

DAL LAKE AND THE ENVIRONMENTAL ISSUES

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Abstract

Dal Lake, located a mile above sea level in the Himalayan Mountain range, is one of many natural sites that have become the forgotten victims of war and civil strife throughout India and other troubled countries. Since India gained independence in 1947 from the British, and Pakistan was created from eastern Indian Territory, separatist factions and militants in the Kashmir Valley have been waging a civil war. Their stated goal is to become either a purely autonomous region or to be joined with its neighbor Pakistan. The history of animosity between these sidings of Kashmir and its Indian government is long and due to a variety of reasons. Of these, the most often expressed by the Kashmiris is the feeling that they are being discriminated against by the Indian majority. Dal Lake, and much of the surrounding area, has become a battlefield and fallen victim to the difficulties of war. But, not only is the land dying but many poor, native inhabitants say they can no longer continue their traditional way of life let alone survive. Through massive deforestation and pollution the area is just an example of what can occur without international attention and governmental regulation." The whole system has broken down," said M.A. Kawosa, conservator of forests for the Kashmir Valley, where separatist militants have been fighting prominently Indian government forces for last thirty one years. "The lake is dying and our forests have had terrible damage. J&K Government must take urgent steps to prevent illegal violations against the lake.

Introduction

History is a survey of man's existence and occupation on earth, the ideas, events and meaning of man's long journey through his birth and development, leading to the progress of civilization, which are basic to any elicitation, indicative of how the past is interpreted and what lessons might be learnt for a clearer comprehension of the thoughts, motivations and actions, the philosophy and forces that operated and influenced him. Origin of Jammu can be traced back to the age of Raja Jamboolochan in the 14th century BC. It is believed that during one of his hunting campaigns he reached the Tawi River where he saw a goat and a lion drinking water at the same place. The king was impressed and decided to set up a town after his name, Jamboo. With the passage of time, the name was shaped to become "Jammu".

According to folk etymology, the name "Kashmir" means "desiccated land" (In Sanskrit: Ka = water and shimeera = desiccate). In Rajatarangini, (history of Kashmir written by Kalhana in mid-12th century), it is stated that the valley of Kashmir was formerly a lake (Das Gupta, 1958:38). According to Hindu mythology, the lake was drained by the great rishi Kashyapa, son of Marichi, son of Brahma, by cutting the gap in the hills at Baramulla (Varaha-mula). When the lake had been drained, Kashyapa asked Brahmans to settle there. The name of Kashyapa was connected with the draining of the lake and the chief town or collection of dwellings in the valley was called Kashyapa-pura¹.

Kashmir came to be known as the abode of rishis because it has provided a calm and serene shelter to sages and savants. The ancient Greeks called it "Kasperia" and the Chinese pilgrim Hiuen-Tsang who visited the valley around 631 A.D called it Kahi-Milo. Rishis finding the

place secure for their Tapas made it their home and gave it the name Kashyapa mar after the rishi who found it². In the modern time it had been changed to Kashmir. In pre-historical times the valley of Kashmir was believed to be the abode of Shiva manifest itself as the great lake of Sati, the other form of Shakti. Brahmans who engaged in contemplation to study the Vedas continued to come and settle here. A time came when the whole of the valley was populated by Brahmanas with a rich Vedic scholarship and lore. Medieval historian Alberuni says Varanasi and Kashmir are the High schools of Hindu science.

Study Area

Jammu Kashmir, located in the extreme north of the country is situated between 32° 17' and 37° 5' N latitude and 72° 40' and 80° 30' E longitudes. It is bounded on north by China, east by Tibet, south by Pakistan. Geographically this state was divided into four zones – the mountains and semi Mountains plain known as Kandit belt, Siwalik ranges, mountains of Kashmir valley and Pir Panjal ranges and Tibetan tract of Ladakh and Kargil. This study is mainly focusing on the present conditions of Dal Lake. Dal Lake is situated in the heart of the Srinagar the capital city of J&K. Several families and so much of ordinary citizens are directly linked with Dal Lake. Unfortunately Dal Lake is dying because of the several reasons. This paper reveals some Eye observations from the author.

Methodology

The methodology adopted in this study is mainly historical, Descriptive and Analytical. Both primary and secondary source materials have been used. Data's are collected from Books, articles, Journals and news papers. Many data's are observed from author's research.

Findings

Dal Lake is the part of J&K history.

Before the lake water is used for drink by locals..

Several families are living inside the dal lake.

Nowadays the living conditions of the local people are totally damaged by environmental disorders.

It lost its beauty and calmness just because of instability.

Physiography

A peculiar feature of the state was the existence of two capitals. In summer the capital is Srinagar and in winter the capital is Jammu. The climate of the state varies from tropical in Jammu plains to semi arctic cold in Ladakh with Kashmir and Jammu mountain tracts having temperate climatic conditions. Leh is coldest and Jammu is the hottest region in the state. In the winter nights temperature goes down below zero and heavy snow fall occurs during November to February. The annual rainfall varies from region to region with 92.6mm in Leh, 650.5mm Srinagar and 1,115.9mm in Jammu³.

Our immortal Sanskrit poet Kalidasa writes about the valley: "The place is more beautiful than heaven and is the benefactor of supreme bliss and happiness. It seems to me that I am taking a bath in the lake of nectar here. The valley is an emerald set in pearls; lands of lakes, clear streams, green turf, magnificent trees and mighty mountains where the air is cool, and the water sweet, where men are strong, and women are beautiful like fruits". Table 1.1 gives profile of the Jammu Kashmir.

TABLE 1:1
Profile of J&K

Geographical Area	2,22,236*
Number of Districts	22
Population(2001)	10,069,917
Major Languages	Kashmiri, Dogri, Urudu, Hindi
Forest cover (2001)	9.56% of total Geographical area
Rural Population (2001)	75.12% Total Population
Number of towns and Villages	75 and 6652
Agricultural Land	4.7% total
Per Capita Income (NSDP 1999-2000)	Rs.7435/-
Population Density (2001)	99/Km ²
Literacy rates (2001)	54.46%
Sex Ratio (2001)	900 females per thousand males
Major Source of occupation	Agriculture (80%)
Major Tribal communities	Balti, Beda, Boto, Brokpa, Drokpa, Garra, Chnagpa, mon, Purigpa, Gujjar, Gaddi, Bakarwal and Sippi
Major Industries	Handicrafts and Handlooms

Source: Office of the Registrar General of India, Ministry of Home Affairs

* Included 78,114 and 37555Km² occupied by Pakistan and China respectively and 5,180km² handed over by Pakistan to China.

Nature has bestowed unlimited grace and grandeur to the valley. Its scenic beauty is unparallel. The chinar is a royal tree and the walnut belongs to Kashmir. Its green leaves become red in autumn and later fall down on the ground where these are meticulously collected by the housewives in villages for use as fuel etc, during hard winter months. That is why this valley is compared with Paradise. The amazing climate of Kashmir valley had attracted lakh of tourists every year.

Geography and climate

Jammu and Kashmir is a home of several valleys such as the Kashmir Valley, Tawi, Chenab, Poonch, Sind and Lidder. Among these the major one is Kashmir valley which is 100 km (62 mi) wide and 15,520.3 km² (5,992.4 sq mi) in total area. The Himalayas divide the Kashmir valley from Ladakh while the Pir Panjal range, which encloses the valley from the west and the south, separates it from the great plains of northern India. This densely settled and beautiful valley has an average height of 1,850 metres (6,100 ft) above sea-level but the surrounding Pir Panjal range has an average elevation of 5,000 meters (16,000 ft).

The Jhelum River is the only major Himalayan River which flows through the Kashmir valley. The Indus, Tawi, Ravi and Chenab are the major rivers flowing through the state. Jammu and Kashmir is home to several Himalayan glaciers. With an average altitude of 5,753 metres (18,870 ft) above sea-level, the Siachen Glacier is 70 km (43 mi) long making it the longest Himalayan glacier. Important rivers are Jhelum and Chenab. Both are originating from J&K and flowing to Pakistan. There are so many small rivers also originating from Pir Panjal Mountains and flowing to Jammu areas. Important thing is winter season also filled with water because of the melting snow.

The climate of Jammu and Kashmir varies greatly owing to its rugged topography. In the south around Jammu, the climate is typically monsoon, though the region is sufficiently far west it receives an average 40 to 50 mm (1.6 to 2 inches) of rain per month between January and March. In the hot season, Jammu city is very hot and can scale up to 40 °C (104 °F) whilst in July and August, very heavy though erratic rainfall occurs with monthly extremes of up to 650 millimeters (25.5 inches). In September, rainfall declines, and by October conditions are hot but extremely dry, with minimal rainfall and temperatures of around 29 °C (84 °F).

Across from the Pir Panjal range, the South Asian monsoon is no longer a factor and most precipitation falls in the spring from southwest cloud bands. Because of its closeness to the Arabian Sea, Srinagar receives as much as 25 inches (635 millimeters) of rain from this source, with the wettest months being March to May with around 85 millimeters (3.3 inches) per month.

Across from the main Himalaya Range, even the southwest cloud bands break up and the climate of Ladakh and Zaskar is extremely dry and cold. Annual precipitation is only around 100 mm (4 inches) per year and humidity is very low. The region, almost all above 3,000 meters (9,750 ft) above sea level and winters are extremely cold. In Zaskar, the average January temperature is 20°C (-4 °F) with extremes as low as -40 °C (-40 °F). All the rivers freeze and locals actually do river crossings during this period because the high levels from glacier melt in summer inhibits crossing. During summer in Ladakh and Zaskar, days are typically warm about 20 °C (68 °F) but with the low humidity and thin air nights are cold⁴.

Tourism

Kashmir was a popular tourist destination due to its climate. When the temperature in Srinagar rises at the beginning of June, the residents would migrate to Gulmarg, which was a fashionable hill station during British rule. Dal Lake, Mughal gardens, Patnitop, Pahalgam, Soonamarg, Vaishnavodevi temple, Amarnath temple etc are the important tourist destinations of J&K. In India, it contributed 5.90% gross in domestic products during 2003-04. The tourism department has earned Rs.7346.51lakh during the period 2004-05 to 2006-07 of which Rs5204.24lakh has been earned by JKTDC followed by Rs 1621.16lakh(22.07%) by cable car operation. The Vaishno Devi yatra alone contributes Rs. 475 crore to the local economy annually.

As per the World travel and Tourism council, this sector contributed 10.4% to gross domestic product during 2007. Tourism in the Kashmir valley has rebounded in recent years and in 2007, the state became one of the top tourist destinations of India⁵. Apple farms and Saffron Paddies also are main attractions for tourists. Gulmarg, one of the most popular ski resort destinations in India, is also home to the world's highest green golf course. However, with the

decrease in violence in the state the state's economy specifically tourism has received a boost.

Lakes in J&K

There are eleven lakes situated in J&K. Mansbol Lake is the longest in the valley. It originates from Sopore. Seshnag Lake is the shortest in the valley .Dal lake is flowing in the heart of Srinagar and memmorable mughal gardens like shalimar, Nishant,Harwan alos situated opposite the lake.Table 1.2 gives detailed picture of lakes in J&K.

TABLE 1: 2

Lakes in J&K

Name	Distance in Sq Km	Place
Wular Lake	16 KM	Bandipore and Sopore
Dal Lake	8 KM	Srinagar
Anchar Lake	8KM	Gandarbal
Mansbal	29KM	Sopore
Harwan	21KM	Srinagar city
Hokarsar	13KM	Baramulla
Konsarnag & Vishnopad	5KM	Shopian
Gangabal	6KM	Harmukh Mountain
Sheshnag	4KM	Pahalgam
Neelang	5KM	Budgam
Pangong	6.4KM	Ladakh

Source: Archeological Department J & K.Report 1989.

Dal Lake is being overrun by weeds, choked with silt, and saturated with pollution and was one of the most scenic lakes on the Indian subcontinent. It is but one example in which governmental officials and other observers say that trees, lakes and animals rank low on the priority list in regions such as Kashmir, Afghanistan, and Somalia, where civil tribal wars threaten the existence of humans⁶. By the time the war ends, according to India's top environmentalists, the fabled lake near the Pakistani border, once a large, productive body of water, may be little more than a polluted marsh incapable of sustain the local population (Moore 1994). Across the subcontinent, bodies of water are being polluted, forests plundered, and wildlife sanctuaries stripped of flora and fauna as a result of local militias, struggling natives and government neglect brought on by the chaos of warfare. The civil war in Kashmir has had a devastating effect on the Dal Lake eco system. In many instances, inadequate government protection has resulted in widespread poaching and timer cutting in sanctuaries, parks and reserves. "I used to be able to hunt, fist, and survive in the forests and waterways around Dal Lake, "said Tariq Mohammed, a former resident of the Dal Lake area, "but now I do not even recognize my once beautiful birthplace⁷. The deforestation has created problems of soil erosion and mud slides that catch local population by deadly surprise and slowly change the shape and chemistry of the lake.

People on the lake

In the last 63 years the lake has shrunk to about half of its original size. And almost two-thirds of the remaining 4.6 square miles has become smothered by vegetation in the six years since the civil war began and India posted an estimated 500,000 troops in the state of Jammu and Kashmir, according to Rasheed uddin Kundangar, a scientist at Srinagar's Sri Pratap College. Greatly affected are the approximately 4,000 lake people, who farm their vegetables on unusual floating islands built from reeds, send their children to class by school boats and supplement their diets with the fish. Pollution is reducing their catches, forcing more of them to build more islands, which diminish the water area. The thick, interwoven mats of water weeds have reduced the ability of a society in which all movement and commerce takes place on water. Water men now are being forced to sell vegetables on the streets of Srinagar or to push their children into carpet weaving to help their families survive⁸.

Pollution of the lake

In addition to the land and water environmental destruction many former structures and landmarks are being inhabited by warring factions that look more to defeating their enemies rather than to the potential long-term problems that are being created for the region. The once heavily visited and picturesque season all tourist hotels have now been turned into year round military barracks that pump tons of raw waste into the lake. As the conflict continues so too does the amount of waste and garbage being dumped into the lake. On the steep hillsides above the lake, Indian military officials, Kashmiri militants and impoverished natives are taking advantage of the lack of regulation to strip the mountains of their forest cover. The appearance of red algae, which thrive in polluted and stagnant water and spread over vast portions of the lake, has been one of the most serious problems in recent years. As the plankton die, the smaller water plants and bugs which feed on the small organisms die as well. Larger fish and birds eat these smaller creatures and the lake dwellers use the bigger animals for food. With the appearance of the red algae, the entire food chain is severed and the traditional villagers do not have enough to eat. When the patches first appeared four years ago the lake dwellers believed it was the blood of the thousands of Kashmiris killed during the civil war. All too often now, red slime covers the surface, the lake people struggle to navigate weed-choked canals and fewer birds return to their nesting sites in the trees on banks. The timber companies act with little government inspection and often disappear from the area before fines and arrests can occur.

The timber companies strip clear the land and transport the wood to coastal shipping ports for export. It is estimated that the companies have been making millions of dollars in the timber sales. The potential profit that will be lost if there is a change in the status of the contracts or the ability to harvest the timber causes fierce lobbying by the companies to the India government. In many instances the local villagers have been offered bribes to allow the companies to continue their work⁹.

Government relief programs

The Indian government has suspended their prewar programs to control pollution in the lake citing decreasing funds and a lesser importance to the projects until the conflict can be resolved. Water treatment and the prevention of mere dumping of refuse into the waterways head the lists of governmental pollution programs. If the water can be cleansed and remain pollution free many of the current problems due to the excess waste dumping can be alleviated. The government was to expand its vegetation removal, by water-type vegetation "mowers" and harvesters. Officials cite the danger of attempting these measures while a civil

war is occurring nearby. There is also the problem of lack of funding for these projects due to the budgetary problems India is experiencing as well as the officially stated need to divert moneys to the war effort¹⁰. The government and the United Nations also express the need for population control methods to stem this increasing amount of pollution into the local waters. Due to the belief that a large family is necessary for farming, through traditional methods, there has been a population explosion in recent years. The annual birth rates for the area are said to have increased by over 25 percent in the last 20 years. Dal Lake and the surrounding area, which once registered approximately 2,500 residents, is now figured to support over 4,000 peoples and this number is expected to grow significantly in the next decade. Environmentalists warn that if forests, waters and wildlife are not protected in these regions, there may be little left to sustain local populations once the political problems are resolved¹¹.

Now, here are the problems expressed by government officials more evident than in the Kashmir Valley, where a number of war-related environmental abuses have converged to threaten the livelihood of thousands of people and the existence of an important ecological habitat. In addition to the deforestation and soil erosion problems, other environmental conditions are being overlooked or exploited. At Dachigam National Park, just outside the Kashmiri summer capital of Srinagar, both militants and Indian military forces have been accused of slaughtering the rare Kashmir stag, an endangered species of red deer. Consequently the deer, birds, and fish in the area are being used to nourish the troops.

Present Picture

Dal Lake suffered from serious pollution problems before the civil war began. The lake was once a popular domestic and international tourist area. Its luxurious hotels and spas catered to famous clients and wealthy patrons alike. For example, George Harrison, former member of The Beatles was often seen vacationing in and around the Dal Lake area. When it was a tourist haven more than 1,000 houseboats ringed the lake--and dumped untreated sewage into the water. The 700,000 residents of Srinagar, which has no water treatment systems, traditionally have used the lake and nearby rivers as toilets, sink and were basins. But just as international aid organizations were beginning to pump millions of dollars into programs, war erupted and all outside efforts were suspended. What few government projects were underway became public works programs, aimed more at giving local contractors jobs than preserving the lake. A \$225,000 settlement basin was built to control soil runoff into the lake but it never was put in to operation¹².

Conclusion

To taken governmental efforts to control some of the problems have been misguided, according to Kundangar and other scientists. Giant weed harvesters troll the lake but prune only the tops of the water weeds, making the aquatic plants grow even faster, Kundangar said, As long as the area continues to harbor civil strife and logging companies continue to clear cut the hillsides the problems in the Kashmir Valley and Dal Lake will continue. The United Nations has attempted to intervene in the war but has had only limited and temporary success. Both warring factions indicate the need for an end to the conflict while at the same time continuing to duel over the mountainous region. It is thought that the "tree hugging" movement may help slow the environmental damages but without international attention and aid, no solution is on the horizon.

Bibliography.

- ¹ Hargopal Kaul, Guldasta-I-Kashmir, Arya Press: Lahore, 1993.
- ² Taken from Huyen sang travel eports.
- ³ Brecher Michel, The Struggle for Kashmir, Oxford Press: Newyork. 1953.
- ⁴ Datas are collected from Kashmir University Librarys various Books.
- ⁵ Jammu and Kashmir Tourisam Report, 2008.
- ⁶ Bhagawan Singh, Political Conspiracies in Kashmir, Rinstar: Bombay, 1983.
- ⁷ Opinion from local recident, Tariq.
- ⁸ Kaul, R U, The Wall of kashmir, Sterling: Newdelhi, 1999.
- ⁹ Datas are collected from J&K Forest Department and Water Authority.
- ¹⁰ Oberoi Surendar, Kashmir is bleeding: Vol II, No.2, and October 1997.
- ¹¹ Datas are collected from Survey.
- ¹² From Authors survey, 2007-2011.