

Safeguarding Ancient Tamil Heritage in Northern Sri Lanka: A Study of the '*Muthaliyan kalveddu*' Manuscript

R. Kupeshan¹ and K. Chandrasekar²

ABSTRACT

Libraries, museums, and archives worldwide are committed to documenting and preserving cultural heritage to ensure wider access and safeguard rare and endangered information resources. The archival collection of palm-leaf manuscripts preserved in the Jaffna University Library constitutes a vital repository of Sri Lankan Tamil tradition and safeguards invaluable cultural heritage for future generations. This study focuses on the Muthaliyan kalveddu (Catalogue No. 162), a palm-leaf manuscript copied on March 26, 1873, from the original inscription of Ottisuttan Rajasegara Subramaniam Muthaliyar and preserved in the archival collection of the Jaffna University Library. The objectives of the study were to explore the socio-economic, political, and cultural significance of the Muthaliyan kalveddu manuscript, examine its physical characteristics and condition, identify challenges encountered in its conservation, and propose strategies for its sustainable preservation and effective knowledge dissemination. A historical-descriptive approach was employed to examine the manuscript in detail. The Muthaliyan kalveddu provides a historical account of northern Sri Lanka, beginning with references

¹ Senior Assistant Librarian, University of Jaffna, Jaffna, Sri Lanka. Email: kupeshan@univ.jfn.ac.lk, <https://orcid.org/0009-0007-0588-4799>

² Deputy Librarian, University of Jaffna, Jaffna, Sri Lanka. Email: kchandrasekar@univ.jfn.ac.lk, <https://orcid.org/0000-0002-3753-7229>



Received: 27 May 2025, Accepted revised version: 02 September 2026.

This work is licensed under a Creative Commons Attribution- Share Alike 4.0 International License.

to the Ramayana and extending to the Jaffna Kingdom (1215–1619 CE), with particular emphasis on the kingdom's expansion into Vannipattu during the reign of King Pararasasekharam of Jaffna. It further records the establishment of 18 caste-based enterprises to serve the growing population, the construction of ponds and other water bodies for residential needs, and evidence of human migration. The manuscript also highlights the local economy's reliance on pearling during this period and identifies the port of Mannar as a significant hub for maritime trade with India. In addition to this historical analysis, the study evaluates the physical condition of the manuscript, outlines the conservation methods adopted, and discusses challenges faced during the preservation process. Strategies are also proposed for the sustainable preservation of the Muthaliyan kalveddu to support ongoing knowledge dissemination. Overall, the study emphasizes that, as stewards of information resources, librarians have a vital responsibility to safeguard invaluable knowledge through the conservation and preservation of archival documents, thereby ensuring its transmission to future generations.

Keywords: *Palm-leaf manuscripts; Ola leaves; conservation; preservation; Muthaliyan kalveddu; Tamil cultural heritage; Sri Lanka; history*

Introduction

Documenting and preserving cultural heritage are important activities undertaken by libraries, museums, and archives worldwide to facilitate wider access to rare and unique information resources and safeguard them for future generations. Such resources include texts, photographs, manuscripts, ola leaves, audio recordings, moving images, objects, and artefacts (Balloffet & Hille, 2005).

Sri Lanka possesses a wealth of cultural heritage-related documents, many of which are under continual threat from natural disasters and other causes (Wijesundara et al., 2016). In addition to deterioration caused by

natural disasters such as floods, landslides, and tsunamis, three decades of civil war destroyed several valuable information resources, including centuries-old, irreplaceable Tamil manuscripts and palm leaves preserved at the Jaffna Public Library and related to the historical, social, agricultural, scientific, religious, linguistic, anthropological, and cultural heritage of Tamil-speaking people in Sri Lanka (Selvarajah, 2003). Many of these valuable materials have perished and, in the absence of copies, have disappeared from Sri Lankan cultural memory. Therefore, it is vital to conserve and preserve cultural heritage texts and objects that remain unnoticed or inadequately preserved within the Tamil community.

The University of Jaffna, a leading academic institution in northern Sri Lanka with a history spanning 50 years, recognizes the preservation and conservation of invaluable cultural and scholarly assets as a vital responsibility. The library network is integral to the University of Jaffna and serves the university community through the Main Library at the Thirunelvely premises and seven branch libraries at various locations. Despite challenges such as limited resources, inadequate infrastructure, and constrained technological support, the Jaffna University Library has remained resilient, including during periods of civil unrest, and has continued striving to preserve and safeguard the rich historical heritage of the Tamil community.

As part of its commitment to preserving historical heritage, this study focuses on the palm-leaf manuscripts housed and preserved in the Archives of the Jaffna University Library. This collection is one of the largest of its kind in northern Sri Lanka and consists of 28,690 palm leaves covering diverse subjects, including astrology, religion, language, literature, Siddha medicine, Vishakadi medicine, veterinary medicine, history, epics, and magic. Among these manuscripts, 24,607 palm leaves were systematically catalogued by Mr.S. Murugavel, former Librarian of the University of Jaffna, between 1982 and 1994 (Sivashanmugarajah, 2013). Later, 4,083 palm leaves donated by the Faculty of Siddha Medicine, University of Jaffna, were added to this collection

and remain uncatalogued due to a lack of expertise, leaving this important task pending.

Although many documents are available for understanding the history of Sri Lanka, records specifically relating to the Northern and Eastern Provinces are limited. Sources such as the *Chulavamsa* and *Mahavamsa* provide only brief information about these regions. However, historical information about the Jaffna and Vanni regions can be obtained from sources such as Yalpana Vaipava Malai, Yalpanam Kaumudi, Vallipuram Sasanam, Pararajasekaran Ula, Robert Knox's *An Historical Relation of the Island Ceylon* (1681), and the *Vaiyapadal*.

Among these, *Vaiyapadal* is a historical document composed in poetic form and is relevant to the present study. It is said to have been written by Vaiyapuri Aiyar and was later published by Swami Gnanapragasar. In his preface, Swami Gnanapragasar stated that *Vaiyapadal* belongs to the category of oral, narrative-style historical literature of the late 18th century. The Muthaliyan kalveddu, associated with Ottisuttan Rajasegara Subramaniam Muthaliyar, also contains numerous historical details. While *Vaiyapadal* does not provide detailed information on the settlement and cultural aspects of the Vanni region, the Muthaliyan kalveddu provides such specific details. Therefore, the Muthaliyan kalveddu is considered a historically significant document for understanding the history of the Vanni region.

The Muthaliyan kalveddu, a palm-leaf manuscript copied on March 26, 1873, from the original inscription of Rajasegara Subramaniam Muthaliyar of Ottisuttan, is preserved in the Archives of the Jaffna University Library under Catalogue No. 162. Through a transcription of this manuscript, the study explores the cultural features, political systems, literary traditions, and economic conditions of the Sri Lankan Tamil community in the northern region during the 18th century. It also examines the traditional preservation techniques used to conserve this palm-leaf manuscript, highlights the challenges encountered in its conservation, and considers possible remedies.

Objectives of the Study

The specific objectives of the study are:

- To explore the socio-economic, political, and cultural significance of the Muthaliyan kalveddu palm-leaf manuscript in relation to the Tamil community in northern Sri Lanka.
- To examine the palm leaves, their preparation, seasoning, and writing techniques in the Muthaliyan kalveddu manuscript.
- To highlight the challenges encountered in conserving the Muthaliyan kalveddu palm-leaf manuscript.
- To propose strategies for the sustainable preservation of the Muthaliyan kalveddu manuscript.

Review of Literature

Historical manuscripts provide valuable insights into ancient civilizations. These ancient records encompass inscriptions on stone and metal, paper manuscripts, and palm-leaf manuscripts. However, many of these manuscripts are deteriorating due to various factors, including inadequate conservation practices, which have contributed to their scarcity. Preserving these unique historical documents is therefore crucial. Researchers and scholars actively engage in efforts to conserve and restore these invaluable sources of information (Gandhi & Ponnaivaikko, 2017).

Before the advent of paper, palm leaves served as an important writing material across South and Southeast Asia, including India, Nepal, Sri Lanka, Burma, Thailand, Indonesia, and Cambodia. Identifying the precise period when palm leaves were first used for writing remains challenging (Agrawal, 1984). Due to their organic nature, palm leaves are prone to deterioration, much like other natural materials. To ensure the transmission of knowledge across generations, scribes have traditionally recopied aging manuscripts, thereby preserving their contents.

As noted by Ghosh et al. (2017), palm-leaf manuscripts serve as

repositories of recorded knowledge and are considered a valuable component of national heritage. Reports indicate that the majority (95%) of palm-leaf manuscripts preserved in various institutions across Sri Lanka date back to the 18th and 19th centuries. However, one of Sri Lanka's oldest known palm-leaf manuscripts, Chullavagga, was created in the 13th century A.D. and is stored at the Colombo National Museum (Alahakoon, 2006).

The *Mahavamsa* states that the practice of inscribing on palm leaves began during the reign of King Vattagamani Abhaya in the Anuradhapura period (Abayarathne, 2018). It is believed that, during his reign, the Tripitaka was written on palm leaves (Malalgoda, 1976). However, Nishanthi and Wijayasundara (2022) reported that there is no concrete evidence to support the use of palm-leaf manuscripts during the Anuradhapura and Polonnaruwa periods. Later, the Kotte period came to be recognized as the 'golden era' of Sinhala literature (Wijenayake, 1995). Under the reign of King Parakramabahu VI, numerous chronicles and Sandesha Kavyas were produced, significantly enriching Sri Lanka's literary heritage. Notable works from this period include Budu Guna Alankaraya and Hansa Sandeshaya by Veedagama Maithree Thero, Saddarmarathnakaraya by Wimalakiththi Maha Sthavira, Kawsilumina by King Parakramabahu II, and several other compositions such as Kawyashekaraya, Parawi Sandeshaya, Salalihini Sandeshaya, and Parakumba Siritha by Thotagamuwe Sri Rahula Thero, as well as Kokila Sandeshaya by Dewnuwara Irugalkulathilaka Thero (Ilangasinghe, 2003). These manuscripts cover a wide range of subjects, including religion, language, literature, medicine, veterinary science, astrology, yantra mantra, fiction, customs and ceremonies, law, history, taxation and revenue, agriculture, state administration, Buddhist education, world geography, music, and art (Lagamuva, 2006).

An overview of palm-leaf manuscripts as sources of socio-economic, political, and cultural history, the characteristics of palm leaves as early writing materials, the processes of their preparation, seasoning, and

inscription, and the approaches to their preservation and conservation are presented below.

Palm-leaf Manuscripts as Sources of Socio-economic, Political, and Cultural History

Historical documents such as inscriptions, coins, foreign historical accounts, and palm-leaf manuscripts are crucial for understanding the social, economic, and political conditions of the past. These records provide a wealth of information about the social relationships, lifestyles, political and economic systems, and foreign relations of people who lived during those periods.

In a similar vein, the historical information for the northern region of Sri Lanka is primarily derived from inscriptions, palm-leaf manuscripts, genealogical records, and foreign accounts. Among these, the Muthaliyan kalveddu is of particular importance. Historical documents found in Jaffna, especially manuscripts and inscriptions, provide details about lineage origin stories, local historical notes, struggles for political rights, the relationships between colonial officials and local communities, and the formation of local elite families.

These documents also offer insights into cultural aspects such as local worship practices, caste and lineage systems, temple histories, mythological stories, and astrological beliefs. Many historians have used these documents as a basis for establishing local and national histories, colonial-era customs, the origins of royal dynasties, and traditional practices. In this way, the Muthaliyan kalveddu is highly significant for its ability to reveal the socio-economic, political, and social conditions of the Vanni region. Furthermore, in northern Sri Lanka, the tradition of writing on palm leaves and manually copying texts persisted until 1835 (Sivalingarajah, 2022).

With the advent of printing technology, American missionaries began printing medical textbooks, dictionaries, Christian literature, and newspapers to support educational and religious initiatives. Following the repeal of the law

prohibiting the establishment of printing and publishing presses in 1835, the printing of Tamil books began. This advancement facilitated the publication of numerous palm-leaf manuscripts on Tamil grammar, literature, astrology, and religion, which had remained largely inaccessible. Prominent figures in this revival included Arumuga Navalar, Vallai Vayithiyalingam Pillai, C.Y. Thamothersampillai, and V. Kanthapillai Nallur Manickam (Sivalingarajah, 2022). Despite the long tradition of palm-leaf manuscripts in northern Sri Lanka, efforts to preserve the original palm-leaf manuscripts within the Tamil community appear to be unsatisfactory.

Historical Context of Jaffna and the Significance of the Muthaliyan kalveddu Manuscript

Sri Lanka is a South Asian nation with a rich and diverse historical and cultural heritage, comprising regions of distinct historical importance. Among these, the Northern region—particularly Jaffna—holds a prominent place because of its unique historical trajectory. The history of Jaffna is understood to have been shaped by prehistoric settlements, early ethnic communities, and sustained interactions with South India (Pathmanathan, 2002). Over time, through gradual socio-political and economic transformations, these early settlements evolved into a region with a distinct cultural and historical identity. This historical development has been substantiated through archaeological evidence, literary sources, and scholarly research.

The historical evolution of Jaffna can be traced from the early historical period through to the emergence of the Jaffna Kingdom in the 13th–14th centuries CE, followed by the transition into the modern period. The modern phase broadly encompasses the era of colonial rule up to Sri Lanka's independence. Sources such as foreign travel accounts, literary works, and administrative records serve as key evidence for reconstructing this period. Among these, palm-leaf manuscripts occupy a significant place as primary historical documents. In this context, the palm-leaf manuscript

Muthaliyan kalveddu, which refers to the Vanni settlement system, is of particular importance.

Archaeological findings provide valuable insights into early settlement patterns in the Jaffna Peninsula, especially during the Stone Age and Iron Age (Indrapala, 2005). Excavations at sites such as Kandarodai and Anaikottai have revealed burial practices, structural remains, and artefacts including Black and Red Ware pottery (Deraniyagala, 1992; Ragupathy, 1987). These discoveries demonstrate that Jaffna was part of a wider network of early human settlements in South Asia. Moreover, the discovery of ceramics and beads suggests the existence of long-distance trade connections linking Jaffna with South India, the Arabian Peninsula, and other regions of Asia.

Literary sources further contribute to understanding the early history of Jaffna. Northern Sri Lanka is referred to as “Nagadipa” or “Naga Nadu” in historical texts, indicating the presence of an ancient ethnic group known as the Nagas. References to the Nagas appear in works such as the *Mahavamsa* and the Tamil epic *Manimekalai* (Geiger, 1950; Veluppillai, 1995). These sources provide insight into early cultural formations and suggest that such communities played a foundational role in shaping the cultural identity of later Tamil-speaking populations (Indrapala, 2005).

The emergence of the Jaffna Kingdom during the 13th–14th centuries CE marks a significant milestone in the region’s history (Indrapala, 2005). Following the decline of political authority in southern Sri Lanka, an independent Tamil polity arose in the north under the Arya Chakravarti dynasty. Centered in the Jaffna Peninsula, this kingdom maintained strong political, economic, and cultural connections with South India while developing its own administrative systems and sustaining regional trade networks.

The colonial period constitutes another important phase in Jaffna’s historical development. Portuguese rule was established in 1619, followed by the administration of the Dutch East India Company. During the Dutch period,

the Thesavalamai law was codified (Pathmanathan, 2002). Subsequently, British rule (1796–1948) introduced significant transformations in education, economy, and culture (Veluppillai, 1995). Within this socio-political framework, local elites who played key roles in administration were conferred the title “Muthaliyar”. These intermediaries were instrumental in governance and contributed notably to the patronage and maintenance of Hindu temples (Indrapala, 2005).

Within this historical context, Rajasegara Subramaniam Muthaliyar emerges as a figure of local significance in the historical traditions of northern Sri Lanka. He is particularly associated with the Ottisuttan Thanthondreeswarar Temple, an ancient Swayambhu (self-manifested) shrine dedicated to Lord Shiva. The temple continues to function as an important centre of religious worship, cultural continuity, and regional identity in the Vanni region. However, detailed primary historical records documenting the specific contributions of Rajasegara Subramaniam Muthaliyar remain limited. Existing knowledge is largely derived from oral traditions, temple histories, and regional narratives.

In this regard, the palm-leaf manuscript Muthaliyan kalveddu, which contains references to Rajasegara Subramaniam Muthaliyar, assumes considerable importance as a documentary source. It serves not only as a repository of local historical memory but also as a medium through which tradition and historical knowledge are preserved and transmitted across generations. Thus, the manuscript can be regarded as a valuable historical record contributing to the reconstruction of regional history and cultural heritage.

Preparation, Seasoning and Writing on Palm Leaves

Palm leaves require additional processing or seasoning before they can be used for manuscript writing. They were typically harvested while young, preferably during the dry season, and partially opened young leaf bundles were preferred

as suitable writing materials. Depending on the country, type of leaf, and local traditions, various seasoning methods were employed. These included boiling in water, limewater, milk, or other liquids (Wilson & Rice, 2019); heating in kilns (Wilson & Rice, 2019); exposure to smoke (Wiland et al., 2022); air drying (Wilson & Rice, 2019); burial in mud, sand, or wet rice straw (Wilson & Rice, 2019); sanding (Wiland et al., 2022); rubbing or burnishing (Wiland et al., 2022); and treating the leaves with substances such as turmeric or gingili oil (Wiland et al., 2022). In Sri Lanka, fresh palm leaves were boiled for a few hours in water or limewater and then dried in the shade. Sometimes, they were boiled with pineapple fronds, kappettiya leaves, or papaya nodal leaves. These materials help enhance the colour and flexibility of palm leaves and protect them from insect infestation (Lagamuva, 2006). Thereafter, fumigation and burnishing processes were followed (Balasooriya et al., 2021).

After the initial processing, the leaves are cut to the required size. There are two primary methods for writing on palm leaves. The first involves using a reed, bamboo pen, or brush to write directly on the surface of an oiled palm leaf (Kumar et al., 2009). The second involves engraving the text using a pointed metal, bone, or hard wooden stylus, followed by the application of pigment or ink (Wiland et al., 2022). Examination of the Muthaliyan kalveddu manuscript indicates that the text was incised using a pointed metal stylus, with herbal ink applied thereafter to enhance legibility. For instance, ink mixtures could include bean leaves blended with charcoal and turmeric or black thorn apple juice (Wiland et al., 2022). Additionally, oils such as camphor, castor, lemongrass, cedarwood, mustard, neem, and clove, selected for their insecticidal properties, could be added to the ink (Wiland et al., 2022). Writing on palm leaves requires the writer to have appropriate skills, training, and patience.

Preservation and Conservation of Palm-leaf Manuscripts

Several studies have examined the preservation and conservation of palm-leaf

manuscripts. Preservation encompasses managerial, technical, and financial efforts aimed at slowing deterioration and prolonging the lifespan of early writing materials to ensure their ongoing accessibility (Kim et al., 2020). Conservation, on the other hand, involves the direct treatment of artefacts through interventive procedures and should be considered one component of a broader collection-care programme (Eden et al., 1998).

Preserving palm-leaf manuscripts has always been challenging. Since their use as a medium for recording information, various preservation techniques have been employed and can be broadly categorized as traditional and modern methods. Traditional preservation methods, practised since ancient times, primarily relied on plant extracts to prevent natural deterioration (Baquee & Raza, 2019). These techniques included dusting and cleaning manuscripts, wrapping them in cloth to protect against dust and insects, exposing them to sunlight, and using natural insect repellents such as Ajwain powder, custard apple seeds, neem seeds, and black cumin. Sahoo and Mohanty (2004) highlighted that indigenous preservation methods have historically been used in India to safeguard palm-leaf manuscripts. The principal physical factors contributing to manuscript deterioration—light, dust, heat, and humidity—were well recognized. To mitigate these threats, manuscripts were traditionally wrapped in cloth, often red or yellow cotton, and carefully stored.

Ghosh (2012) and Sah (2002) reported additional measures to prevent insect infestations, including storing manuscript folios in hardwood boxes made from insect-resistant materials like neem (Kohomba) wood. Similarly, Cabral and Rathnabahu (2021) documented optimal methods for preserving palm-leaf manuscripts in Sri Lankan libraries, by using traditional oils, such as *Madhuca longifolia* seed oil (Mee oil) and *Vateria copallifera* resin oil (Dummala oil), which were believed to enhance the flexibility of palm leaves while offering protection.

Further studies have emphasized the historical use of natural herbal

products, including citronella oil, neem oil, walnut oil, clove oil, sandalwood oil, camphor oil, turmeric, and datura, for manuscript preservation (Sharma et al., 2018). These substances were thought to improve the flexibility of palm leaves while also protecting them from bacteria, mould, and insects (Nishanthi, 2023).

Later, fumigation and chemical treatment were introduced as conservation methods (Udayakumar et al., 2009). Modern preservation efforts are increasingly focused on digitization as a long-term solution for ensuring the longevity and accessibility of manuscripts (Nishanthi & Wijayasundara, 2022).

Although advances in technology have increased attention to manuscript preservation and encouraged the adoption of modern techniques, traditional preservation methods remain widely used because of their distinct advantages, such as:

- Being non-hazardous to human health
- Having no adverse effects on the material
- Requiring minimal expertise, equipment, and financial investment

In this context, an effort has been made to summarize the effectiveness of various traditional preservation practices in relation to the Muthaliyan kalveddu manuscript. These plant extracts and herbal oils are believed not only to enhance the flexibility of palm leaves but also to protect them from bacteria, mould, and insects that can threaten the longevity of palm-leaf manuscripts. These traditional plant extracts and herbal oils, passed down through generations, have been tested for their effectiveness against common bacteria, mould, and insect pests that typically affect palm-leaf manuscripts (Suryawanshi et al., 1992).

Methodology

This study employs a historical-descriptive approach involving the research and documentation of past events, people, practices, artefacts, and

developments within their historical contexts (Mahoney, 2004). Rather than focusing exclusively on causal explanation, this approach aims to provide a comprehensive account of historical facts and trends (Mahoney, 2004).

The Jaffna University Library houses a palm-leaf manuscript titled Muthaliyan kalveddu, composed in the late 19th century and originally associated with Rajasegara Subramaniam Muthaliyar of Ottisuttan area in the Vanni region. Belonging to the Muthaliyan lineage that held considerable influence in the Vanni during the British period, this manuscript holds particular significance as a written record pertaining to the history of the Vanni in the 18th century, preserved through the efforts of the local community. While *Vaiyapadal*—published in book form by Swami Gnanapragasar—has long been regarded as an authoritative source for reconstructing the history of the Vanni, the Muthaliyan kalveddu remains unpublished. This study, therefore, undertakes a content analysis of the manuscript in comparison with *Vaiyapadal*, and examines the physical characteristics of the palm leaves used and their preparation process for writing the manuscript.

Furthermore, based on an assessment of traditional preservation methods for palm-leaf manuscripts, a suitable conservation approach was identified. This method was then applied to the manuscript, and the challenges encountered during the preservation and conservation process were documented and presented in this study. The study also proposes strategies for the long-term preservation of the manuscript and for sharing its preserved knowledge with scholars and the general public.

Results and Discussion

According to the catalogue of the Jaffna University Library, the Muthaliyan kalveddu manuscript is listed as Catalogue No. 162. The manuscript consists of 18 leaves, each measuring 27.5 cm in length and 3 cm in width. Minor damage is visible at the right-hand corner of the manuscript (Figures 1 and 2).

The first leaf provides a brief summary of the manuscript's content,

stating that it details the history of the kings who ruled Sri Lanka (Figure 1). It concludes with a note mentioning that the manuscript was copied on March 26, 1873, from the original inscription of Ottisuttan Rajasegara Subramaniam Muthaliyar (Figure 2).

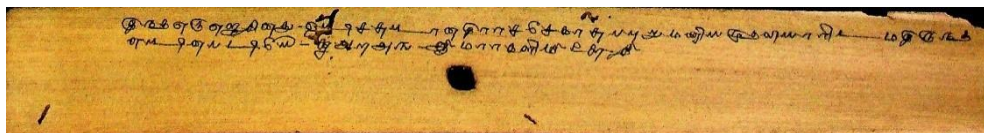
Figure 1

First leaf of the Muthaliyan kalveddu manuscript



Figure 2

Last leaf of the Muthaliyan kalveddu manuscript



Socio-economic, Political, and Cultural Significance of the Muthaliyan kalveddu

This manuscript provides a detailed account of how the governance system evolved from the Jaffna Kingdom to the Vanni region, particularly in northern Sri Lanka. It further explores the development of governance in the Kilinochchi, Mullaitivu, Mannar, and Vavuniya districts, describing the establishment of settlements and the economic and socio-cultural conditions of the region.

Among the documents provide information on history of Sri Lankan Tamils, Kailayamalai, *Yalppana Vaipavamalai*, Konesar Inscription, Vaiyavasanam, Mattakkalappu Maanmiyam, and Sekarasasekaramalai Paayiram are considered significant historical texts (Anonymous, 1992). However, the *Vaiyapadal* is the only source identified that specifically discusses the civilization of the Vanni region in northern Sri Lanka.

The *Vaiyapadal* manuscript states that this work was composed by Vaiyapuri Aiyar, a court poet of King Segarajasekaran, one of the rulers of Jaffna. The *Yalppana Vaipavamalai* states that the poet Vaiyaa flourished as a court poet during the reign of the fifth Segarajasekaran, also called Sayaveerasinkai Ariyan (1380–1414 CE). It further states that he was the author of *Vaiyapadal*, Pararajasekaran Ula, and Pararajasekaran Iracamurai. Historians have considered the *Vaiyapadal* an authoritative source for reconstructing the history of the Vanni region during the eighteenth century (Nadarajah, 1980).

In the *Vaiyapadal*, from a historical perspective, the histories of kings Pararajasekaran and Segarajasekaran are mentioned. Along with this, the story of Kannaki is also narrated. That is, the event of Meekaman going to Lanka in search of the Nagamani (serpent gem) for the purpose of making the anklet (silambu) for Kannaki is described from verses 52 to 54. This same event is also detailed in the Muthaliyan kalveddu manuscript. The purpose of the *Vaiyapadal* is to describe the royal dynasties that ruled Sri Lanka and the events in which those kings defeated the demons who originally inhabited the land and established good governance. The Muthaliyan kalveddu manuscript also mentions how various clans settled in the land.

Furthermore, the *Vaiyapadal* narrates the history of how settlers migrated from India to northern Sri Lanka starting from the time of Kulankai Chakkaravarti. It also states that the earliest settlers in Vanni were the remnants of the demons who remained in Lanka after the Rama–Ravana war, and it provides details about the clans of the Vanniyars. The text describes how good governance was eventually established in the country. In addition, the *Vaiyapadal* mentions the dynasty of Kulankai Chakkaravarti, the first ruler of Jaffna, and the arrival of his brother-in-law Marutappuravi. It then gives accounts of the subsequent Vanniyar settlements, describing how they subdued the local tribes and ruled over them. These events are also detailed in the Muthaliyan kalveddu manuscript. While the Muthaliyan kalveddu

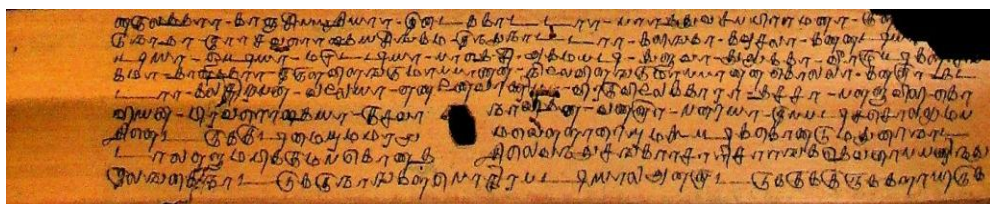
manuscript covers the history from the Ramayana period to the Jaffna Kingdom (1215–1619 CE), it places particular emphasis on the expansion of the Jaffna Kingdom into Vannipattu (Vanni region) following the reign of King Pararasasekharam (1478–1519). In addition, it details the establishment of regional states in Vannipattu, which paid taxes to the Jaffna Kingdom. These states were formed in areas such as Chavakachcheri, Muhamalai, Mulliyawalai, Chettikulam, Thunukkai, Kotiyalam, Vidathathaladivu, Kuthiraimalai, Thampalagamam, Thanikallu, Kilakkumulai, Metkugumulai, etc.

Furthermore, the *Vaiyapadal* provides extensive references to the history of the Vanniyars' arrival in Sri Lanka. The history of the Vanniyars coming to Sri Lanka is also largely recorded in the Muthaliyan kalveddu manuscript. According to the *Vaiyapadal*, sixty Vanniyars came from Madurapuri during the reign of Singhamanavan (Valasingan), the son of Marutappuravi, in connection with his marriage. The first sixty Vanniyars who arrived were sent to Adankapattu. It is said that one of these Vanniyars served as a Regional Chief (disa nulaiyaraya) in the city of Kandy. Additionally, references to Pararajasekaran appear towards the end of the *Vaiyapadal*. Similarly, the *Vaiyapadal* indicates that the first deities worshipped in Vanni land were Kali, Aiyanar, and Sadaimuni. When Veeranārāyana Chetti came to Sri Lanka, he placed Kali at Kudiraimalai, Sadaimuni near the Keṇi at Vavvaalai, and Sattan to guard his wealth. It is also mentioned that he built the Chandrasekaran temple. These details are also recorded in the Muthaliyan kalveddu and the manuscript reports that an ancient civilization from early times, referred to as the Aathikudis, includes groups such as the Atangapattai Vedar, Parayar, Rakshas, Parangyars, Ampatars, and Paravars, who were descendants of King Ravana and lived in this region (Figure 3). The manuscript further notes that after 60 Atangapattai Vannimars brought women to Sri Lanka for the marriage of Walasingha Maharaja, 59 of these Vannimars established small dynasties that paid taxes to the Koolanga emperor. The

manuscript also mentions that after the settlement of people, ponds and water bodies were constructed to meet their economic needs. Additionally, 18 caste-based industries were established to serve the community. The people of this period were involved in pearling for their livelihood and participated in maritime trade with India, particularly through the Mannar port.

Figure 3

Leaf 12 of the Muthaliyan kalveddu



The Muthaliyan kalveddu manuscript also notes that people created parks for recreation, worshipped God Shiva for their spiritual needs, and honoured village deities such as Nachimar and Annamar. The account states that people wore sarees and ornaments such as pearl necklaces and nagam necklaces, reflecting cultural aspects of the community. Accordingly, the Muthaliyan kalveddu manuscript is regarded as an important historical document that should be preserved and maintained, as it provides valuable insights into the social, economic, and cultural history of Tamils in northern Sri Lanka.

Furthermore, the Muthaliyan kalveddu manuscript is presented in a narrative style and was written on both sides of 18 palm leaves. The *Vaiyapadal* is in verse form and comprises 104 verses. However, these verses do not mention such arrangements, such as deity placements or constructions; instead, they narrate historical events in a storytelling style. In this context, notable similarities can be identified between the *Vaiyapadal* and the Muthaliyan kalveddu, both of which provide historical accounts of the Vanni region during the 18th century.

Physical Examination of Muthaliyan kalveddu Palm-leaf Manuscript

In this study, the Muthaliyan kalveddu palm-leaf manuscript preserved at the Jaffna University Library was identified and cleaned by manuscript conservators (Figure 4). After dust was removed using suitable brushes, the manuscript was identified, with assistance from the Department of Botany, University of Jaffna, as being made from leaves of *Palmyra* palms found in northern Sri Lanka.

Figure 4

Cleaning process of the Muthaliyan kalveddu



The preparation of palm leaves for writing appears to have varied across regions. In southern Sri Lanka, for instance, palm leaves were commonly soaked in water mixed with various herbs, dried in the shade, pressed, and cut to make them suitable for writing. In contrast, no concrete evidence is available regarding the preparation techniques used for palm leaves in northern Sri Lanka. Consequently, the exact process by which the Muthaliyan kalveddu manuscript was prepared cannot be determined empirically.

Examination of the writing revealed that the manuscript was written in Tamil. Certain orthographic marks that would normally appear above the letters were positioned adjacent to them, while other diacritical marks were

written in their expected positions. The examination further indicated that a pointed metal stylus had been used to incise the palm leaves and that ink had been applied over the letters to improve their clarity and visibility. Some leaves are crumbling at the edges; such damage may have resulted from inadequate maintenance.

Challenges in the Conservation of Muthaliyan kalveddu Palm-leaf Manuscript

Several studies have highlighted that, in ancient times, natural herbal products such as citronella oil, neem oil, clove oil, sandalwood oil, camphor oil, turmeric, and datura were used for the preservation of palm-leaf manuscripts (Sharma et al., 2018). These herbal products were believed to enhance the flexibility of palm leaves while protecting them from bacteria, mould, and insects (Nishanthi, 2023). Cabral and Rathnabahu (2021) reported best practices for preserving palm-leaf manuscripts in Sri Lankan libraries.

The present study emphasizes the effectiveness of traditional conservation methods in ensuring the longevity of palm leaves, leading to a preference for natural herbal treatment. After assessing various natural herbal oils and extracts, citronella oil (lemongrass oil) was selected for preserving palm-leaf manuscripts housed in the Archives of the Jaffna University Library, including the Muthaliyan kalveddu manuscript. The selection was due to its effectiveness in protecting manuscripts from biodeterioration and its antifungal properties (Gangavarapu & Palwai, 2021; Sahoo, 2016).

In the conservation process, a mixture of lemongrass oil and ethanol, prepared in specific proportions as recommended by the custodians of the Saraswathi Mahal Library, Thanjavur, Tamil Nadu, India, was applied to the palm leaves (Ghosh et al., 2017). Following this treatment, the manuscript was gently wiped with a cotton cloth. The palm-leaf folios were then dried in the shade for two days under controlled conditions, maintaining a temperature between 25°C and 30°C.

In the case of the Muthaliyan kalveddu manuscript, the legibility of the incised text had deteriorated because of fading ink, thereby necessitating a re-inking process. For this purpose, lampblack (a mixture of charcoal and oil) was applied to enhance the clarity of the letters. Upon completion of these treatments, the manuscript was wrapped in saffron-coloured cloth to provide additional protection against insects, heat, and humidity and was subsequently stored in a protective neem-wood box (Figure 5).

Figure 5

Wooden storage cabinets for palm-leaf manuscripts at the Archives, UoJ



Preserving palm-leaf manuscripts is challenging because of their organic nature, which makes them highly vulnerable to damage from insects, pests, fungi, and environmental factors (Figure 6). Insects, termites, and mould can cause irreversible deterioration, compromising or even destroying these valuable records.

Figure 6

Palm-leaf manuscripts damaged by fungi and insects



Zhang et al. (2022) reported that palm-leaf manuscripts are particularly sensitive to fluctuations in temperature, humidity, and light exposure, which can accelerate deterioration in poorly controlled environments and through natural ageing. Improper handling and storage such as direct contact, inadequate shelving, or a lack of protective coverings further contribute to physical damage, including creases, tears, and fading inscriptions.

In addition, the ink used on these manuscripts, often derived from organic dyes, gradually fades because of exposure to air, light, and temperature changes, leading to the loss of significant textual information. Furthermore, leaves sticking together, loss of flexibility, insect-inflicted holes, discolouration, and inadequate infrastructure can further compromise preservation efforts. Existing pest-control and preservation methods may not adequately address these challenges (Chandrasekar, 2013).

Strategies for the Preservation of Muthaliyan kalveddu

The preservation of palm-leaf manuscripts represents a critical responsibility for academic and cultural institutions, as these materials are highly vulnerable to climatic conditions, biological agents, and the effects of handling (Nishanthi & Wijayasundara, 2022). In recognition of these challenges, the study recommends that the Jaffna University Library adopt strategies to safeguard the Muthaliyan kalveddu and similar archival resources.

The establishment of comprehensive preservation policies, procedures, and guidelines is essential to provide a systematic framework for conservation practices. Such policies should address storage conditions, handling protocols, and long-term preservation planning (Cabral & Querner, 2017; Cabral et al., 2018). In addition, specialized training programmes should be offered to library personnel in advanced conservation and preservation techniques. Developing professional expertise would strengthen institutional capacity to manage fragile collections effectively.

Furthermore, the integration of global best practices and emerging technologies is crucial for ensuring sustainable preservation. Practices such as digitization, climate-controlled storage, and the application of environmentally safe conservation treatments have been widely recognized as effective methods for prolonging the life of palm-leaf manuscripts (Li et al., 2025). These approaches not only secure the physical integrity of the documents but also enhance their accessibility for scholarly research and cultural transmission.

Overall, the implementation of these strategies would enable the Jaffna University Library to fulfil its dual mandate of protecting fragile cultural heritage while facilitating academic inquiry and knowledge dissemination for future generations.

Conclusion

This study explored the socio-economic, political, and cultural significance of the Muthaliyan kalveddu palm-leaf manuscript, copied in 1873, and examined the characteristics of the palm leaves used in its preparation. It also highlighted the traditional conservation methods employed by the Jaffna University Library to preserve the manuscript, along with the challenges encountered in the process.

Copied from the original inscription of Ottisuttan Rajasegara Subramaniam Muthaliyar, the Muthaliyan kalveddu provides a historical account of northern Sri Lanka, particularly detailing the Jaffna Kingdom's expansion into Vannipattu (Vanni region). The manuscript further describes the establishment of caste-based enterprises, the construction of water bodies, human migration patterns, and maritime trade through the port of Mannar during the 18th century.

The study emphasizes the critical role of the Jaffna University Library in preserving historical and cultural records through its conservation and archival efforts. During the conservation process, a mixture of lemongrass oil

and ethanol was used to treat the manuscript. However, several challenges were identified, including improper handling, inadequate infrastructure, and biological factors that threaten the longevity of palm-leaf manuscripts.

As custodians of knowledge, librarians bear responsibility for conserving and preserving regional and national information resources for future generations. The reproduction of the Muthaliyan kalveddu palm-leaf manuscript is also recommended to facilitate wider knowledge dissemination.

References

- Abayarathne, A. H. M. H. (2018). Indigenous knowledge depicted in palm leaf manuscripts in Sri Lanka. *Journal of the Faculty of Graduate Studies*, 6, 172–178.
- Agrawal, O. P. (1984). *Conservation of Manuscripts and Paintings of South-east Asia*. Butterworths.
- Alahakoon, C. (2006). Identification of physical problems of major palm leaf manuscripts collections in Sri Lanka. *Journal of University Librarian Association of Sri Lanka*, 10, 54–65.
<https://doi.org/10.4038/jula.v10i0.318>
- Anonymous. (1992). *Vaiyā enum Yālpāṇa nāṭṭu vaḷappam*. Late Vaithianathar Thambu Nallaiya memorial publication.
- Baquee, A., & Raza, M. M. (2019). Preservation conservation and use of manuscripts in Aligarh Muslim University library: A case study. *Collection Management*, 45(3), 273–283.
- Balasooriya, D., Wijesinghe, S., Uluwaduge, I., & Peiris, P. (2021). Ethnobotanics used as an external application to manage wounds in Sri Lankan traditional medicine: A scientific validation of Ola leaf manuscript evidences. *World Journal of Advanced Research and Reviews*, 12(1), 487–497.
- Balloffet, N., & Hille, J. (2005). *Preservation and Conservation*. American Library Association.

- Cabral, L. M. U. P., Ravikumar, M. N., & Ramanan, T. (2018). Developing a strategic program for safeguarding palm-leaf manuscripts in Sri Lanka. In: *IFLA WLIC 2018*. IFLA.
- Cabral, U., & Rathnabahu, R. N. (2021). *Report on the best practices for conservation of Palm-Leaf Manuscripts in Sri Lankan Libraries*. IFLA.
https://cdn.ifla.org/wp-content/uploads/files/assets/pac/Documents/pac_sri_lanka_report_best_practices_for_conservation_of_palm-leaf_manuscripts_.pdf
- Cabral, U. P., & Querner, P. (2017). Four Step Strategy for Implementing IPM in Libraries in Sri Lanka. *Restaurator. International Journal for the Preservation of Library and Archival Material*, 38(4), 383–393.
- Chandrasekar, K. (2013). Public libraries in Jaffna district, Sri Lanka-challenges. *Library Philosophy and Practice*, 957.
<https://digitalcommons.unl.edu/libphilprac/957/>
- Deraniyagala, S. U. (1992). *The Prehistory of Sri Lanka*. Department of Archaeological Survey.
- Eden, P., Bell, N., Dungworth, N., & Matthews, G. (1998). Preservation needs assessment in libraries and archives: piecing together the national jigsaw. *Library management*, 19(4), 228–237.
- Gandhi R, I., & Ponnaivaikko, V. (2017). A Study towards Ancient and Modern Preservation Techniques of Historical Manuscripts against Deterioration. *International Journal of Emerging Trends & Technology in Computer Science (IJETTCS)*, 6(4), 8–10.
<https://www.ijettcs.org/Volume6Issue4/IJETTCS-2017-07-04-9.pdf>.
- Gangavarapu, Y., & Palwai, S. (2021). Antifungal Activity of Lemongrass Oil Against Pathogenic Fungi, *IJHSR*, 34–38.
<https://doi.org/10.36838/v4i1.7>
- Geiger, W. (tr.) (1950). *The Mahavamsa*. Ceylon Government Information Department. (Original work published in 1912).
- Ghosh, R. (2012). Palm leaf manuscripts conservation-A study. *Global*

- Research methodology Journal*, (4), 1–4.
[http://grmgrlaranya.org/Journals/4th%](http://grmgrlaranya.org/Journals/4th%20)
- Ghosh, S., Mahajan, A., & Banerjee, S. (2017). Palm leaf manuscript conservation, the process of seasoning with special reference to Saraswati Mahal library, Tamilnadu in India: some techniques. *International Journal of Information Movement*, 2, 122–128.
- Ilangasinghe, M. (2003). *Literature and the arts, History of Ceylon: Part II*. Department of Education.
- Indrapala, K. (2005). *The Evolution of an Ethnic Identity: The Tamils of Sri Lanka c. 300 BCE to c. 1200 CE*. Vijitha Yapa Publications.
- Kim, Y. H., Choi, K. H., Hong, J. Y., Lee, J. M., Kim, S. J., Jo, C. W., & Jeong, S. Y. (2020). Investigation of microorganisms deteriorating ancient Ola leaf manuscripts. *Restaurator. International Journal for the Preservation of Library and Archival Material*, 41(3), 119–129.
- Kumar, D. U., Sreekumar, G., & Athvankar, U. A. (2009). Traditional writing system in southern India—palm leaf manuscripts. *Design Thoughts*, 7, 2–7.
- Lagamuva, A. (2006). *Sri Lankave Puskola Poth Lekhana Kalava*. Department of Cultural Affairs.
- Li, Y., Yu, H., Zhang, J., Huang, Y., Zhou, Y., Yuan, Y., Liu, P., Yang, G., & Yang, Y. (2025). Conservation Strategies for Palm-Leaf Manuscripts from Yunnan, China. *Restaurator. International Journal for the Preservation of Library and Archival Material*, 46(2), 145–170.
- Mahoney, J. (2004). Comparative-historical methodology. *Annual Review of Sociology*, 30(1), 81–101.
- Malalgoda, K. (1976). *Buddhism in Sinhalese society, 1750–1900: a study of religious revival and change*. University of California Press.
- Nadarajah, S. (1980). *Vaiyapatal of Vaiyapuri Aiyar*. Colombo Tamil Sankam.
- Nishanthi, M. (2023). Traditional conservation methods used to preserve Indian palm leaf manuscripts: A literature review. In: *Proceeding of the*

- first Desk Research Conference of the Library of the University of Kelaniya (DRC 2023)*. University of Kelaniya, Sri Lanka.
- Nishanthi, M., & Wijayasundara, N. D. (2022). Preservation and conservation of palm leaf manuscripts at the library of University of Sri Jayewardenepura. *Vidyodaya Journal of Humanities and Social Sciences*, 7(02).
- Pathmanathan, S. (2002). *Early History of Jaffna*. Kumaran Book House.
- Ragupathy, P. (1987). *Early Settlements in Jaffna: An Archaeological Survey*. University of Madras.
- Sah, A. (2002). Palm leaf manuscripts of the world: material, technology and conservation, *Studies in Conservation*, 47(1), 15–24.
<https://doi.org/10.1179/sic.2002.47.Supplement-1.15>.
- Sahoo, J. (2016). A Selective Review of Scholarly Communications on Palm Leaf Manuscripts. *Library Philosophy and Practice (e-journal)*, 1397.
<http://digitalcommons.unl.edu/libphilprac/1397>.
- Sahoo, J., & Mohanty, B. (2004). Indigenous methods of preserving manuscripts: An overview. *The Orissa Historical Research Journal*, 47(3), 28–32.
- Selvarajah, N. (2003). *Rising from the Ashes-Tragic Episode of the Jaffna Library*. Thesam Publications.
- Sharma, D., Singh, M. R., & Dighe, B. (2018). Chromatographic study on traditional natural preservatives used for palm leaf manuscripts in India. *Restaurator. International Journal for the Preservation of Library and Archival Material*, 39(4), 249–264.
- Sivalingarajah, S. (2022). *Yaazhppaanaththil Achchukkalai - Thodakkamum Thodarchchiyum*. National College of Education.
- Sivashanmugarajah, S. (2013). Eezhathu Siththa Maruththuva Eattuchchuvaadigalai Paadhugaathalum Aavanappaduththalam. In: Noolaham Foundation (Ed.). *Tamil Aavanam Maanadu 2013: Aayvu Katturaik Kovai* (pp. 38–46). Noolaham Foundation publication.

- Suryawanshi, D. G., Nair, M. V., & Sinha, P. M. (1992). Improving the flexibility of palm leaf. *Restaurator. International Journal for the Preservation of Library and Archival Material*, 13(1), 37–46.
- Udayakumar, M., Ayyanar, M., & Sekar, T. (2009). Indigenous knowledge on medicinal plants among the local people of Puducherry region (union territory), India. *Ethnobotanical Leaflets*, 2009(11), 7.
- Veluppillai, A. (1995). *Studies in the History of Tamil Literature*. University of Madras.
- Wijenayaka, N. K.S. (1995). *Detailed History of Ceylon*. Godage.
- Wijesundara, C., Sugimoto, S., Narayan, B., & Tuamsuk, K. (2016). Bringing cultural heritage information from developing regions to the global information space as linked open data: an exploratory metadata aggregation model for Sri Lankan heritage and its extension. In: *Proceedings of 7th Asia-Pacific Conference on Library and Information Education and Practice (A-LIEP 2016)* (pp. 117–132). School of Information Management, Nanjing University.
- Wiland, J., Brown, R., Fuller, L., Havelock, L., Johnson, J., Kenn, D., ... & Snowdon, J. (2022). A literature review of palm leaf manuscript conservation—Part 1: A historic overview, leaf preparation, materials and media, palm leaf manuscripts at the British Library and the common types of damage. *Journal of the Institute of Conservation*, 45(3), 236–259.
- Wilson, E. B. & Rice, J. M. (2019). Palm Leaf Manuscripts in South Asia. *School of Information Studies - Post-doc and Student Scholarship*. 8. <https://surface.syr.edu/ischoolstudents/8>.
- Zhang, D. Y., Yang, J. X., Liu, E. J., Hu, R. Z., Yao, X. H., Chen, T., ... & Fu, Y. J. (2022). Soft and elastic silver nanoparticle-cellulose sponge as fresh-keeping packaging to protect strawberries from physical damage and microbial invasion. *International Journal of Biological Macromolecules*, 211, 470–480.