Summary

The Manuscripts Archive Chunnakam Public Library 2012 project was carried out by Noolaham Foundation in 2012 to digitize and archive the collection of palm-leaf manuscripts and archaic coins in the Chunnakam Public Library. Digitization of palm leafs and ancient coins is a first-of-its-kind activity undertaken by NF. To archive as electronic document, maximize the usage of palm-leaf manuscripts, provide access to them freely and enhance the study of ancient numismatics through online access of digitized documents, and to understand and depict the history and promote the prestige of the Tamil state are the objectives of the project.

The project was completed by December 2012. Through this project ten manuscript volumes and seventy five ancient coins were digitized and will be launched publicly at www.noolaham.org. A web portal will also be created for easy access and could be downloaded in the user friendly interface. These precious collections are related to the Tamil speaking communities of Sri Lanka. These palm leafs were the storage medium for ancient literature, philosophy and science containing valuable knowledge such as medicine, Tamil literature, stories, paintings, family Notes, family Accounts, grammar books, astrology, septic breakdown remedies, animal remedies, Vegan books and thesaurus. The digital preservation of these manuscripts is one of the more respectable achievements of the project in the context of cultural preservation. This project was a successful initiative and received special appreciation from librarians and scholars.

Introduction and Background

In the ancient period, scholars transmitted their wisdom and knowledge through their pupils orally for many years and afterwards started copying the knowledge onto materials such as stones, wood, metal etc. But the area of scribing was very small. The scholars at that time failed to record their knowledge exhaustively due to the absence of a proper recording
media until the usage of palm leaves arrived. But it was a great challenge to them to preserve the knowledge recorded on palm leaves from deterioration. Jaffna was the land of scholars, teaching and studies and had a rich tradition in preserving ancient knowledge in the form of palm leaves. Even though a large number of manuscripts were perished irrecoverably, and we have lost many of this kind over the past years, still a large number of palm leaves manuscripts are preserved without any damage. Now it is the duty of the present day information scientists to find out an acceptable solution to the preservation of the contents in the palm leaf manuscripts and other intellectual properties.

The growing demand for digital access is having a profound impact on the roles of institutions such as museums and special collections libraries. These institutions are repositories of objects of both historical and cultural significance that cannot be widely disseminated to the public through circulation in the way that regular library holdings—such as books, journals, and maps—are. Because the ola leafs and coins are deemed by museum and library officials to be too fragile to handle, and thus never used for scholarly activities such as research or teaching. Among them in Jaffna the Chunnakam public library serves as the caretaker of the intellectual content of the collections.

Preservation of palm leaves manuscript was the biggest challenge faced by its custodians all the times. From the time when the palm leaves were prepared and used for recording information, there were several techniques used for preserving the material. From the ancient period the common accepted method was using herbal extracts to prevent natural decay. Later on fumigation methods were followed and people started using chemical methods in the modern world. Above all, digitization is accepted as the best practice for preserving the contents of the manuscripts. As a result, the available palm leaf manuscripts and ancient coins at libraries, museums and special collections have to be digitized. Then the libraries could provide access to their collection. Noolaham Foundation’s archive project identifies, digitizes and makes these works accessible to the wider scholarly community and the public.

**Objectives and Achievements**

This project was conducted under Noolaham Foundation’s objective of engaging in preservation and digital archiving of manuscripts and other handmade documents related to Sri Lankan Tamil speaking communities. 10 volumes (1350 Images) of ola leaf manuscripts and 75 ancient coins (225 images) were digitized. They are rare and endangered documents.

The collections were digitized according to generally accepted professional archival standards on high resolution, so that scholars can access high resolution images of manuscript of ola leafs and ancient coins which yield greater detail than can be seen with the naked eye. The scanning was conducted using the scanner model provided by EAP 458 (Endangered Archive Program of British Library) team.

**Constraints / Challenges:**

- During the project period Noolaham Foundation observed that there were not many persons who could read the native script which needs to be researched. We could not
find many people who are trained in the technique of conservation of palm-leaf manuscripts. This was true not only for Jaffna but for all other parts of Sri Lanka. Thus to get basic information (metadata information), rights about all collections seemed to be a hard job.

- There are some economic factors necessitating the digitization of palm leaves such as when storing the digital copies occupied large disk space compared to print publication archives.

- Noolaham Foundation started the process of digital archiving without finding good answers to such questions like whether to archive all the available manuscripts, questions about the property right, data portability, inter-operability, platform independency, technological obsolescence, storage media to be used, etc. But NF believes whatever be the questions and threats, digital archiving is the commonly accepted and immediate remedy in front of the information seekers and information scientists to preserve the contents in palm leaves.

- During the project climatic threats include severe variation between the wet and dry seasons and related challenges of insects, dust, humidity and variations in temperature. Measures are being taken to offset these factors, including attention to cleaning, but they still remain a significant challenge and they must be handled with the utmost care.

Suggestions and Recommendations:

- Adequate online metadata is an essential for good quality access to digitized versions of material. Minimal description is far better than none. So basic information about all collections should be made available online as quickly as possible.

- Special collections professionals should take a lead in researching and developing new forms of access and digital storage, and finding opportunities to apply them to special collections. The relevant libraries and other repositories need to make the necessary investment in technology to advance the creation of tools, and support their staff in taking the lead.

- Still there are a large number of palm leaves manuscripts in many parts of Jaffna that remain un-identified. The findings can be practically applied to solve the existing problems in creating a digital library or a consortia based sharing resources using the digital image thus created and also to find out the possibility of bringing the material under a common roof.

- The identified and available palm leaf manuscripts need to be published in modern media. There needs to be a basic system to recollect these misplaced, scattered and hidden materials in addition to a space, where such materials could be made available for researchers and inventors.

- Noolaham Foundation will have to provide awareness creation through continuous lobbying to facilitate manuscripts holders to continuously provide support in the collection of documents, to obtain permission and approval from respective
contributors, and to seek help from all relevant stakeholders such as scholars to
digitalize and archive relevant documents

- In Jaffna palm leaf manuscripts have not been explored and researched, so all the
  repositories have to do something by increasing their trained staff, fund allocation, and
  enhance related studies and then the problems could be solved.
- Digitizing palm leaf documents has a large set of challenges associated with it. They
  need to be handled with enormous care as they are delicate and irreplaceable. As of
  now, the palm leaves are being photographed one at a time, but better methods have to
  be invented to improve the rate and quality of digitization. Better scanners have to be
designed for this purpose, which can take high definition colour images of the palm
leaves while causing no damage to the bundle. The processing of the palm leaf images
needs special features and the image processing algorithms must be well tuned to
handle tear, cut and background features.

Acknowledgments
Noolaham Foundation takes immense pleasure in expressing its gratitude to Chunnakam
public library staff and Mr. S. Balamurali who provided the ancient coins for this project. NF
would like to acknowledge its volunteers for their valuable work during this project and for
their dedication towards all the activities of the Foundation.

Relevant Attachment:

*Sample of a digitized palm-leaf manuscript*