"BRIDGING THE PAST AND PRESENT: THE LEGACY OF PUNALUR SUSPENSION BRIDGE"

First Degree Programme

In

History under CBCS System

DEPARTMENT OF HISTORY

ALL SAINTS' COLLEGE, THIRUVANANTHAPURAM

2021-2024

"BRIDGING THE PAST AND PRESENT: THE LEGACY OF PUNALUR SUSPENSION BRIDGE"

Dissertation submitted to the University of Kerala in partial fulfillment of the degree of Bachelor of Arts

Name of candidate with candidates' code :

1.Mridula.S. B **14021100010**

2.Raheena.R **14021100049**

3.Saranya.S **14021100052**

4.Stebeena.D **14021100058**

5.Vismaya.Y **14021100065**

6.Smrithi Sankar.M **14021100076**

COURSE CODE: HY1645

ALLSAINTS' COLLEGE, THIRUVANANTHAPURAM

2021-2024

CERTIFICATE

This is certify that the dissertation title **"BRIDGING THE PAST AND PRESENT: THE LEGACY OF PUNALUR SUSPENSION BRIDGE"** is a record of studies carried out by **Mridula.S.B, Raheena.R, Saranya.S, Stebeena.D, Vismaya.Y, Smrithi Sankar.M** at the department of history, All saints' college under my guidance and submitted to the University of Kerala in partial fulfillment of the degree of bachelor of Arts, First degree program in CBCS System .

Dr. LEKHA RANI M.L

Head of the Department of History

All Saints' College

Dr. LEKHA RANI M.L

Supervising Teacher

Department of History

All Saints' College

project valued

project valued

29/4/2024

Dr. Unnikrishnan S

External Examiner

Dr LEKHA RANI M.L.
Associate Professor & Head of the Department
DEPARTMENT OF HISTORY, ALL SAINTS' COLLEGE
THIRUVANANTHAPURAM- 695007

ACKNOWLEDGEMENT

With genuine modesty, we are obediently thankfully to God almighty, praise and glory to him, for all his uncountable bounties and guidance without which this work would never ever be a reality. It is our pleasure to express our profound attitude to all those who made this project possible.

The study entitled the **"BRIDGING THE PAST AND PRESENT: THE LEGACY OF PUNALUR SUSPENSION BRIDGE"** is a reality due to the contributions from many quarters. We sincerely express our deep felt gratitude to all those who have helped us in accomplishing task. The studies conducted under the guidance of Dr. Lekha Rani M.L, Head of the Department of History, All Saints' College. Without her Guidance and encouragement, this project would have remained incomplete. We are very much indebted to our family members for their constant encouragement and support.

Mridula.S.B

Raheena.R

Saranya.S

Stebeena.D

Vismaya.Y

Smrithi Sankar.M

DECLARATION

We hereby declare that the dissertation **"BRIDGING THE PAST AND PRESENT: THE LEGACY OF PUNALUR SUSPENSION BRIDGE" is** a record of research work carried out by us at Department of History, All Saints' College under the guidance of Dr, Lekha Rani M.L and submitted to the University of Kerala in partial fulfillment of requirement for the award of Bachelor of Arts degree program in History .

Name and signature of candidates

1.Mridula S.B

2. Raheena..R

3.Saranya S

4.Stebeena .D

5.Vismaya.Y

6. Smrithi Sankar .M

Thiruvananthapuram

Department of History
All saints' College

PREFACE

Bridges serve as more than just physical structures that connect two points; they are also valuable sources of history that offer insights into the society in which they were built. The design, materials, and construction techniques used in bridges reflect the technological advancements of their time, providing valuable information about the level of technological expertise and innovation present in a society. Additionally, bridges often serve as vital links for trade and commerce, facilitating the transportation of goods and people. Their presence in specific locations can indicate areas of economic activity and development, as well as trade routes and commercial hubs. Furthermore, bridges connect communities, fostering interaction and integration among people from diverse backgrounds. The location and design of bridges can reveal patterns of social interaction, cultural exchange, and community development.

The construction of bridges can also be influenced by political decisions and cultural values. For example, bridges built during certain political regimes or cultural eras might reflect the ideologies, aspirations, and priorities of that time. Moreover, bridges represent architectural and engineering achievements that showcase the skills, creativity, and ingenuity of their designers and builders. Studying these aspects can offer insights into the artistic, scientific, and engineering practices prevalent in a society. The location and design of bridges are often influenced by environmental and geographic factors such as rivers, mountains, and terrain. Understanding these factors can provide insights into how societies interact with and adapt to their natural environment. Over time, bridges may undergo modifications, repairs, or even replacement, reflecting changing societal needs, values, and priorities. This evolution can help trace the societal changes and developments over different periods.

CONTENTS

1.INTRODUCTION

*SOURCE ANALYSIS

*REVIEW OF LITERATURE

*METHODOLOGY

*OBJECTIVESES

*HYPOTHESIS

*CHAPTER DESIGN

*RELEVANCE OF THE TOPIC

2. CHAPTER. 1 –HISTORICAL SIGNIFICANCE OF PUNALUR

3. CHAPTER.2- PUNALUR SUSPENSION BRIDGE: ENGINEERING MARVEL AND HISTORICAL LANDMARK

4. CONCLUSION

5. BIBLIOGRAPHY

6.. APPENDIXES

INTRODUCTION

History unfolds through the complex interplay between humans and their environment, as well as among individuals themselves. At its core, history reflects fundamental human needs like food, clothing, shelter, and the establishment of social and political structures. However, when these needs expand to encompass economic and commercial ambitions, they often transform inquiries for dominance. In the colonial context, this socio-economic and political dynamic becomes even more intricate, especially when imposed by foreign powers on native societies. The architectural landmarks of Punalur gain significance within this framework. While history serves as a record of past events, architectural structures stand as tangible remnants of the past, deeply intertwined with political decisions and primarily rooted in economic interests.

Bridges, spanning across rivers, valleys, and roads, are more than mere structures; they embody the story of human civilization. Throughout history, they have served as conduits of trade, commerce and cultural exchange. From the stone arch bridges of ancient civilizations to the modern marvels of suspension bridges, each bridge reflects the technological prowess and societal priorities of its time. In times of war, bridges have been strategic assets, controlling movement and communication. Battles fought over key bridges have left indelible marks on history. Conversely, bridges symbolize unity and connection, often featuring prominently in literature, art, and folklore as emblems of hope and transformation. The evolution of bridge construction mirrors the progression of engineering and architectural techniques.

The Punalur Suspension Bridge, in particular, stands as a remarkable example of how bridges can encapsulate the history and culture of a region. Built over a century ago, its design and construction reflect the engineering prowess and technological advancements of its time.

terrains between Punalur and Chenkotta. While these infrastructural developments might be seen as modernization efforts, they ultimately served the British colonial agenda by facilitating economic exploitation, particularly of the region's forest resources. Even if the Travancore King was not fully aware of the imperialist motives, benefiting from the project made him complicit in the exploitation.

The architectural landmarks of Punalur, namely the suspension bridge and railway, not only symbolize historical milestones but also reflect the colonial ambitions and economic interests of the British in this region. While these constructions are often romanticized for their engineering marvels, it's essential to understand the historical context that led to their development. As we showcase these monuments, it's crucial to strike a balance between appreciating their aesthetic and recognizing the complex historical currents that shaped them.

The Punalur Suspension Bridge, located in Punalur, India is a remarkable historical landmark constructed in 19th century by the Travancore government spanning 400ft across the Kallada river, this suspension bridge was ingeniously designed to serve a unique purpose to prevent wild animals from entering the town from the dense forest area of old *Kattu Pathanapuram*. The innovative engineering of the time is evident in the construction of this bridge, showcasing the efforts made to protect the town's inhabitants from potential dangers posed by wildlife.

Today, the Punalur Suspension Bridge stands as a testament to the past, attracting visitors who are drawn to its historical significance and architectural beauty. The bridge offers stunning views of the surrounding landscape allowing visitors to appreciate both its functional

As cities expanded, bridges became vital arteries of urbanization, linking neighborhoods and fostering growth. Iconic bridges, like the Brooklyn Bridge, stand as testaments to human ingenuity and urban identity. Yet, bridges are not immune to disaster. Collapses, whether due to structural failure or natural calamity, remind us of the fragility of human endeavor. However, the resilience shown in rebuilding and reinforcing bridges reflects our ability to overcome adversity. Moreover, bridges are architectural wonders, blending functionality with aesthetics. Their design reflects cultural preferences and architectural trends, shaping skylines and cityscapes.

In essence, the history of bridges is a tapestry woven with threads of innovation, conflict, resilience, and beauty. Through them, we gain insights into the ebb and flow of civilizations, connecting past achievements with present aspirations. Bridges stand as enduring symbols of human progress and the indomitable spirit of ingenuity.

In 1872, the British government, recognizing the need to harness the region's resources, proposed the construction of a suspension bridge across the Kallada river. Despite initial resistance from the Travancore Diwan, T Madhava Rao, a Scottish engineer named Albert Henry eventually persuaded the Travancore King to approve the project. The completion of the bridge in 2212 days involved 250 workers and marked the beginning of increased exploitation of Travancore's forest resources.

Following the bridge's completion, the British furthered their colonial agenda by introducing the Kollam-Tirunelveli railway line. This railway line, inaugurated in 1904, connected Travancore with the Madras Presidency, covering a distance of 108 miles and crossing challenging

This book was edited by R. 2016.The edited volumes include case studies of engineering projects in southern India, including Krishnan in bridges and other infrastructure; it may contain information about the cultural significance of Punalur Suspension Bridge.

METHODOLOGY

To study and research using academic sources, historical records and site visits gather information about the bridge and conduct the overview of local residents and historians and experts to gain insight and socio economic impact of the bridge.

OBJECTIVES:

- Examine the engineering and architectural aspects of the Punalur Suspension Bridge.
- Delve into the historical background and cultural importance of the bridge.
- Assess the bridge's influence on the local community.

HYPOTHESIS

- The Punalur Suspension Bridge's unique design and materials contributed to its ability to withstand heavy loads and endure harsh weather conditions.
- The proximity to trade and power centers made Punalur a focal point for colonial ambitions.

CHAPTER DESIGN

The project report is organized into two chapters besides the introduction and conclusion. The first chapter is entitled "Historical significance of Punalur", it explains the salient features of Punalur.

purposes and aesthetic appeal. As a symbol of the region's history and ingenuity the Punalur Suspension Bridge continues to captivate visitors and serve as a reminder of the challenges faced by the early settlers in safeguarding their communities.

SOURCE ANALYSIS

There are a lot of sources in the form of primary and secondary sources. Personal interview conducted with various persons such as the guard of Punalur Suspension Bridge and the other peoples. The secondary sources include various books on the topic such as various books on the topic such as *studies of Kerala history etc.*

REVIEW OF LITERATURE

1. Structural Analysis and Design of Suspension Bridges

This book was written by M.N Datta in 2019 .This book provides a detailed analysis of suspension bridge design principles and structural mechanism. It may contain insights into the design and engineering aspects specific to the Punalur Suspension Bridge

2. Historical Development of Bridges in India.

This book was written by AK Saini *et.al* in 2018.This book provides an overview of the historical development of bridges in India including the Punalur suspension bridge. It discusses the engineering challenges faced during its construction and its significance in the region's transportation network.

3. Cultural Heritage and Engineering: Case Studies from Southern India

attractions that harken back to these periods. Its evolution into a significant commercial and industrial hub that bridged Kollam with Tamil Nadu remains a mystery to many. One theory suggests that the name "Punalur" originates from the Tamil words 'Punal' and 'Oor', hinting at its close ties with Tamil Nadu. Another argument suggests that the name reflects its status as a bustling settlement visible when journeying from Tamil Nadu to Kollam. Another argument suggests that the name reflects its status as a bustling settlement visible when journeying from Tamil Nadu to Kollam. The word *punar* in Tamil means again.[2]

Evidence of prehistoric settlements, particularly around Thenmala, further highlights its historical importance. The British Raj's interest in Punalur was not solely based on its natural resources; its strategic position between the bustling port city of Kollam and the British stronghold of Madras played a crucial role.

DEMOGRAPHICS

As of 2011 India census Punalur had a population of 46702 males constitute 49%of the population and female 51% Punalur has an average literacy rate of 84 % higher than the national average of 59.5% male literacy is 85%and female literacy is 82% in Punalur ,10%of the population is under 6 years of age. [3]

HISTORY OF PUNALUR

Punalur has a rich and diverse history, culture, and natural beauty, which makes it a popular unique place in Kerala.

CHAPTER-1

HISTORICAL SIGNIFICANCE OF PUNALUR

GEOGRAPHICAL POSITION

Punalur is a municipality in the Kollam district of Kerala, India. It is the headquarters of the Punalur Taluk and Punalur revenue division. It is situated in the eastern part of the Kollam District of Kerala, on the banks of the Kallada River and foothills of the Western ghats. It is about 45 kilometers North - East of Kollam and 68 kilometers north of Thiruvananthapuram. Punalur is one of the oldest municipal town in Kerala and home to suspension bridge, plywood and paper industry. Punalur had one of the first industries in Kerala and was a pioneer in the industries revolution of the state. Punalur also served as a pivot point in the rise of the independent movement. Punalur is located in quite uphill and sloped areas of Kollam at the banks of river Kallada. Its average altitude or elevation is around 184 ft and it is reorganized as one of the lush areas of Kerala. Located in Western ghats, it is surrounded by Vilakudy, Kottavattam, Mantra and Edamon region.[1]

ETYMOLOGY

Punalur's geographical location held particular allure for British colonial officials due to its abundant forest resources. Its name, possibly derived from the Tamil term 'Punar-Uru' meaning 'inhabited area after the forest regions of Aryankavu,' suggests its historical ties with Tamil Nadu and its status as a mountainous crossroad with cultural and economic links to the Tamil region. The city of Punalur stands as a testament to its royal and British heritage, boasting numerous

The second chapter entitled "Punalur Suspension Bridge: Engineering marvel and Historical landmark", explains about the constructional features of Punalur Suspension Bridge and its historical significance.

RELEVANCE OF THE TOPIC

The study entitled PUNALUR SUSPENSION BRIDGE is significant due to many reasons. It is one of the oldest bridges in India built in the late 19th century. Its historical significance as engineering marvel and cultural importance make it a noteworthy topic for discussion on architecture, infrastructure and regional development.

Prehistoric Culture in Punalur

Punalur is one of the important excavated sites in the Kollam district. The cultural assemblage of the burial site at Punalur belongs without any doubt to the Megalithic order of south India. The common type of Megalithic remains encountered in Punalur is urn burials, and cist burials, and is followed by menhirs and stone circles

Punalur and Travancore kingdom

Punalur occupied a predominant position in commercial and naval transactions of the East as a repository of all sorts of conceivable commercial goods including rice, banana, cotton, pepper, ginger, cardamom, pineapple, fruits, pulses, gold, herbs, horns, ivory, iron, jewels, betel leaves, pearls, poison, perfumes, peacock, corals, butter and jasmine flowers besides the spices. Punalur was a famous center during the period of Travancore kingdom. It became a famous township when it became the capital of Pathanapuram Taluk.

Punalur during Colonial period

Punalur Suspension bridge was constructed by the Britishers. Punalur paper mill was constructed by the British due to the availability of raw products and the water from Kallada river. Later the township elevated to one of the largest townships in Kerala. Punalur market was constructed by His Highness Sir Sreemoolam Thirunal, Maharajah of Travancore due to the rich agricultural background. Main agricultural products of this township include rubber, black pepper and other spices. The chief commodities of export here are the hill products, pineapple, pepper products, plywood and timber. The Punalur paper mill Ltd., a paper industry established in 1888 by the British national was under the control and management of Mr L.N Dalmia till 1984. This

unnoticed by the historians, archaeologists and scholars till recently. Punalur holds historical significance as one of the oldest settlements in the southern state of Kerala, India. Its name translates to "the city of ponds," reflecting its abundant water bodies and lush green landscapes. Over the centuries, Punalur has been a hub for trade and commerce, especially in timber and agricultural produce. The town is also renowned for its British-built suspension bridge, which was once the longest in India and served as a crucial link for transportation. Today, Punalur continues to thrive as a blend of tradition and modernity, attracting visitors with its natural beauty and cultural heritage. Some of the tourist spots near Punalur are Thenmala Ecotourism (21km) and Palaruvi Waterfalls (15km). Punalur is the western edge of Agasthyamalai Biosphere Reserve. There is a municipal stadium which is only an open ground. Pilgrims from Tamil Nadu go to Ayyappa temple at Pampa halt at Punalur, making it a busy place during festival season[5]


Hanging Bridge 1932

SUSPENSION BRIDGE

Suspended bridges, characterized by their two central support towers, main cables, secondary cables, main deck, and supporting girders, rely on tension cables to support the deck where traffic flows. This design allows for exceptionally large spans without the need for intermediate supports, making them ideal for crossing vast rivers where conventional bridges would be impractical. However, this structural advantage comes with a significant challenge: aerodynamic stability. The slender profile of the main slab, combined with the clear span and the forces exerted by wind loads, can lead to aerodynamic instability. Essentially, the bridge's susceptibility to wind-induced oscillations poses a risk to its structural integrity and the safety of those using it.

To address this issue, engineers employ various strategies. They may incorporate aerodynamic shapes into the design of the bridge components, such as the towers and deck, to minimize wind resistance and turbulence. Wind tunnel testing is crucial for simulating different wind conditions and identifying potential areas of vulnerability, allowing engineers to refine the design accordingly. In addition to aerodynamic design features, engineers may install damping systems or tuned mass dampers to mitigate wind-induced vibrations. These systems absorb or dissipate energy from the bridge's movements, enhancing stability and ensuring the safety of the structure and its users.

Overall, while suspended bridges offer unparalleled spans and versatility in crossing large bodies of water, careful consideration of aerodynamic stability is essential to their design and construction, safeguarding against the forces of nature and ensuring long-term reliability.

CHAPTER 2

Punalur Suspension Bridge: Engineering Marvel and Historical Landmark

There are still mysteries around the materials used for the bridge construction as well as how the structure is suspended over the waters. There are four wells each near the main for the pillars of the bridge. A chain from this pillars each go deep inside the respective wells and this are said to be mystery that still holds the structure in tight. The wells are about 100 ft deep . So many studies have been done regarding this. And still the answer is not complete. The binding materials used for the stones are local jaggery which also adds to its mystery history. The bridge's unique historical and architectural significance has turned it into a popular tourist attraction. Visitors flock to the areas not only to experience the thrill of crossing a suspension bridge but also soak in the serene beauty of Kallada river and the surrounding landscape. The bridge offers a rare opportunity to witness the confluence of engineering marvel and natural splendor.

ARCHEOLOGICAL FEATURES

The bridge was made up in British archeological style that was the main feature of the bridge. The construction of the suspension bridge had begun in 1871 and was completed in 1877-78. The work was supervised by Henry, a Scottish Engineer. About 250 labours worked for 2212 days to complete the bridge. Its base is made of wooden planks placed over the iron bars and its sides are made of metals and the bridge is hanging on huge iron chains, each of them has 53 rings and its one end is connected to four huge discs attached to four wells.[1]

hanging bridge starts shaking when someone walks on it can scare away the wild animals. unlike other hanging bridges, the construction of Punalur hanging bridge used no cement and was majorly imported from England and only its pillars and wood works were done in Kerala. At the two ends are the suspension pillars to support the deck and the bridge seen hanging two massive twin steel bar suspension chains that are affixed to 4 wells built on both side of the bridge. The first reason was that the heavy flow of the Kallda river cannot support the ordinary pillared bridges. Another reason was to prevent the wild animals from transpiring on the human settlement of Punalur which was once enveloped with dense think forest on one side. As the hanging bridge starts shaking when someone walks on it, can scare away the wild animals. After the construction of this bridge, the people were unwilling to walk on the bridge as they doubt about its strength. So, to prove this, six elephants were made to walk through the hanging bridge, at the same time the engineer Albert Hentry and his family passed through the river under the bridge in a country boat. [3]

The impact of the Punalur Suspension Bridge

The construction and existence of the Punalur Suspension Bridge have had profound effects on the Travancore society in various ways:

1. **Economic Growth: **

   The bridge facilitated easier transportation of goods and people across the region. This enhanced connectivity boosted trade, commerce, and economic activities, contributing to the overall prosperity of Travancore.

METHOD OF CONSTRUCTION

The bridge is connected to four wells. The Iron rods of the bridge are connected to the clips, situated in wells. Each well is about 100 feet deep and one since knows the engineering behind the construction of this bridge. It still remains a mystery. This ancient hanging bridge of Kerala is built of linked bar chains which are bolted with huge nuts and steel rod hangers which join the deck. The chain runs through the top part pillars and the deck is laid through the pillars and supported at both ends of the bridge. The bridge is set to be a non-cement construction. The two ends of the twin steel chains which support the bridge are anchored into the wells. The chain made to pass through the pillar tops, basement on bridge entrances and finally fixed deep inside the wells. It would be possible that the wells are interconnected for weight distribution but this is not surveyed. The two ends of twin steel bar chains which support the bridge are anchored into the wells. The chains are made to pass through the pillar tops, basements on the bridge entrances and finally fixed deep inside the wells.[1]

REASON FOR THE CONSTRUCTION

The main concept behind the construction of the bridges was the area on the other side of the Kallada river was dense forests. A bridge was necessary, but it was to be built to prevent wild animals from getting in to the populated side, a bridge which shakes when someone gets on it was built, the shaking scared of the animals and they wouldn't cross the bridge. The choice of a hanging bridge over an ordinary one was that the heavy flow to Kallada river cannot support ordinary pillared bridge. Another reason was to prevent wild animals from trespassing on the human settlement of Punalur which was once enveloped with dense thick forest on one side. As the

Endnotes

[1] Binu Raj B.K, *International journal of Innovative Research in Engineering and Management* ,1st January 2019

[2] *Ibid*., p2

[3] *Census of India 2001: Data from the 2001 census ,including cities ,villages and towns* .

[4] Interview with Kamala Amma , cleaner of Punalur Suspension bridge on 10-2-2024

[5] Athira Haridas , *Engineering marvel from past* ,The new Indian express ,published on 2019

2. **Social Integration: **

The bridge played a pivotal role in connecting different communities and regions within Travancore. It promoted cultural exchange and interaction among people from diverse backgrounds, fostering a sense of unity and social cohesion.

3. **Infrastructure Development: **

The construction of the bridge spurred further infrastructural development in the surrounding areas. Roads, transportation networks, and other facilities were improved to support and complement the bridge, leading to overall development of the region.

4. **Tourism and Heritage: **

The Punalur Suspension Bridge has become a significant tourist attraction, drawing visitors interested in its engineering marvel and historical significance. This has not only boosted tourism but also raised awareness about the rich heritage and culture of Travancore.

5. **Educational and Technological Advancement: **

The bridge stands as a testament to the engineering prowess of its time. Its presence has inspired and continues to inspire future generations in Travancore to pursue education and careers in engineering and technology.

In summary, the Punalur Suspension Bridge has left an indelible mark on the Travancore society, shaping its economic landscape, fostering social cohesion, promoting development, enhancing cultural heritage, and inspiring educational pursuits.

SUGGESTIONS

1. Regular Maintenance: Implement a regular maintenance schedule to inspect and repair any wear and tear, ensuring the structural integrity of the bridge is maintained. This includes checking the cables, deck, and support structures for any signs of damage or deterioration.

2. Conservation Planning: Develop a comprehensive conservation plan that outlines the preservation goals, strategies, and actions needed to protect the bridge. This plan should consider the historical and cultural value of the bridge while addressing its structural needs.

3. Public Awareness: Raise public awareness about the importance of preserving the Punalur Suspension Bridge through educational programs, signage, and public campaigns. Engaging the community in the preservation efforts can foster a sense of ownership and pride in the bridge.

4. Environmentally Friendly Practices: Adopt environmentally friendly practices during maintenance and preservation activities to minimize the impact on the surrounding ecosystem. This includes using sustainable materials and methods wherever possible.

5. Documentation and Research: Document the history, design, and construction techniques of the bridge through thorough research and documentation. This can help in understanding the bridge's significance and in making informed decisions about its preservation.

6. Funding and Support: Secure adequate funding and support for the preservation efforts through government grants, private donations, and public-private partnerships. This financial support will be essential for implementing preservation projects and maintenance activities.

FINDINGS

Transportation Halt:

It has been 45 years since transportation across the Punalur Suspension Bridge was halted. This interruption in service had significant implications for the local community, affecting trade, connectivity, and daily life.

Reconstruction:

The bridge underwent reconstruction between August and September 2013. This reconstruction effort aimed to restore the bridge to its former glory, ensuring its structural integrity and safety for future generations.

Dimensions:

The Punalur Suspension Bridge spans a length of 400 feet (120 meters), making it a substantial structure that commands attention and admiration. Its impressive dimensions are a testament to the engineering expertise and meticulous planning that went into its construction.

In conclusion, the Punalur Suspension Bridge stands as a symbol of resilience, innovation, and cultural heritage. Its history, coupled with its architectural significance, makes it a landmark that holds a special place in the hearts of the people and serves as an inspiration for future generations.

Preserving the Punalur Suspension Bridge is crucial to maintaining its historical, cultural, and architectural significance. Here are some suggestions for the preservation of the bridge:

CONCLUSION

The Punalur Suspension Bridge is more than just a physical link between two points; it serves as a connection to history, culture, and human ingenuity. Its enduring presence stands as a remarkable testament to what can be achieved through collaboration, innovation, and a deep understanding of engineering principles. As we admire its intricate design and delve into its historical context, we are reminded that bridges, both physical and metaphorical, possess the power to unite us across time and space. The Punalur Suspension Bridge is not merely a piece of architecture; it is a testament to human achievement.

Suspension bridges like the Punalur Suspension Bridge offer a unique architectural spectacle, characterized by their distinctive cable arrangements and pylon shapes. Despite their aesthetic appeal and engineering marvel, suspension bridges are not as prevalent as other bridge types. Apart from the Punalur Suspension Bridge, notable examples include the Pamban Bridge and a few others. The limited number of suspension bridges might be attributed to a lack of readily available standard textbooks and bridge codes that comprehensively explain the design procedures and techniques involved in constructing such bridges.

BIBLIOGRAPHY

PRIMARY SOURCE

UNPUBLISHED PRIMARY SOURCE

1) Field study conducted on 10-02-2024

2) Personal interviews

a) Interview with Shaji, Guard of Punalur Suspension bridge on 10-02-2024

b) Interview with Mahesh, Native of Punalur on 10-02-2024

c) Interview with Sudhi, Shop owner near Punalur Suspension bridge on 10-02-2024

d) Interview with Kamala amma, Cleaner of Punalur Suspension bridge on 10-02-2024

e) Interview with Suresh, Auto driver near Punalur Suspension bridge on 10 -02-2024

f) Interview with Vikraman, Security of Punalur Suspension bridge on 10-02-2024

SECONDARY SOURCES

1. Haridas Aathira, *Engineering Marvel from past,* The New Indian express, 2019
2. Jayaram,*Engineering feats,* Indian civil engineering journal, 2020
3. Kattakada Divakaran, *Keraleeya Gramangalilude,* by Sahitya pravarthaka cooperative society, 1968
4. Kunjiraman Nair. K, *Punalur Suspension Bridge: Historical perspective,*2013
5. Menon. M, *Historical prospective of Punalur Suspension bridge,* journal of Indian history 1965
6. Safaan. A. S, *Theoretical analysis of Suspension bridge, 1966*

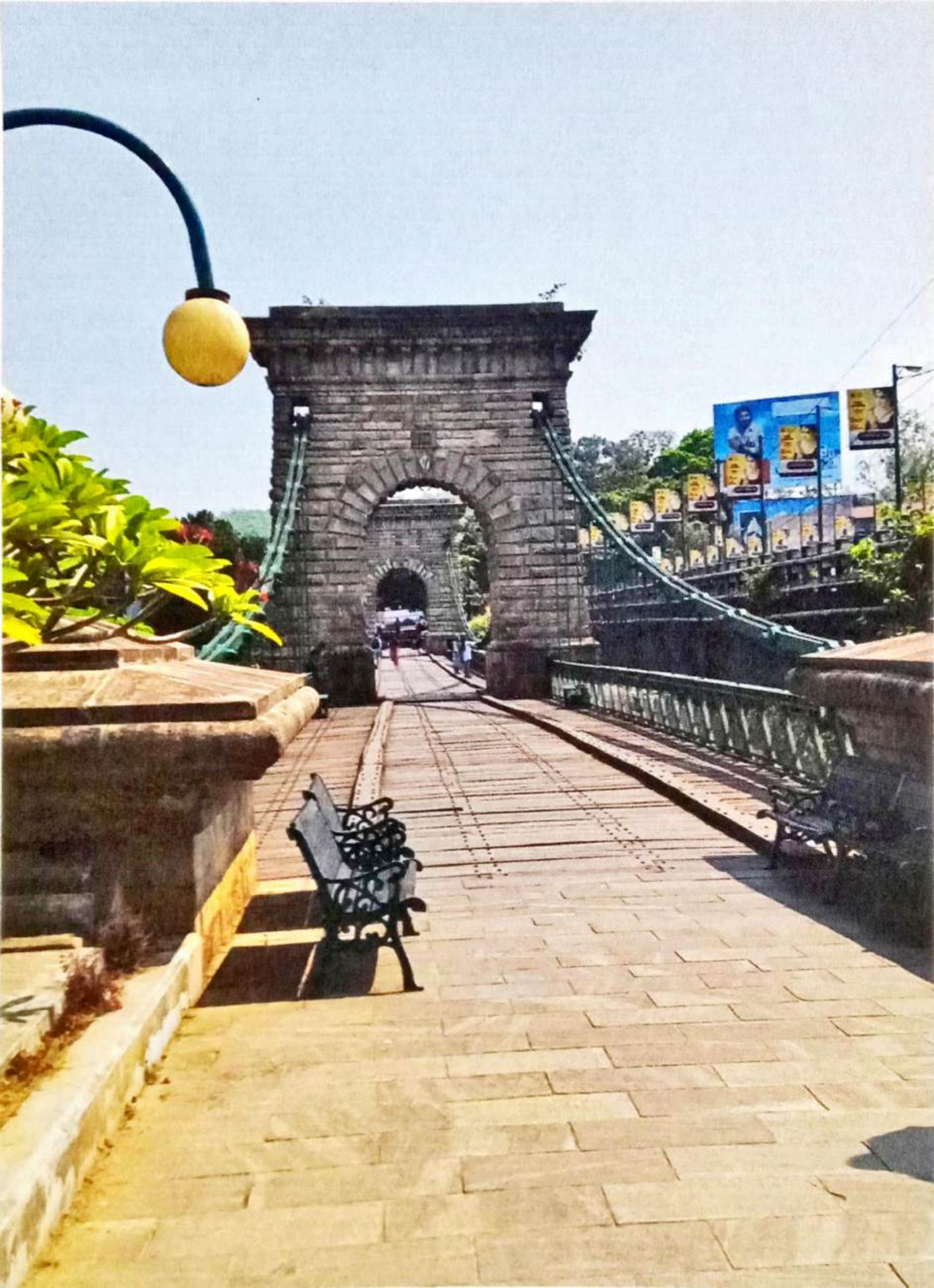
7. Regular Monitoring: Establish a system for regular monitoring of the bridge's condition using modern technology such as sensors and drones. This will help in early detection of any potential issues and allow for timely intervention.

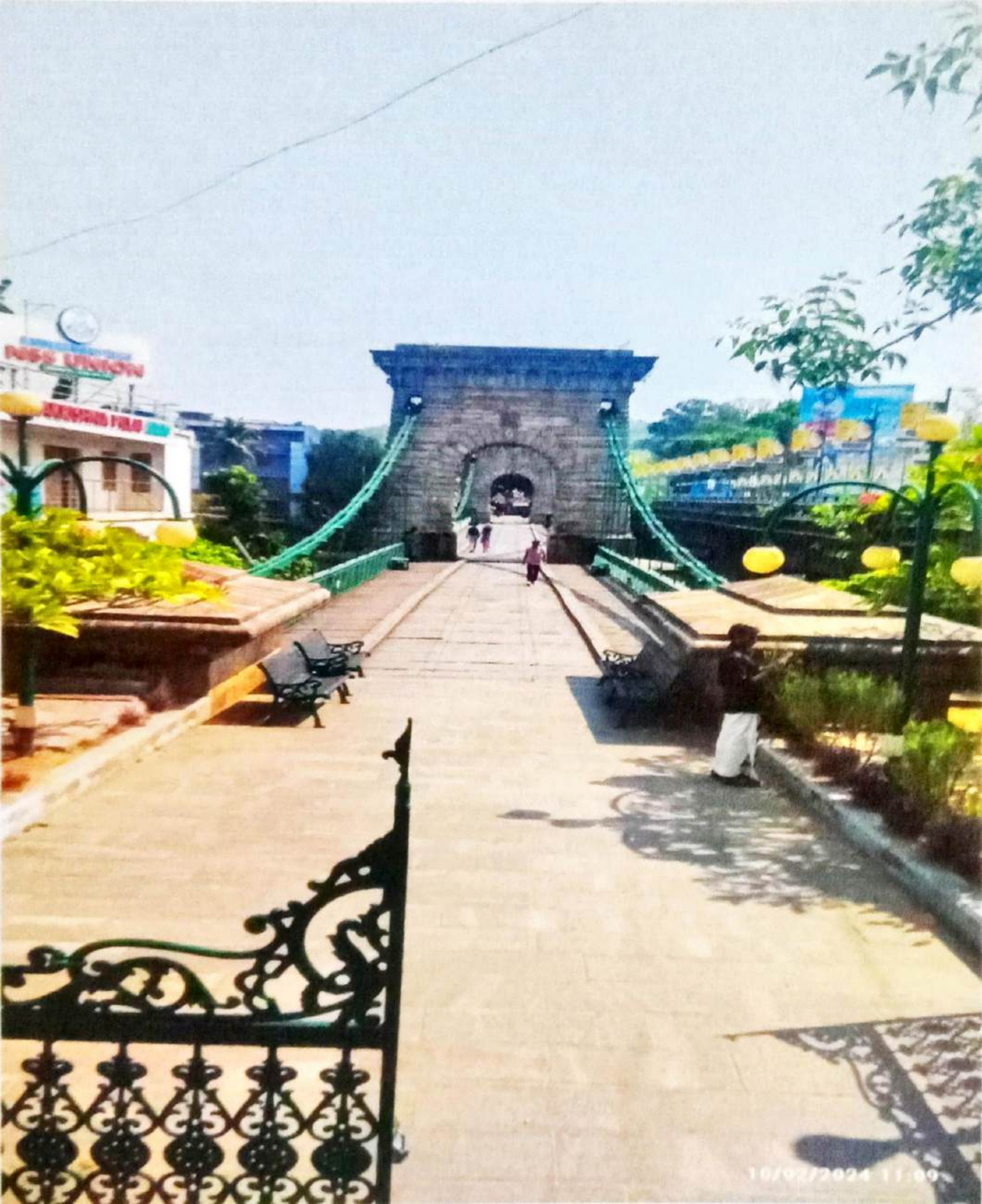
8. Heritage Listing: Seek recognition for the bridge's historical and cultural value by listing it as a heritage site. This can provide additional protection and support for its preservation efforts.

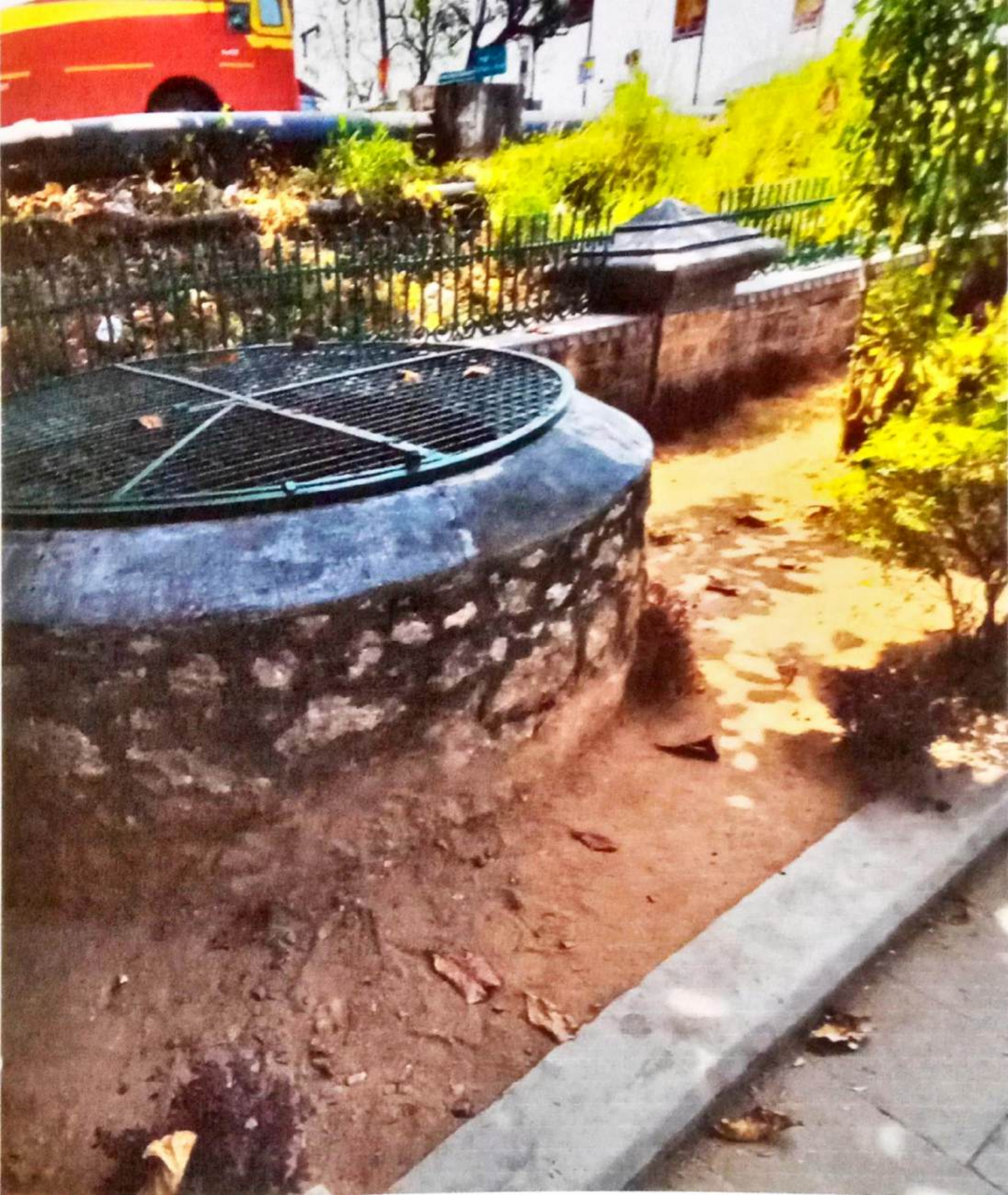
9. Community Engagement: Involve local communities, historians and experts in the preservation efforts by organizing workshops, seminars, and community clean-up events. Their input and involvement can provide valuable insights and help in creating a sense of ownership and responsibility towards the bridge.

By implementing these suggestions, we can ensure that the Punalur Suspension Bridge continues to stand as a symbol of human achievement, cultural heritage, and architectural excellence for future generations to admire and appreciate.


877








10/02/2024 11:13


10/02/2024 11:15

All Saints' College
Trivandrum

MINI PROJECT ON THE SALIENT FEATURES OF INDIAN CONSTITUTION

THIS MINI PROJECT ON THE SALEINT FEATURES OF THE INDIAN CONSTITUTION HAS BEEN SUBMITTED TO DR VIDYA NAIR BY AMRITHA B, ANJANA R M, ANNA GRACE JOHN, ANUPRIYA A Y AND APARNA JYOTHI L M OF DC 1 HISTORY

Dr LEKHA RANI M.L.
Associate Professor & Head of the Department
DEPARTMENT OF HISTORY, ALL SAINTS' COLLEGE
THIRUVANANTHAPURAM- 695007

Dr. VIDYA NAIR

The Salient Features of Indian Constitution

Introduction

The Constitution is the supreme law of India. This is a written document which lays down the framework demarcating fundamental basic code, structure, procedures, powers, and duties of government and its organizations and rights and duties of the citizen.

It was adopted by the Constituent Assembly on 26th November 1949 and came into force on 26th January 1950. At the time of its adoption, the Constitution contained 395 Articles and 8 Schedules and was about 145,000 words long, making it the longest national constitution to ever be adopted. Every Article in the Constitution was debated by the members of the Constituent Assembly, who sat for 11 sessions and 167 days to frame the Constitution over a period of 2 years and 11 months. The preamble of the Constitution declares India a sovereign socialist, secular, and democratic Republic and assures its citizens justice, equality and liberty, and endeavours to promote fraternity.

The Constitution of India is the largest written Constitution of the world. It is neither printed nor typed. It is handwritten and calligraphed in both Hindi and English. It provides for a Parliamentary form of government which is federal in structure with certain unitary features.

The Salient Features of the Indian Constitution

The Constitution of India is among the largest in the world. The Indian Constitution is the fundamental law of the land. It occupies a supreme and unique position in the country's political system. Its basic structure defines the powers of the state and the rights and duties of the citizens

The basic feature of the Constitution of India are:

1 Drawn from different sources: The constitution of India is remarkable for many outstanding features which will distinguish it from other Constitution even though it has been prepared after "ransacking all the known Constitutions of the world" and most of its provisions are substantially borrowed from others.

So, though our Constitution may be said to be a 'borrowed' constitution, the credit of its framers lies in gathering the best features of each of the existing Constitutions and in modifying them with a view to avoiding the faults that have been disclosed in their working and to adapting them to the existing conditions and needs of the country

2 Supplemented by multiple amendments, and practically recast by the 42nd, 43rd and 44th ammendments (1976-78):

Many of the orginal features of the 1949 Constitution have been substantially modified by the 78 amendments which have been made up to 1996 - of which the 42nd Amendment Act, 1976, has drastically recast the Constitution in vital respects

The 73rd Amendment Act which was brought into force in April 1993 has added 16 articles which provide

for the establishment of and elections to Panchayats. They comprise a new part, Part IX. By the same amendment a new schedule (Sch. 11) has been added which enumerates the functions to be delegated to the Panchayats.

The 74th Amendment Act was passed to establish Municipalities and provides for elections to them.

3. The longest known Constitution: The Constitution of India has the distinction of being the most lengthy and detailed constitutional document the world has so far produced. The original Constitution contained as many as 395 Articles and 8 Schedules.

4. More Flexible than Rigid: Another distinctive feature of the Indian Constitution is that it seeks to impart flexibility to a written federal Constitution.

It is only the amendment of a few of the provisions of the Constitution that requires ratification by the State Legislatures and even then ratification by only ½ of them would suffice. Parliament has been given the power to alter or modify many of the provisions of the Constitution by a simple majority as is required for general legislation, by laying down in the constitutions that such changes "shall not be deemed to be amendments" of the constitution.

5. Role of Conventions under the Constitutions: It is also remarkable that though the framers of the constitution attempted to make an exhaustive code of organic law, room has been left for the growth of conventions to supplement the constitution in matters where it is silent

The Constitution cannot possibly give any indication as to which issue should be regarded as a 'vital issue' by a ministry, so that on a defeat on such an issue the Ministry should be morally bound to resign. Similarly, in what circumstances a Ministry would be justified in advising the President to dissolve Parliament instead of resigning upon an adverse vote, can only be established by a convention.

6. Fundamental Rights, and Constitutional Remedies:

While the Directive Principles are not enforceable in the Courts, the fundamental Rights, included in Part III, are so enforceable at the instance of any person whose fundamental right has been infringed by any action of the State, — executive or legislative — and the remedies for enforcing these rights, namely, the writs of habeas corpus, mandamus, prohibition, quo warranto and certiorari are also guaranteed by the Constitution.

7. Compromise between Judicial Review and Parliamentary Supremacy: An Independent Judiciary, having the power of 'Judicial review', is another prominent feature of our constitution.

On the other hand, we have avoided the other - extreme, namely that of 'Judicial supremacy', which may be a logical outcome of an over-emphasis on Judicial review. The harmonisation which our Constitution has effected between Parliamentary Sovereignty and a written Constitution with a provision for Judicial Review, is a unique achievement of the framers of our

Constitution. Our Constitution thus places the supremacy at the hands of the Legislature as much as that is possible within the bounds of a written Constitution.

8. Fundamental Rights subject to reasonable regulation by legislature: The Balancing between supremacy of the Constitution and sovereignty of the Legislature is illustrated by the novel declaration of Fundamental Rights which our constitution embodies.

9. Social Equality also guaranteed by the Constitution

Another peculiarity of the Chapter on Fundamental Rights in the Indian Constitution is that it aims at securing not merely political or legal equality, but social equality as well. Thus, apart from the usual guarantees that the State will not discriminate between one citizen and another merely on the ground of religion, race, caste, sex or place of birth — in the matter of appointment, or other employment, offered by the State, — the Constitution includes a prohibition of 'untouchability', in any form and says down that no citizen may be deprived of access to any public place, of the enjoyment of any public amenity or privilege, only on the ground of religion, race, caste, sex or place of birth.

10. Fundamental Rights checkmated by Fundamental Duties: Another feature, which was not in the original Constitution has been introduced by the 42nd Amendment, 1976, by introducing Art 51A as Part IV A of the Constitution. Though the Directives in Part IV of the Constitution were not enforceable in any manner and had to give way before the Fundamental Rights, under the original

Original Constitution, the situation was reversed, through the backdoor, by the 42nd Amendment, 1976, by amending Art. 31C - shielding all the Directives in Part IV of the Constitution from the Fundamental Rights in Part III.

11 Universal Franchise without Communal Representation:

The adoption of universal adult suffrage, without any qualification either of sex, property, taxation or the like, is a bold experiment in India, having regard to the vast extent of the country and its population, with an over-whelming illiteracy. The concept of popular sovereignty, which underlies the declaration in the Preamble that the Constitution is adopted and given by the people of India unto themselves. The electorate has further been widened by lowering the voting age from 21 to 18 by the 61st Constitution Amendment Act, 1988

12 Parliamentary Government combined with an elected President at the Head: It has been stated at the outset that the form of government introduced by our Constitution both at the Union and the States is the Parliamentary Government. A primary reason for the choice of this system of government was that the people had a long experience of this system under the Government of India Acts, though the British were very slow in imparting its features to the fullest length.

The makers of our Constitution rejected the Presidential system of government, on the grounds that under that system the Executive and the Legislatures are separate from and independent of each other; which is likely to cause conflicts between them

13. A Federal System with Unitary Bias:

Perhaps the most remarkable achievement of the Indian Constitution is to confer upon a federal system the strength of a unitary government. Though normally the system of government is federal, the constitution enables the federation to transform itself into a unitary state in emergencies. Such a combination of federal and unitary systems in the same constitution is unique in the world

14. Integration of Indian States: No less an outstanding feature of the new constitution is the union of some 552 Indian states with the rest of India under the Constitution. Thus, the problem that baffled the framers of the Government of India Act, 1935, and ultimately led to the failure of its federal scheme, was solved by the framers of the Constitution with unique success. The entire sub-continent of India has been unified and consolidated into a compact state in a manner which is unprecedented in the history of the country

Conclusion

The Indian Constitution is a constitution best suited to the Indian environment. The constitution has been helping India to organise and run her government and administration in an effective way both in times at peace and war.

* preamble
* fundamental rights
* directive principles
* secularism
* federalism
* Republicanism
* Independence of Judiciary
* Rule of law and
* Liberal democracy.

Reference

Introduction to the Constitution of India
— Dr. Durga Das Basu.