



MISSION AMRIT SAROVAR- JAL DHAROHAR SANRAKSHAN

DR. SHYAMA PRASAD MUKHERJEE LAKE GARDEN

16/07/2022-05/08/2022



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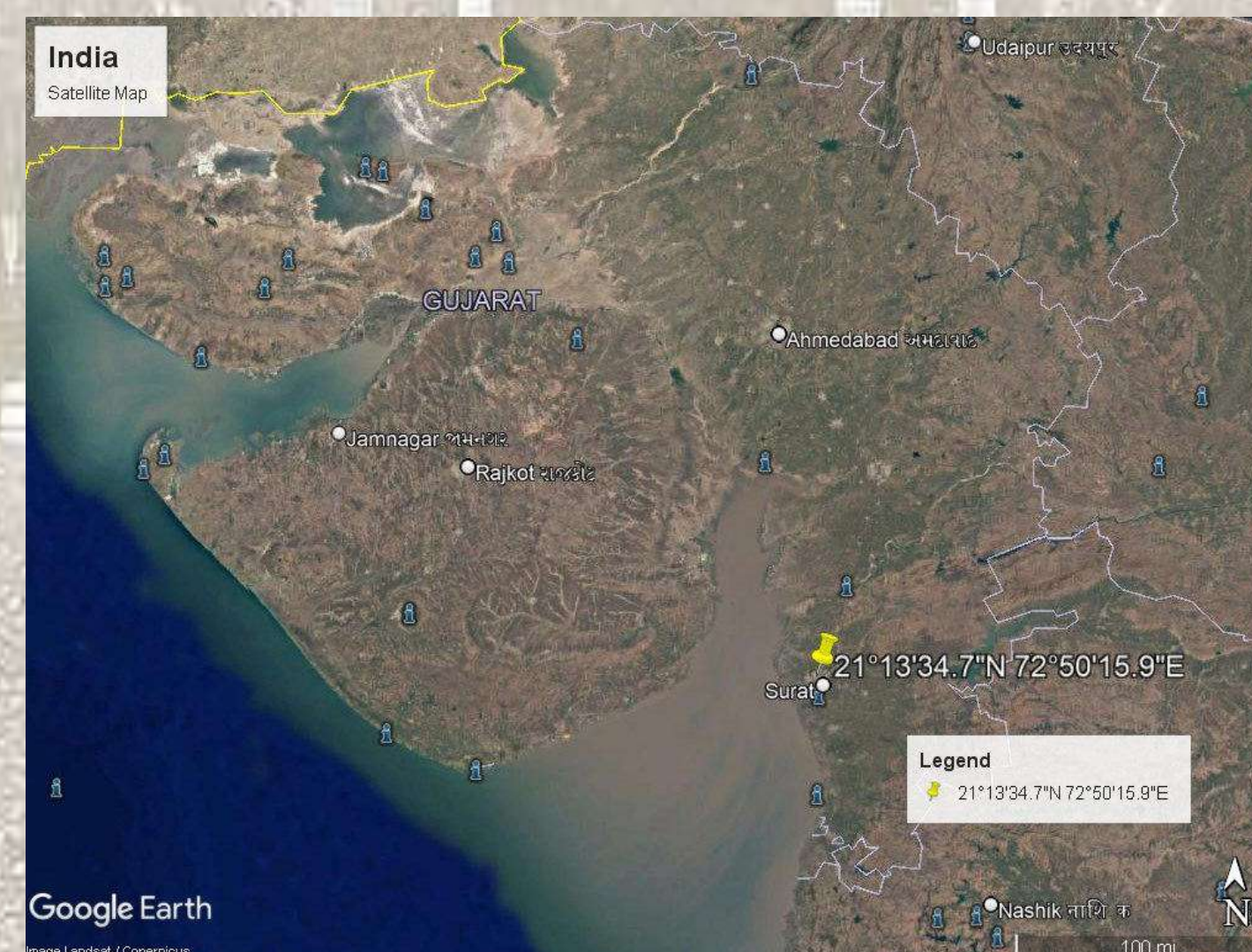
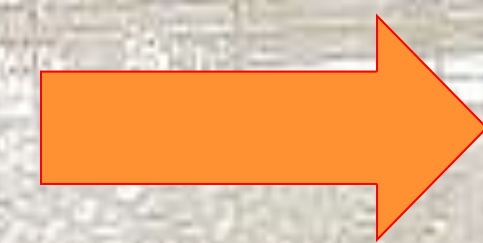
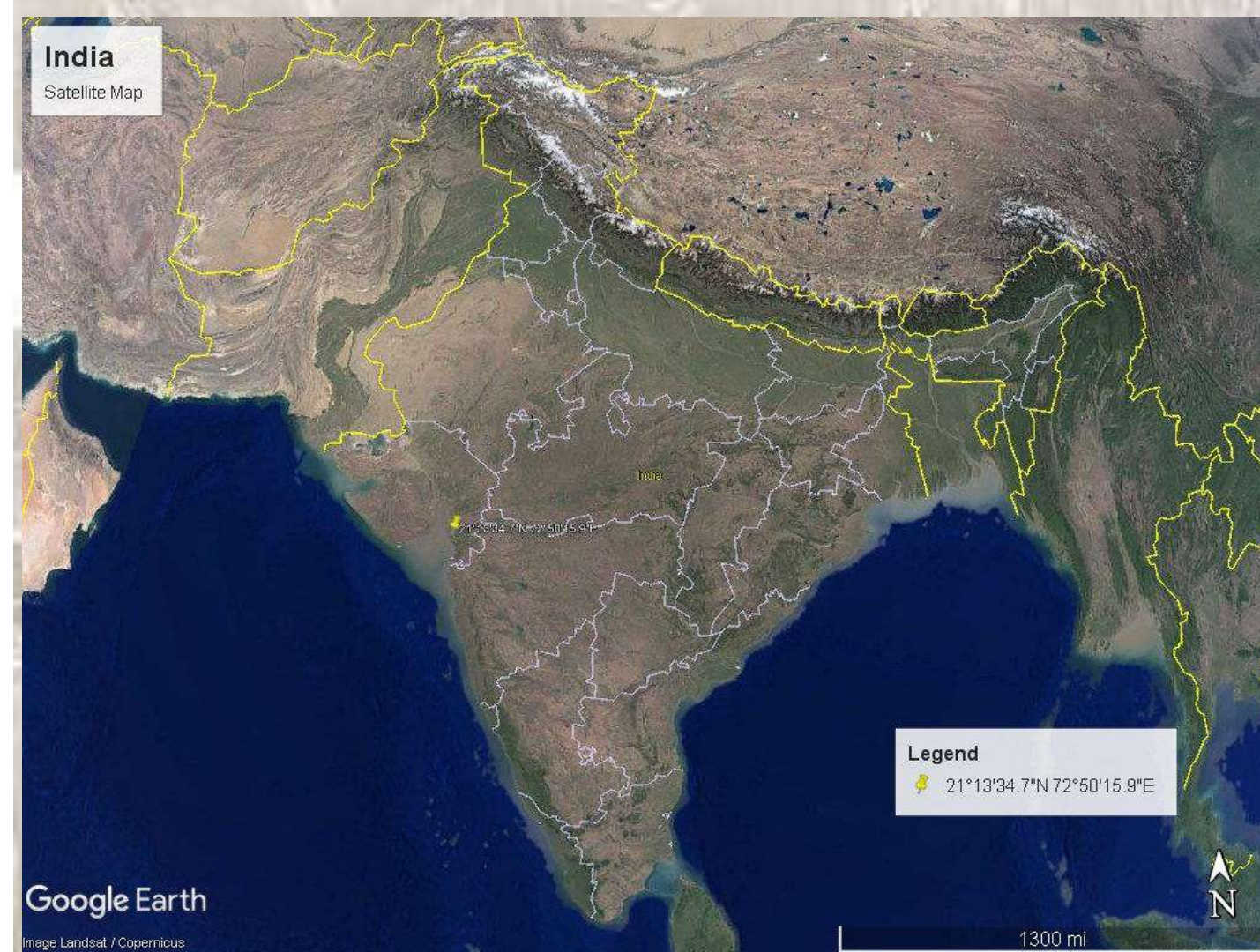
DR. SHYAMA PRASAD MUKHERJEE LAKE GARDEN



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Water Body Basic Detail

16/07/2022-05/08/2022



The lake garden is built by the Surat Municipal Corporation and was launched in April 2008. But the lake garden has been undertaken by the private organization since last 2 months. The organization that has undertaken the lake garden is ARV CONSTRUCTION.

Dr. Shyama Prasad Mukherjee lake garden is located at Gajera circle, Swami Parmanand Marg, Katargam, Surat.

Its geological coordinates are 21° 13'34.7"N 72°50'15.9"E

Total area of the garden is 4.69 ha (46900 m²).

The depth of water body is 3.5m. The water holding capacity of the lake is 7.2ML (million liters). The water that has been store in the lake is mineral water.

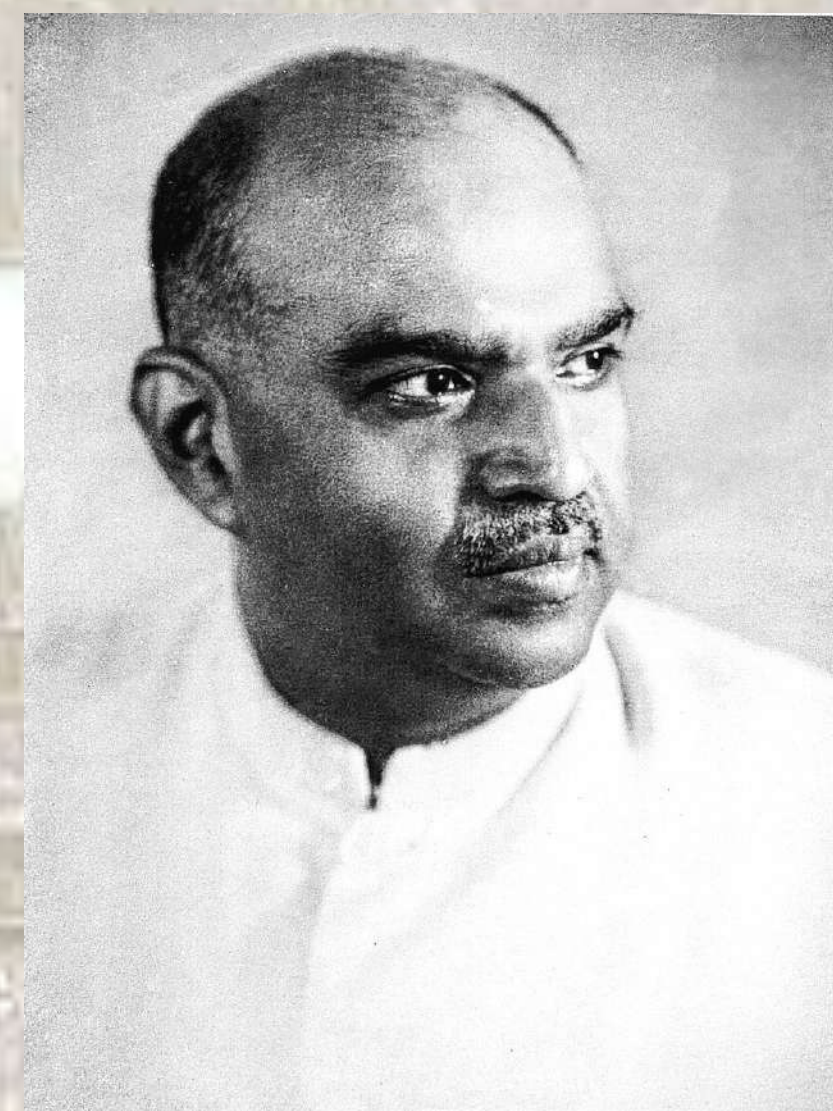


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DR. SHYAMA PRASAD MUKHERJEE LAKE GARDEN



Shyama Prasad Mukherjee was an Indian politician, barrister and academician, who served as the Minister for Industry and Supply in Jawaharlal Nehru's cabinet. After falling out with Nehru, protesting against the Liaquat-Nehru Pact, Mukherjee resigned from Nehru's cabinet.



**Dr. Shyama prasad Mukherjee Lake
Garden**



Layout Plan

Shyama prasad Mukherjee garden is a 3.3 mile (7,500-step) route located near Surat, India. This route has an elevation gain of about 0 ft and is rated as easy. lake

Historical Context and Geographical setting



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SPATIO-TEMPORAL ANALYSIS

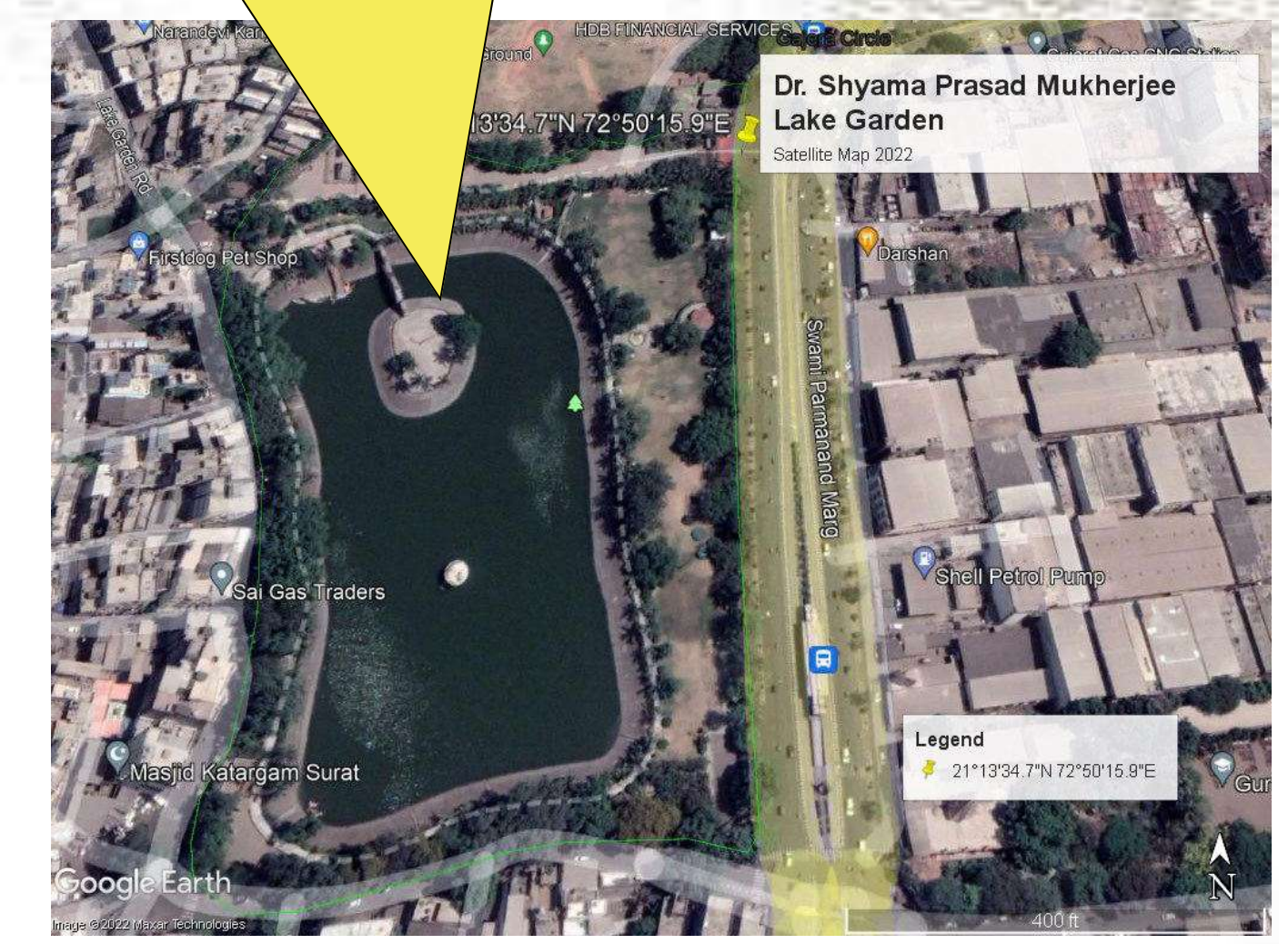
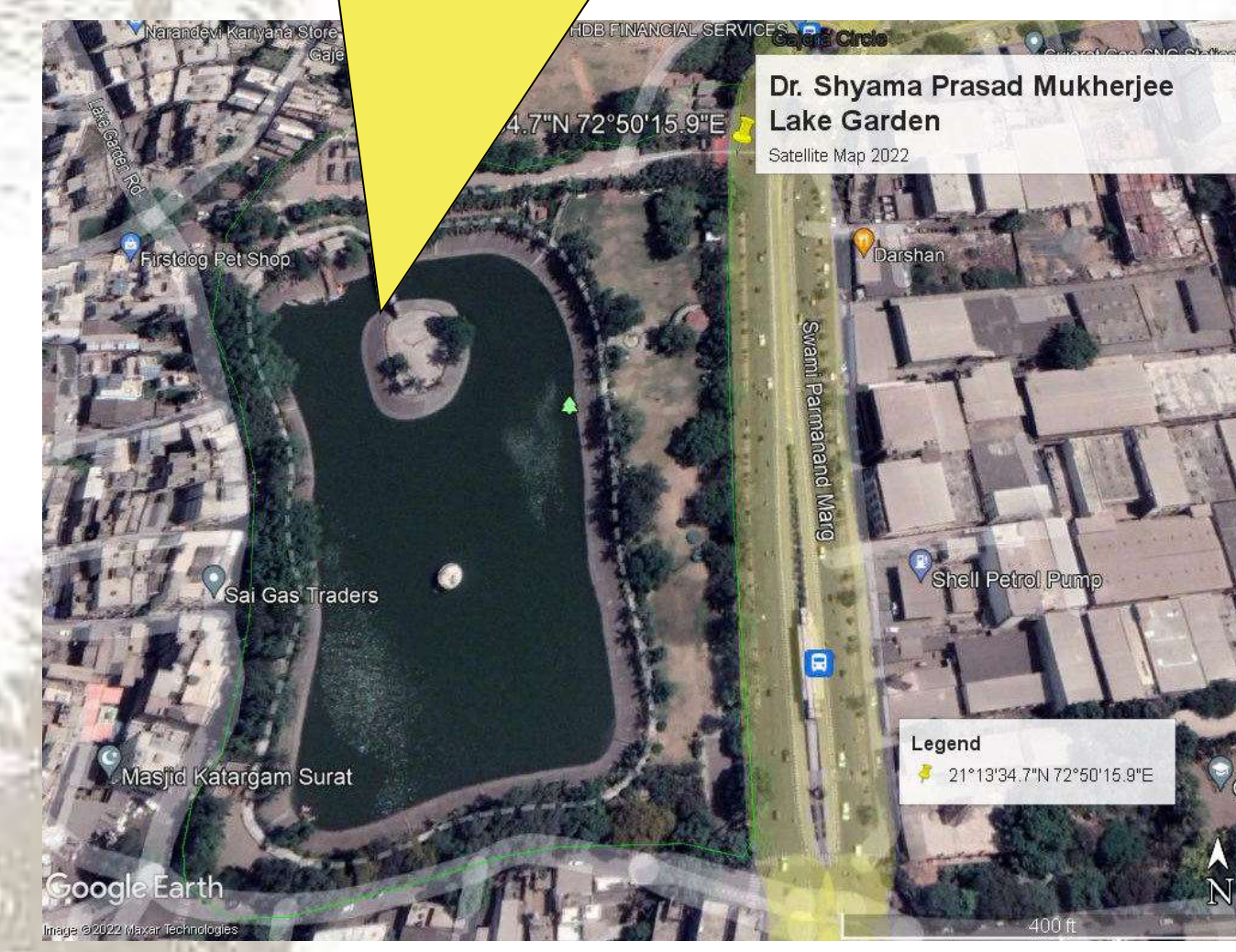
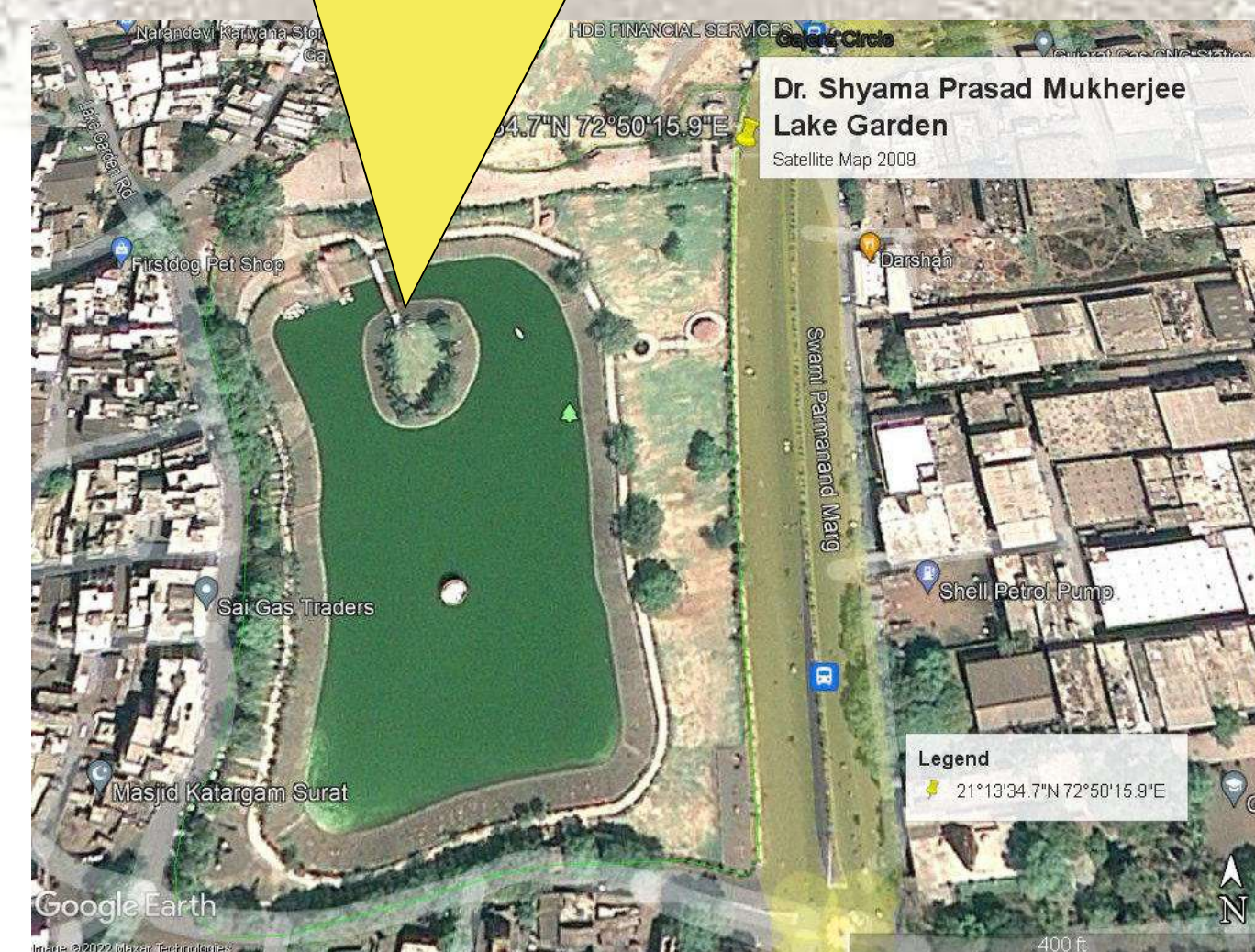
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Since the lake was on the verge of being extinct the local government decided to develop the lake.

After the development, the lake got rejuvenate. The local authority not only develop the lake but also the surrounding of it.

There wasn't any development made around the year 2014.

In the year 2021, the lake had been redeveloped. And since last 2 months the lake is operated and managed by ARV Construction.





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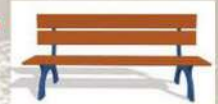
Putting Neglected Area Into Use

16/07/2022-05/08/2022

- There are few land that aren't in use around children area and carnival area so we can provide restroom there.
- The island is huge but there is no sitting area and also there is no proper lighting so we can provide 4 benches and 4 lamp stand as the island is big enough to fit it.
- We can also plant exotic all seasonal flowers around the garden.



- Solar panel shed can at the parking area.
- A statue of dr. Shyama Prasad Mukherjee can be build near the parking area.





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DR. SHYAMA PRASAD MUKHERJEE LAKE GARDEN

Title :- Plan for conservation of catchment area

Time:- 16/07/22 to 5/08/2022



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Introduction

Dr.shyamaprasad Mukharji
Lake Garden Started on 2008
which is situated in katargam,
Surat, Gujarat

- As the area of surrounding the lake is already urbanized so we can't able take suitable measure for conservation of catchment area.
- So we can simply develop a underground water collection system or stromwater drain which will collec.t and deviate the runoff to lake for its recharge.



How to calculate the discharge through catchment

- Delineation of catchment with the help of GIS.
- Rainfall data collection.
- LULC classification for runoff coefficient
- Calculate runoff with the help of empirical equation.



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DR. SHYAMAPRASAD MUKHERJEE LAKE GARDEN



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- Drinking water facility should be available with glasses at multiple places
- Filter water should be available for drinking purpose



Restoration and structural improvements

- ✓ Increase drinking water facility
- ✓ create toilet for public use over their
- ✓ Sitting area for senior citizen



- Number of toilet facility should be provided at multiple places
- Cleanliness should be maintained in toilet and nearby area of toilet



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Dr. Shyama Prasad Mukharjee Lake Garden

Reimaging the Surroundings of the waterbody 16/07/2022 to 05/08/2022

Introduction

Dr. Shyama Prasad Mukharjee Garden Lake was built by Surat Municipal Corporation in 2008 on the name of Dr. Shyama Prasad Mukharjee. It is located in Katargam, Surat. It is built over 58000sq. Mt Area. Facilities provided in garden lake are Walkway, Boating, Children play area, bend stand, Bridge.

Biography of Dr. Shyama Prasad Mukharjee

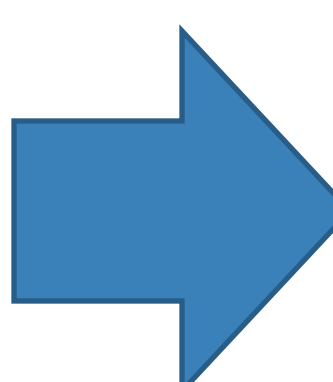
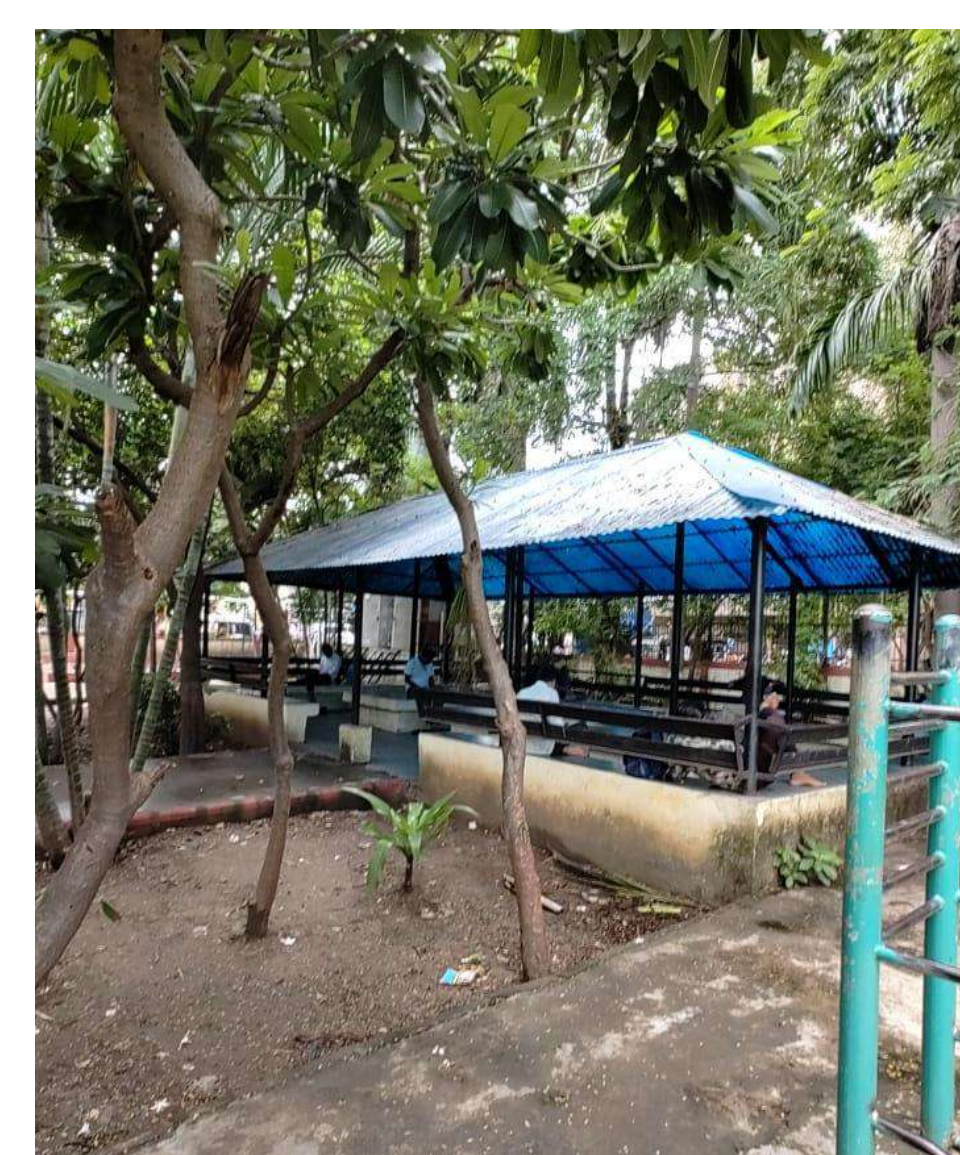
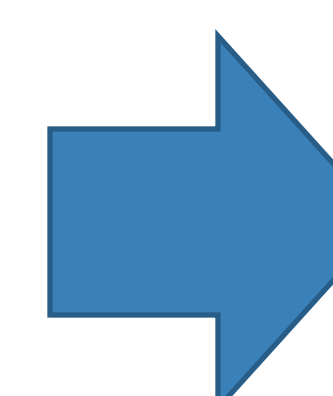
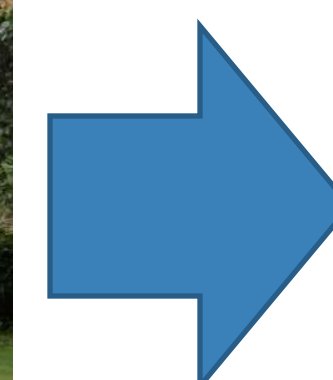
Shyama Prasad Mukherjee (6 July 1901 – 23 June 1953) was an Indian politician, barrister and academician, who served as the Minister for Industry and Supply in Jawaharlal Nehru's cabinet. After falling out with Nehru, protesting against the Liaquat-Nehru Pact, Mukherjee resigned from Nehru's cabinet. With the help of the Rashtriya Swayamsevak Sangh, he founded the Bharatiya Jana Sangh, the predecessor to the Bharatiya Janata Party, in 1951.

Observations

During our internship project, we observed that the garden is already well Developed and maintained but then also there are so many improvement required in the lake garden.

- Fountain is in not working condition.
- Design of fountain is not attractive.
- Parking area is very Congested.
- Sitting Area for Senior Citizen is inappropriate and unhygienic.

Photos



Recommendation

- Construction of Gazebo on the fountain for the Beautification Purpose.
- Redesigning the parking area.
- Renovating the Sitting area for Senior Citizen for beautification purpose.
- Installation of Solar Panels to generate Renewable energy.
- Installation of colorful lights around the lake.
- Placing the inspirational sculptures in open garden place.
- Plantation of herbal plants in the garden.

- Installing water filter system to purify lake water periodically.
- Providing modern garden maintaining equipment such as grass cutter. Pesticide sprayer, etc...
- Placing of garden lake map at different places in garden.
- Installing a news stand and notice board.
- Providing a 'lost and found' box
- Repairing of boating system.
- Installing the Dustbins at equal interval.
- Construction of toilets on different locations of garden.
- Construction of drinking water system at various location.

Conclusion

From our observations we conclude that the garden lake is already well developed but it only requires some modifications and modern facilities and beautifications.



Mission Amrit Sarovar- Jal dharohar Sanrakshan

Dr. Shyamaprasad Mukherjee Lake Garden



Fig-1

We can Organize a Small Carnival Fest for the Enjoyment of Public on Festivals or on Weekend.



Fig-2

We can Put Floating Fountains in the Lake as well as also Lightining can be Done.



Fig-3

We can Use the Entrance Way of the Garden for Putting the Food Stalls.



Fig-4

The bench/Sitting area is as usual used by the People as well as the Open air Gym.



Fig-5

The Gazzibo will be used for small events Gathering.



Fig-6

It Shows the Garden Area as Usual for the Public Use.

Captured the Essence and Character of the Water Body Through High Quality Pictures

16/07/2022 - 05/08/2022



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Dr. Shyama Prasad Mukharjee Lake Garden

Water Body Rejuvenation and Conservation 02/08/2022 to 05/08/2022



Introduction

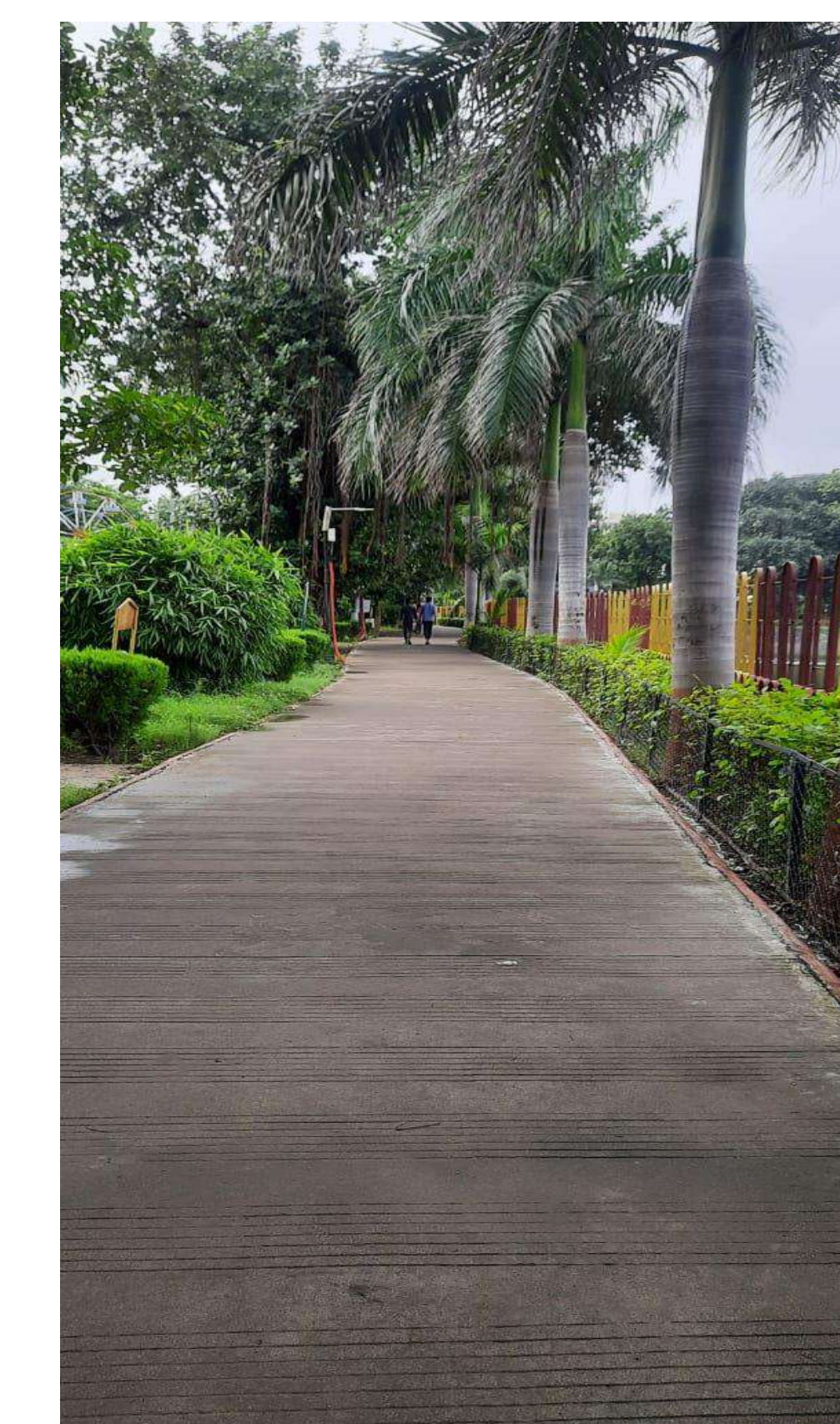
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Calculation

How to calculate the discharge through catchment

- Delineation of catchment with the help of GIS.
- Rainfall data collection
- LULC classification for runoff coefficientt
- Calculate runoff with the help of empirical equation

Capacity of Lake = 7.2 million Liters



Restoration and structural improvements

- Drinking water facility should be available with glasses at multiple places
- Filter water should be available for drinking purpose
- Number of toilet facility should be provided at multiple places
- Cleanliness should be maintained in toilet and nearby area of toilet

Conclusion

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