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An Assessment of the Mirik Lake and the Local Neighborhood- A dynamic perception

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Abstract

Lakes in Himalayas are one of the preferred tourist destinations of all ages. Their maintenance and usability is of serious concern. The 'Sumendu Lake' popularly known as the 'Mirik Lake' is among the very few most visited tourist destinations of West Bengal. An assessment of its current status and condition holds special relevance for the geographers. Overall, this lake is exhibiting varying degrees of environmental degradation caused by encroachments, eutrophication (from domestic and commercial effluents) and siltation. The high population density ensures that many water bodies are under severe and direct pressure from anthropogenic activities in their catchments. With this aim in mind, the present work is an attempt to decipher the popular perception regarding the degeneration of lake with a futuristic outlook.

Keywords: Lake, Current status, Degeneration, Perception, Management

Introduction:

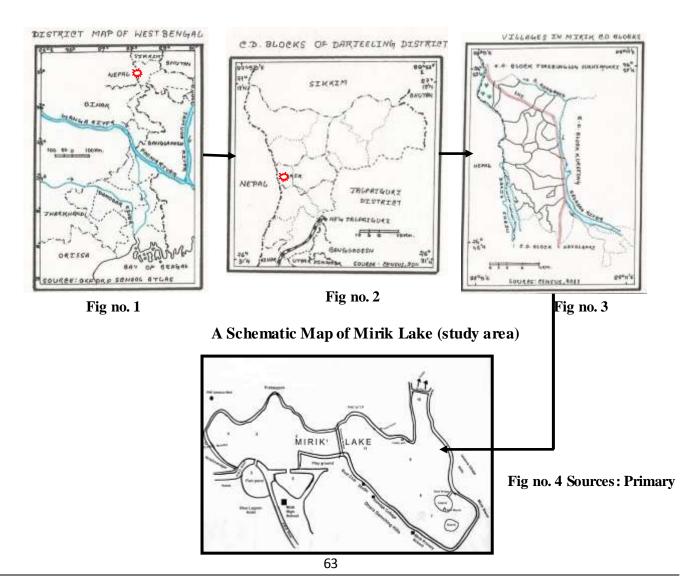
The name Mirik comes from the Lepcha words 'Mir-Yok' meaning "place burnt by fire". Initially the Mirik Bazar area became popular as a commercial centre of the region where people from the surrounding villages and tea gardens came to trade and buy their necessities. "Mirik Tourist Project" in the year 1974 proposed the construction of the Mirik Lake for the facilitation of commercial tourism. This lake has been included under National Lake Conservation Programme formulated by the Ministry of Environment and Forests, Government of India. The total lake area is about 16.19 ha with approximate length of 1.25 km and the peripheral road is about 3.5 km. The arch-type over bridge across the lake is 24.38 m long. Initially maximum depth of the lake was 7.92 m while minimum was 1.83 m. While eastern bank of the lake is flat at ground level, the western bank, having hill slopes, is covered by a rich forest of about ten thousand *Cryptomaria japonica* trees. The lake is fed by both perennial streams and rainwater. Since the lake is situated in a valley encircled by hill ridges with

extensive natural drainage network, it receives wastewater from human settlements through numerous inlets. There is one out-fall point through which the spillover water of the lake is discharged into the river Mechi, situated to the Western side of the lake. The catchment area consists of residential areas, vacant lands and commercial centers comprising of hotels, restaurants and other shops. Mirik Lake and its surroundings as a whole contain multifarious recreational features like boating, jogging, organizing fair and picnics. This is the most beautiful lake of Darjeeling district where visitors come from different parts of the world.

However, the recent condition of the lake is of serious concern from environmental as well as utilitarian perspectives. The current status of the Mirik Lake as per the popular perception enthused my geographical spirit for research prerogatives. Thus, the restoration, protection and management holds relevance on account of the current degradation.

Study Area:

Mirik, a nest in the Lesser Himalaya's is located in the Kurseong sub-division of Darjeeling district of West Bengal, India lies at an altitude of 1767 meters. It is situated at 26°53'N and 88°10'E and covers an area of 135.9 ha. "Sumendu Lake" or "Mirik Lake" is an artificial reservoir of Mirik Town





The mortified condition of the lake is an eye opener for the administration, residents and tourists. In this paper, the issues related to gaps in the knowledge base, delays in restoration, lack of coordination, ineffectiveness of legislation, and the general lack of an integrated approach to management are discussed, and possible solutions to these impediments are explored.

Objectives of the Present Study:

The study is undertaken with the following deliverables:

- To get an overview of the Mirik lake, a part of the Mirik township.
- To determine the problems and benefits of the lake along with its impact analysis.
- To examine the perception of the stakeholders regarding the wanton status of Mirik lake.
- To suggest feasible measures for improvement of the lake in eradicating felt problems and overall
 advancement of this area.

Database:

A database is a collection of information that is organized so that it can be easily accessed, managed and can be updated-

- 1. Primary database: Primary data have been collected through interaction with stakeholders of the Mirik taxi depot, market owners of Krishnanagar area, visitors at premiere tourist destinations and passengers.
- 2. Secondary database: Necessary secondary data have been obtained from Mirik Municipality, Census of India, Demography and Enumeration report (2011), District Statistical Handbook (2004), West Bengal Statistical Abstract (2008) and web interface.

Methods:

- In order to arrive at the desired objectives, field level data regarding the Mirik lake and its influence area were collected through intensive survey by questionnaires (random sampling). The primary data were collected through observation and direct communication with the surveyed respondents focusing on changing morphology, livelihood implications, aspiration and challenges.
- The secondary data on the study area and related aspects were collected from various published and official sources. All the collected data regarding transport, tourism and civic infrastructure were analyzed statistically using MS Word, MS Excel, Adobe Photoshop 7 and manual portrayal.

Sample size - The sample constituted of tourists (120), passengers (10), hotels (13) and surveyed Krishnanagar Market for impact analysis.



Discussion and Result:

Mirik has become a popular tourist destination for its climate, natural beauty and easy accessibility. The centre of all attraction is the Sumendu Lake, surrounded by a garden and pine trees. The present lake area was a marshland with thick growth of *sweet flag (native vegetation)*.

In 1969, the <u>West Bengal</u> tourism department began the process of acquiring 335 acres of land from the neighbouring Thurbo tea estate. In 1974 <u>Siddhartha Shankar Ray</u> the then chief minister of West Bengal developed the hilly township into a familiar tourist destination. The tourist spot was formally inaugurated by the next chief minister of West Bengal, <u>Jyoti Basu</u>, in April 1979. With the flooding of tourists, Krishnanagar developed on the other end of the lake with hotels and restaurants catering to the tourists and visitors. The <u>2011 Census of India</u> recorded a population of 11513 in Mirik <u>Notified Area</u> – 5688 were males and 5825 were females. As per the 2001 Census of India, Males numbered 4619 and females 4522. The decadal growth rate of population (1991–2001) was -1.33.

The following perceptions about the Mirik Lake and its neighbourhood are evident from the study:

The area is a majestically designed location for holiday hoppers which attracts people from abroad and neighboring states or adjoining area. Tourism and transportation play an important role in economy of Mirik with its immediate influence on hotel industry, market dealings and local infrastructure. The tourists pour into Mirik from different states like Gujarat, Maharastra, Punjab, various districts of West Bengal like Kolkata, Darjeeling, Coochbihar, Jalpaiguri etc. and abroad destinations like Israel, UK, Switzerland, Canada, France, U.S.A, Australia etc. It has been observed that visitors (90.08%) prefer to visit this place because of the serene beauty of Mirik Lake, Tea Gardens and the rest for pleasure trips. Places of common interest are Mirik Lake, Tea Garden and Buddhist Temple. The local delicacies to taste are Momo, Thukpa and Orange Juice at Mirik.

The development of Mirik is, however. motivated by Tourism: the tourists face difficulties, serious pollution being the major threat (improper garbage disposal, lack of popular consciousness etc.). pollution survey conducted along the Mirik Main road suggest noise level ranging between

Pollution Status of Mirik Lake Tourists' View

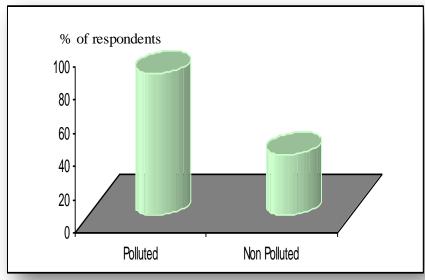


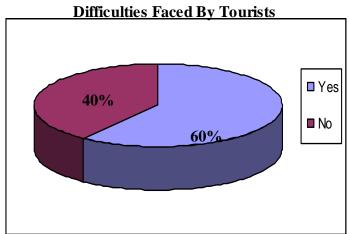
Fig no. 5 Source: Tourist survey, 2014



(68.6-11.5 db and 68.97-82.8db in lean and peak

hour respectively) and smoke pollution accentuated by four wheelers during rush hours. It is evident from the no. of total vehicles run i.e, 175 in peak and 115 in lean periods of the day.

Opinions on Accessibility and Connectivity



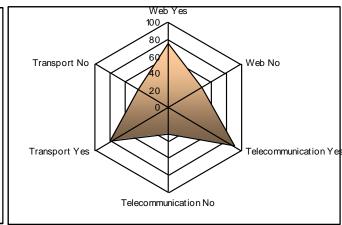


Fig no.6 Source: Tourist survey, 2014

Fig no.7

Status of Transportation To And Fro Mirik

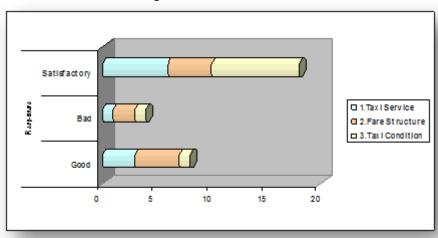


Fig no.8 Source: Passenger survey, 2014

Inspite of major developmental propositions, still access to pure drinking water and means of linkage to connect Mirik with the nearby townships of Siliguri, Kurseong, Shukiha Pokhri and Darjeeling by State transportation is in demand by many. The poor water quality is evident from the pH scale which reveals hotel drinking water is more alkaline with pH level at 8.22 while hotel potable water is alkaline having pH level at 7.38. Both ground and spring water meets daily water requirements along with packaged purified water for drinking purpose.

The **Transport survey** focuses on some problems and prospects of Mirik. The township is well connected with the adjoining famous stations of Himalayan foothills-Darjeeling, Kalimpong,



Kurseong, Sukiapokhri and Nepal etc. by long distance buses, taxis and hired cars. Within Mirik, private cars and scooters are most convenient mode of transport. The upcoming views by the passengers are significant as a meager proportion of the passengers (daily commuters) are dissatisfied with the communication and accessibility. However, mass respondents feel the transport services are crowd and congestion free.

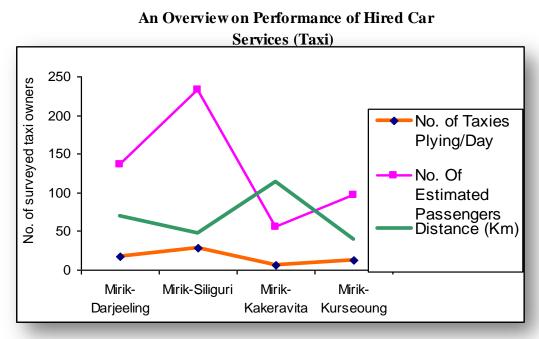


Fig no.9 Source: Taxi depot survey, 2014

The perceptions from the Cab owners at **Mirik Car Depot** suggest Mirik-Darjiling-Siliguri to be the most dominant route in terms of passenger carried and frequency of flow. Being distant in location from Mirik, fare structure and duration of per day travel is higher for Kakeravita(8 hrs.) and Siliguri (10hrs.). The frequency of travel is also highest for Siliguri (3 cars/hour) and least for Kurseong (1 car/hour) with an average/ head fare of Rs.120.



The analysis of **Krishnanagar Market**, the local tourist market being situated in close proximity to the Mirik Lake along the Mirik main road, brings into light the local business pattern and consumer behaviour. Of an aggregate, 88 total shops - food and beverages constitute 62.54%, public utility 39.44%, clinic and medicines 9.29%. There are both leased and personally owned shops which sell the items of daily necessity (60%). The items are obtained from the nearby areas and also consumed by local people, tourist, the dwellers of the neighbouring villages/ tea gardens and Mirik township.

The products are mainly brought through trucks from Nepal, Darjeeling, Siliguri and other areas with bearable transportation cost (average Rs.270/month).

There is a strong positive relationship between maximum income incurred (Rs. 26,000/month) and expenditure (Rs. 15,000/month) vis-a-vis dependent and independent workers. There is a steady

Stretch of Krisnhnanagar Market

Police
Chowki

Fish Pond

Primary Health
Centre

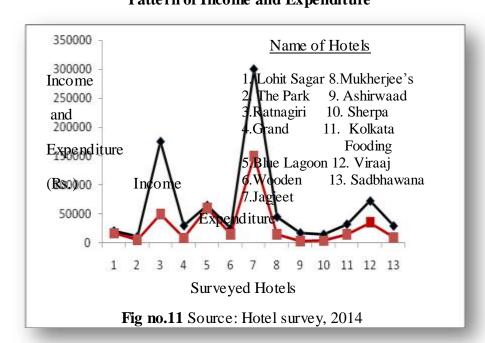
Fig no.10 Source: GPS Survey and Google Earth, profit in the summer months accounting for highest sales-a boon for shopkeepers. The profits are mostly reinvested and spent on education (35%) and least on luxury items (10%). The main problem

of this market is the low sale and limited variety of products because of the less population.

Pattern of Income and Expenditure

The surveyed Hotels and Resorts along Mirik main road give the snap shots of the status of food and lodging provided to the tourists. They throng into private hotels like Ratnagiri, Lohit Sagar, The Park, Jagjeet, Sadbhawana etc. which are equipped enough to provide adequate comfort to the foreign and domestic tourists.

These hotels are mostly multi



storied having both AC and Non AC rooms. The hotels Jagjeet and Blue Lagoon seem to have the



maximum no. of rooms (40) and (28) respectively. There is a disparity in average room rent among the hotels, which increases during the peak season (March to June and September to February), ranging from Rs.700 (hotel Sherpa) to Rs. 2200(hotel Jagjeet) with the high inflow of tourists as the hoteliers operate with profit maximization objective. The hoteliers are more or less satisfied with tourist inflow that they handle with efficient support staff, both outsiders and local people.

The study area consists of an amazing hilly terrain, coated with rich biodiversity and a pleasant climate. Transport and tourism – the two backbones of Mirik are challenged by paucity of required civic services.

Problems Identified

 Deforestation, accelerated soil erosion has increased the vulnerability to natural hazards like landslide and earthquakes along this tourist belt

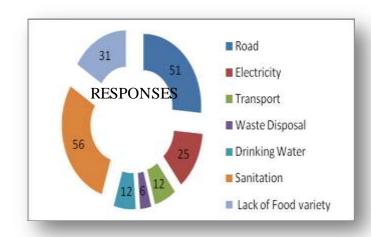


Fig no.12 Source: Tourist and Passenger survey, 2014

- Tourists suffer from common problems like-strolling over the rugged relief, language barriers and
 expensive stays. Environmental degenerations: Vehicular emissions and water pollution are further
 augmented by lacking consciousness among the residents as well as tourists.
- The hoteliers complain about low profit backed by absence of proper infrastructure. Improper
 electrification, sanitation, parking area, cleaning and absence of disaster management system are the
 pressing problems with improper health services.
- Perception survey about the market reveals dissatisfaction regarding the general market conditions like-improper cleaning of garbage and inadequate fire fighting system.
- Finally the passengers were disappointed with the unfavourable facilities at Taxi depot-rest room, toilet, first aid etc.

On the whole it may be opined that this famous spot is under the threat of increasing pollution and improper infrastructure. If any necessary and prompt step is not taken immediately, then it will pose a serious challenge towards the welfare of this area.



Recommendations:

tourists and settlers.

- Proper landuse management by increasing the area under cultivation and tea plantation by utilizing the culturable land, scientifically.
- Supply of purified drinking and potable water also deserves proper attention.
- The hotels, resorts and communication system need further attention to attract tourists. Local heritage sites and the local tea gardens require expansion and promotion.
- The observers found that only one government hospital and four medical shops are located within the surveyed area. So a revamp of medical facilities is in demand for

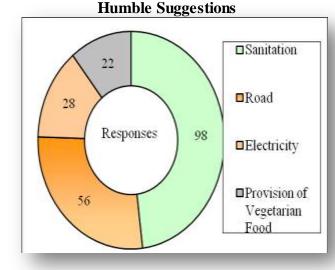


Fig no.13 Source: Tourist and Passenger survey, 2014

• Finally, a study and zonation of earthquake and landslide vulnerable areas requires special attention and governmental initiatives.

As human population expands in the hills, forests are being depleted for the expansion of habitable lands, commercial, plantation agriculture, roadways etc. The growing changes in the wake of urbanization and industrialization leave deep impression on the hill ecosystem; disrupting normal functioning. To materialize all the suggestive measures upgradation and modification of the economic conditions of the local hill people, a transparent, regular administrative vigilance is the need of the hour.

<u>References</u>

Basu, Narayan, Rathindra. (2000): Environment, Calcutta Unniversity Press, Kolkata, pp. Census of India (2001 and 2011): Registrar General and Census Commissioner, New Delhi,

India.

District Statistical Handbook (2004): Bureau of Applied Economics and Statistics, Government of West Bengal



- Dunlap, E, Riley. and Dunlap, Michelson. (2008): Handbook of Environmental Sociology,

 Publication, New Delhi, pp. 33-65, 222-236.
- Singh, Katar. and Shishodia, Anil. (2010): Environmental Economics, Sage Publications,

 New
 Delhi, pp.169-198,305-328
- Singh, Savindra. (2010): Environmental Geography, Prayag Pustak Bhawan, Allahabad, pp. 437-465, 519-556
- West Bengal Statistical Abstract (2008): Bureau of Applied Economics and Statistics, Government of West Bengal