ghotar a local tribesman. After his marriage, he stayed at Samba and made himself the master of the track with Samba as its capital. Samba ultimately came under the supremacy of Jammu, during the period of Hari Dev in 1816 A.D. In 1822, Suchet Singh younger brother of Raja Gulab Singh was made the Raja of Bandralta and Samba. Historically, Samba has been known for its 22 Mandies which were established by Raja Suchet Singh to whom the district also owes the famous Samba fort. In 1846 A.D it was annexed to J&K by Maharaja Gulab Singh making it an integral part of the state. As a District, Samba came into existence vide Government order No. 1345 GAD of 2006 dated 27.10.2006 with only one Tehsil and 382 villages. As per the latest SRO No. 444 dated 21.10.2014, the district comprises 381 villages. These villages have been organized into 6 Tehsils, 55 PatwarHalquas, and 101 Panchayats. Besides this, four urban towns viz. Samba, Vijaypur, Ramgarh, and Bari Brahmana are also part of this District. Famous as the land of Rajput warriors, the district has produced many gallant soldiers including the recipient of the first gallantry award of Independent India Brigadier Rajinder Singh. Samba is also famous for traditional Calico Printing, where local dyes and wooden blocks are used for block printing of woven cotton fabrics (bedsheets). It is for this reason that it is also known as the 'City of Sheets'.

2.1 Location and Size

Samba district lies between the latitude of 32°34′N & 75°07′ E and a longitude of 32°.57′ N & 75°.12′ E. The district is bounded by Udhampur district in the north, Kathua district in the east, Bishna and Jammu tehsils of Jammu district in the west, while on the southern side it has an international border with Pakistan. The district stretches over an area of 91374 Hect., Forest area is 19589 Hect. (21.43%), the gross cultivated area is 71454 Hect. (78.19%), net cultivated area 39200 Hect. (42.90%), irrigated area 14409 Hect. (36%) and unirrigated area 24794 Hect. (64%). It has recorded a population of 318,898. Among all the districts of the UT, it ranks 15th and 4th in terms of population and area respectively. Its density i.e., number of persons per sq km works out to be 353. Samba town is situated on the foothills of Shivalik Hills at 384 meters (1259 feet) above sea level, alongside the National Highway 1-A on the bank of river Basantar. Jammu city is about 40 km from Samba. About 2/3 of the area of District Samba is Kandi and Rainfed. Ravi Tawi Irrigation canal network irrigates the area on the southern side along the national highway, hence boosting the cultivation of major cereals and vegetables.

The climate of the district being a sub-tropical zone is hot and dry in summer and cold in winter. Being in the foothills of the mountains, nights are a bit cooler than that of neighboring areas of Punjab. The temperature ranges between 6 degrees Celsius and 47 degrees Celsius.

2.2 Water bodies of Samba District

The two important rivers of the district Samba are Basanter and Devak or Devika. Basanter is a tributary of River Ravi. Devak also known as Gupt Ganga is a tributary of the Ujh river. Mansar Lake is a freshwater lake surrounded by forest-covered hills located on the Samba-Udhampur Road about 22 km from Samba. Besides rivers and lakes, the Samba district has many ponds, canals, and tube wells. Out of the nine ponds only one has gone dry in the Rahya and Suchani villages in the Samba district, presenting the two villages as the model examples. Khoo Talab, a significantly renowned water body at Suchani village, 2.5 km short of the prestigious Central University at Bagla, is an exemplary model which is surrounded by scenic locales with mountainous terrain on one side and expanding plains on the other. Recently in the year 2019-20 tube wells (212) and dug wells (52) have been added to the area.

3 Ramgarh Tehsil

Ramgarh is a town and a notified area Committee city in Samba district in the Indian union territory of Jammu and Kashmir. Ramgarh city is divided into 13 wards. The Ramgarh Municipal Committee has a population of 5,612 of which 2,840 are males while 2,772 are females as per a report released by Census India 2011.

The population of Children ages 0-6 is 615 which is 10.96 % of the total population of Ramgarh (MC). In Ramgarh Municipal Committee, the Female Sex Ratio is 976 against the state average of 889. Moreover, the Child Sex Ratio in Ramgarh is around 814

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

DOI: http://ijmer.in.doi./2022/11.05.111

compared to the Jammu and Kashmir UT average of 862. The literacy rate of Ramgarh city is 83.25 % higher than the UT average of 67.16 %. In Ramgarh, Male literacy is around 91.04 % while the female literacy rate is 75.44 %.

Ramgarh Municipal Committee has total administration of over 1,214 houses to which it supplies basic amenities like water and sewerage. It is also authorized to build roads within Municipal Committee limits and impose taxes on properties coming under its jurisdiction.

3.1 Water Bodies of Ramgarh Tehsil

S.NO.	Block	Panchayat Halqa	Name of Village	Name of the Water/Bodies
1	Ramgarh	Abtal	S.M.Pura	Pond at S.M.Pura
2			Chakjasso	Pond at Chak Jasso
3			Pardi	Pond at Pardi
4			Chowani	Pond at Raja Mandlik at Rakh Abtal Chowani
5		ChackBalotrian	Kullian	Pond near tube well at Kullian
6			Chak Balotrian	Pond at Chack Balotrian near Shiv Temple
7			Maharajpur	Pond at Maharajpur near School
8			Hira chak	Pond at Hira Chak
9		Chak Chattakan	Kotli Matkalian	Pond at Kotli Matkalian near Sham shan ghat
10			Kotli Matkalian	Pond near Stadium at Kotli Matkalian
11			Kotli	pond at Kotli near Dev Sathan Ditch
12			Khour Slarian	Pond at Khour Slarian near land of Parmanand
13			Khour Slarian	Pond at Khour Slarian near land of Parkash Chand
14			Kotli	Pond at Kotli near GPS
15			Chak Chattakan	Pond near Mandir at Chak Chattakan
16			Chak Chattakan	Pond at Chak Chattakn near H/o Darshan Lal
17			Chak Chattakan	Pond at Chak Chattakan Bore tree
18		Chak Nazir	Chak Nazir	Pond at Chak Nazir near land of Gurdeep Singh
19			Chak Nazir	Pond near Land of Som Dass at Chak Nazir
20			Jerda	Pond near Pry. School Jerda
21			Chak Nazir	Pond at Chak Nazir near land of Gurbir Singh
22		Chak Salarian	Keharwali	Pond at Keharianwaali
23			Chakbana	Pond at Chak Bana
24			Sarwa	Pond at Sarwa
25			Chaksalarian	Pond at Chak Salarian
26			Karalian	Pond at Karalian
27		Changh	Kalah	Pond at Kalah near Tube well
28			Chang	Pond near Shamshan Ghat
29		Channi Fatwal	Narayan chak	Pond at Narayan Pur
30		Gho Brahamana	Shahzadpur	Pond at Sahzadpur
31			Gho brahmana	Pond at Gho Brahmana
32			Gho brahmana	Pond at Gho Brahmna near canal
33			Gho brahmana	Pond near Atta Chaki Gho Brahamana
34		Kesso Manhasan	Kesso Manhasan	Pond at Kesso Manhasan
35			Pakhri	Pond at Pakhari near Dev Sathan
36			Pakhri	Pond at Pakhri near land of Ex- Sarpanch
37			ChakBabral	Pond at Chak Babral near CFC.

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

DOI: http://ijmer.in.doi./2022/11.05.111

38		Khanpur	Khanpur	Pond at Ramkund
39			Bajawati	Pond at Bajawati
40			Khanpur	Pond at Khanpur
41			Khanpur camp	Pond at Khanpur Camp
42		Lagwal	Lagwal	Pond at Baba Panj Peer
43			Lagwal	Pond at Baba Lakshman Jati
44		Mahal shah	Mahal kalanderian	Pond at Mahal Kalanderian
45			Mandalayal	Pond at Mandalayal near Sham Shan Ghat.
46			Mandalayal	Pond at Mandalayal
47			Dupsari	Pond at Dupsari
48			Mahal kalanderian	Pond at Mahal Kalanderian near tube well
49		Nanga	Nathwal	Pond at Nathwal
50			Dadyal	Pond at Dadyal
51			Nanga	Pond at Nanga
52			Kandral	Pond at Kandral
53		RaikaLabana	Raikalabana	Pond at Raika Labana
54			GhoRakwalan	Pond at near Dev Sathan Bua Dati at Gho Rakwalan
55			Raikajogian	Pond at Raika Jogian
56			GhoRakwalan	Pond at Dowal
57		Rangoor	Rangoor	Pond at Rangoor near Shamshan Ghat
58			Rangoor	Pond at Rangoor near Land of Sh. Kartar Chand
59		Rarri	Rarri	Pond near Naga Peer at Rari
60			Rarri	Pond at Rarri near H/o Chet Ram
61		Swankha	Radwan Kalan	Pond at Radwan Kalan near Dev Sathan
62			Radwan Kalan	Pond at Radwan Kalan near Dati Mandir
63			Radwan Khurd	Pond at Radwan Khurd near Canal
64			Swankha	Pond at Baba Sidh Goria at Swankha
65			Swankha	Pond at Swankha near Baba Mandal Nath.
66		Trindi	Trindi	Pond at Mata Mangla Ji at Trindi
67			Ramloo Brahmana	Pond at Ramloo Brahaman near Dev Sathan

4. Swankha Village

According to Census 2011 information the location code or village code of Swankha village is 006489. Swankha village is located in Samba tehsil of Samba district in Jammu & Kashmir, India. It is situated 19 km away from Samba, which is both district & sub-district headquarter of Swankha village. As per 2009 stats, Swankha village is also a gram panchayat.

4.1 Location

The total geographical area of the village is 338.7 hectares. Swankha has a total population of 2,075 people, out of which the male population is 1,058 while the female population is 1,017. There are about 437 houses in Swankha village. The Pin code of Swankha village locality is 184120.

4.2. Water bodies of Swankha Village

A survey was done in the Swankha to gather information about the status of water bodies. The village Swankha has many natural water bodies like streams, ponds, and lakes. The survey was carried out to study the present scenario regarding the use of natural and other sources of water bodies in the area. It was targeted to know the sources of potable water in the area and to assess the ground reality viz a viz use of stream and pond water in the area. The survey aimed tohighlight the reasons for the discontinuation of the use of stream water for drinking purposes.Also, to study the pattern and reasons of how the stream and pondsgot polluted overtime. The targeted group was the inhabitants living near the ponds and streams in Swankha.

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

DOI: http://ijmer.in.doi./2022/11.05.111

Block	Panchayat Halqa	Name of Village	Name of the Water/Bodies
Ramgarh	Swankha	Radwan Kalan	Pond at Radwan Kalan near Dev Sathan
		Radwan Kalan	Pond at Radwan Kalan near Dati Mandir
		Radwan Khurd	Pond at Radwan Khurd near canal
		Swankha	pond at Baba SidhGoria at Swankha
		Swankha	Pond at Swankha near Baba Mandal Nath.

6. FINDINGS& CONCLUSION OF STUDY

The Swankha village of district Samba has been endowed with several natural water sources, especially streams, ponds, and wells. Some of the ponds are known for religious activities and faith. People take baths and chant in the name of God, offering prayers as per their faith. The water in the ponds israin-fed. The pond at Suchaniis the oldest one in the area and has religious and medicinal significance. The rainwater seeping into this pond comes from trees and ferns on its upper banks and has been of great medicinal value," said Khajoor Singh, sarpanch of Suchani. There is a myth about this pond having cured a prince of Sialkot, who used to ferry horse-loads of water from Khoo/Talab for drinking purposes. "No one was ever allowed to wash clothes or bathe in these ponds as the water was used for drinking purposes. Such was the significance of ponds in ancient times. Now there are tube wells, but elders of the villages still revere these ponds with traditional sanctity as many community congregations are held on their banks," said Om Singh, a local shepherd. Besides, these ponds constitute an important water buffer, particularly during the summer months. But now many ponds are highly polluted due to industrial effluents, agricultural wastes, animal wastes as well as dead bodies of animals that are dumped in these ponds.

It was also gathered from the survey that previouslywater from the water bodies was used for drinking purposes. People from far-off places carried gallons of waterfrom the streams and ponds to their homes. Unfortunately, the scenario has changed drastically now, the ponds and streams have become polluted. The truth behind these polluted water bodies in Swankha village is that much of the garbage and filth of the village area is, directly and indirectly, being dumped into these water bodies which pollute them abundantly. Most of the water bodies are used for religious rites, it reduces them to a dry filthy bed of garbage. Not only this, the problem of garbage heaps in the main residential area on the roadside is also posing a threat. Ironically, the study conducted reveals that the water bodies have become the dumping ground of waste and used water from households and agricultural runoff. Other reasons for the distinction of these water bodies are the construction of roads and bridges and filling them up for the construction of buildings and agriculture purposes.

The study conducted indicated that at present the sources of water used in the village are Bore wells, and hand pumps, besides water supplied by the Jal Shakti Department of the Government of JK UT. In Swankha the main source of Drinking water is a Hand pump, only 10% of the population depends on the water supplied by the Government (figure 1). It came to the fore that about 40-30 years back the stream water was used for drinking purposes. But now it is used only for bathing livestock. Regarding the quality of stream water, figure 2 depicts that maximum local find that the quality of stream water is poor and is not fit to be used for any household chores. Only a few are of the opinion that it can be used. From figure 3, it is clear that maximum inhabitants use stream water for either irrigation purpose or bathing animals. Only a few uses it for bathing and cleaning utensils. From figures 4 & 5 it is clear that in Swankha the water bodies have been depleted and polluted because they are being used as a dumping garbage ground by maximum inhabitants of the adjoining area in the absence of proper arrangement for the disposal of household garbage. Moreover, this area does not come under the Municipal committee and hence there is no means of garbage disposal and people find it convenient to dump it in water bodies, thinking that it will be washed away with time and water. Another reason which has come to the fore is that the water bodies are being filled up for use as agricultural land.

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

DOI: http://ijmer.in.doi./2022/11.05.111

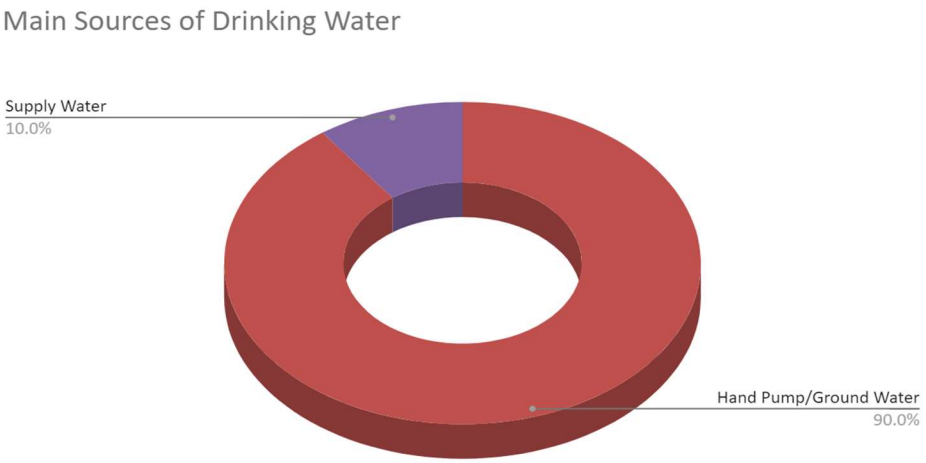

Figure 1

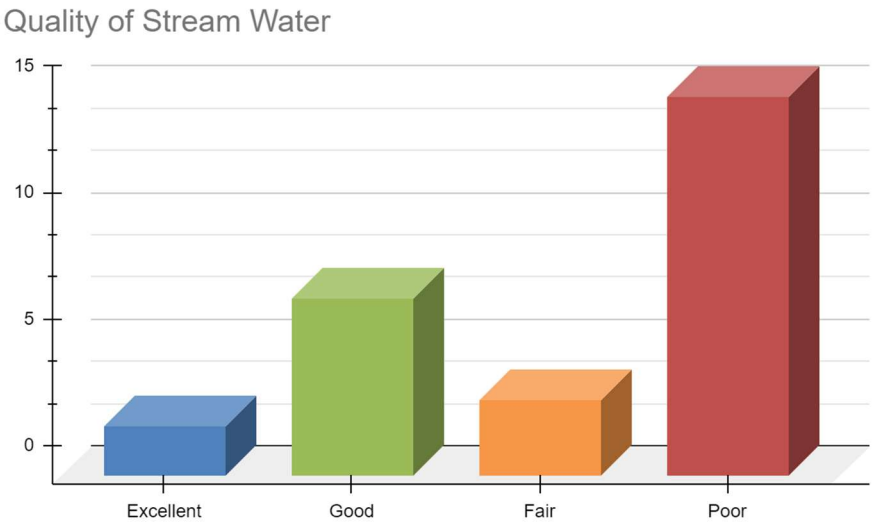

Figure 2

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
DOI: http://ijmer.in.doi./2022/11.05.111
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

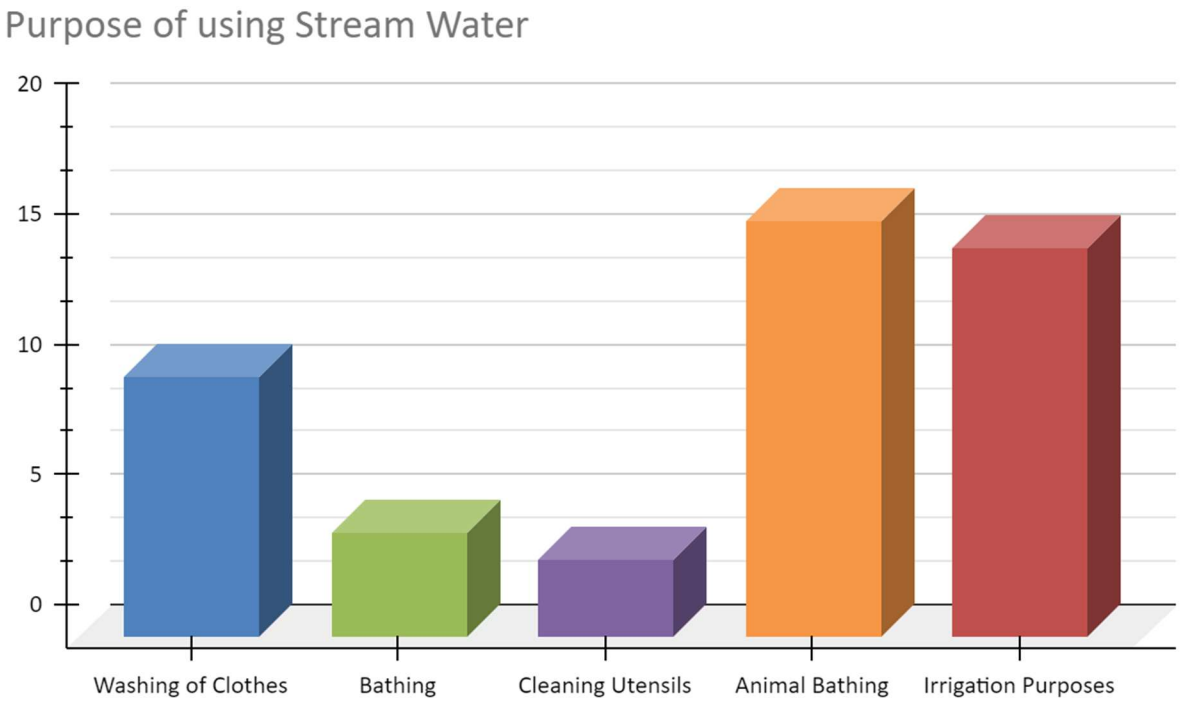

Figure 3

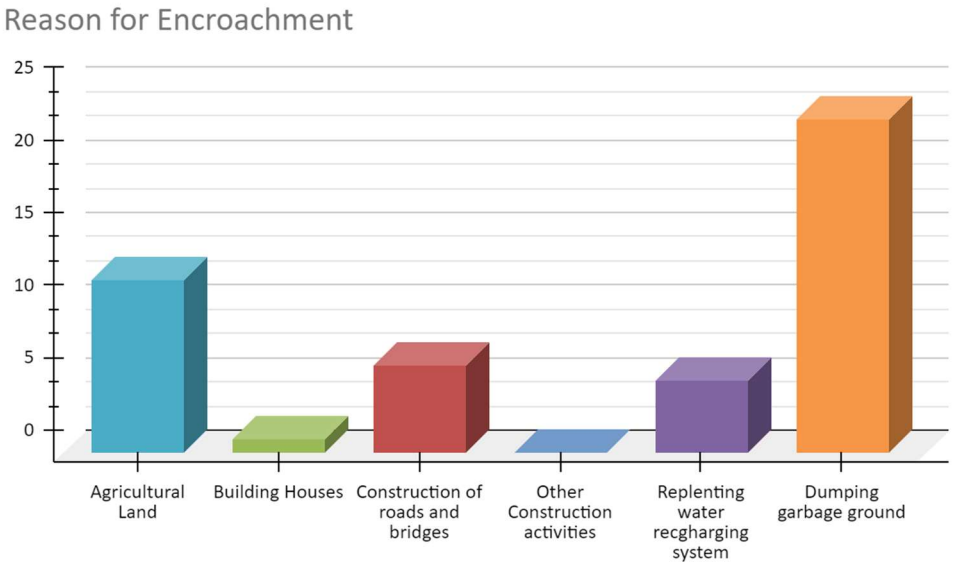

Figure 4

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:5(6), May: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
DOI: http://ijmer.in.doi./2022/11.05.111
Article Received: 2nd May 2022
Publication Date:10th June 2022
Publisher: Sucharitha Publication, India

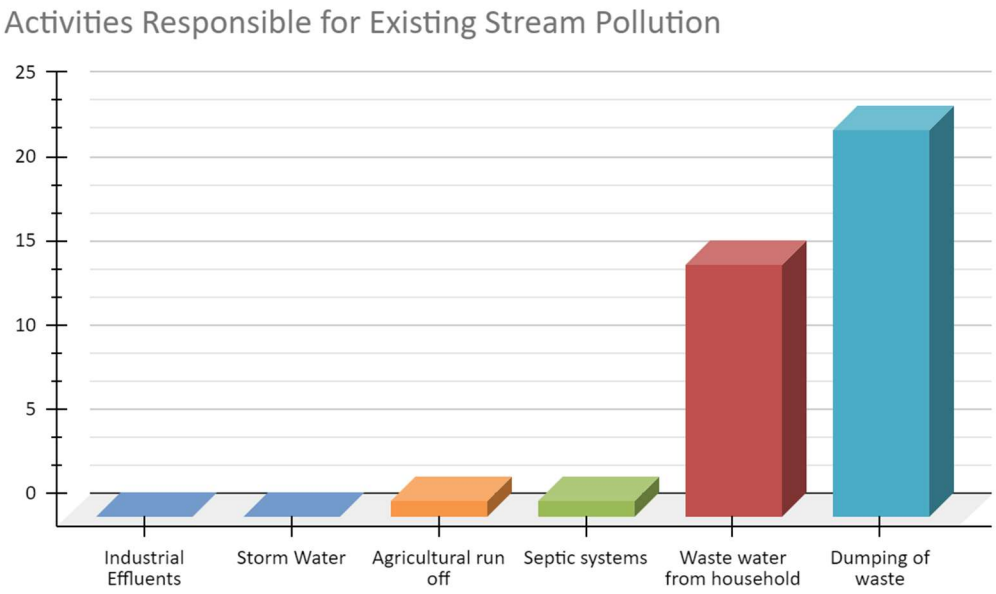

Figure 5

7. SUGGESTIONS

Water pollution, to a larger extent, can be controlled by a variety of methods. Rather than releasing sewage waste into water bodies, it is better to treat them before discharge. Also, more toilets should be built in the rural areas and people taught to use them judiciously. Practicing this can reduce the initial toxicity and the remaining substances can be degraded and rendered harmless by the water body itself. If the secondary treatment of water has been carried out, then this can be reused in sanitary systems and agricultural fields. People should be educated not to dispose of household waste in the river bodies, instead Municipal committee should ensure and guide residents about the benefits of segregation of waste and how it can be reused, recycled, or disposed of. Various simple and manageable ways can be used to limit the pollution of water sources. These actions can be taken individually or collectively and must be done repeatedly to reduce the impacts on the water systems. Swankha should be bought under Municipal Committee, so that waste can be disposed of judiciously. Message about the benefits of clean water bodies through Nukkad Nattaks, distribution of pamphlets, and multi-media be dissipated.

References

1. Directory of lakes & water bodies of UT of Jammu and Kashmir, Department of Environment and Remote Sensing, SDA Bemina Srinagar/Paryawaran Bhawan, Forest Complex Jammu. Email: dirjkers@gmail.com.
2. MSME-Development Institute, J&K, Jammu (Ministry of MSME Government of India). Email: dcdi-jammu@dcmsme.gov.in, website: www.msmediajammu.gov.in
3. Science of the Total Environment, Journal homepage: Elsevier. com/locate/Science tot env.
4. Digest of Statistics, 2022, Directorate of Economics and Statistics, Finance Department, Government of Jammu and Kashmir.
5. District Information Center, Samba District.
6. National Information Center, developed and hosted National Informatics Center, Ministry of Electronics & Information Technology, Government of India.
7. Block Development Office, District Samba.
8. District Statistical & Planning Department Website: http//samba.nic.in/
9. Panchayat Ghar, Village Swankha.
10. Personal interviews, personal discussions, face-to-face oral communication.
11. Survey by using the questionnaire method.