National Seminar on Heritage Tourism in Thalassery. 20th March 2008. Jointly organized by Malabar Heritage Society and Cosmopolitan Club, Thalassery.

APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR CONSERVATION OF CULTURAL HERITAGE OF THALASSERI

Dr. R. Raman Nair

University Librarian Mahatma Gandhi University, Kottayam 686560, India ramannair.r@gmail.com

ABSTRACT

The universe is an artifact, the work of the cosmic architect. Culture is also an artifact, the product of human nature and thought. Items of cultural heritage include the ecosystem, the conditioned natural resources, its inhabitants, their creations like text, image, sound, performing arts, sculptures, buildings, ornaments, utensils and the like and well as the knowledge related to them. Most of them are built up or created from the sweat and blood of the common people. So the heritage items are the common property of the whole population the region. It is the greedy and wealthy minority who in the name of industrialization and development, which is beneficial only to them, are destroying the heritage and from this what the majority will get is only one time return as employment for a short period. But the majority is selling the wealth of all their future generations, their life support systems. So heritage conservation is a common man's requirement. The paper examines how ICT can be utilized to document, watch and manage, and create awareness on heritage items including natural resource, knowledge, text and a wide varieties of artifacts of great value that help to sustain life.

The universe is an artifact, the work of the cosmic architect. Culture is also an artifact, the product of human nature and thought. Both are strongly bonded to each other. ICT based Heritage archives treasure wide varieties of artifacts that help to construct the tradition spanning many generations, making it accessible for research and dissemination through information systems. Conservation of cultural heritage of a region like Thalassri include protection, strengthening and conservation of original environment including the trees, lakes, hills buildings their surroundings, the text, paintings, music, dance and every thing. It does not mean that no development should be made there. The only concern is that development should blend with environment and already

existing human creations. We have no right to destroy an environment, a thing that was originally there or created by our predecessors, if they have no negative impact on society, and if we are not capable to rebuild them as they are; in future. The fundamental insight is that the universe is the original, the sacred artifact.

Development is not Destruction

Ours was the home of a great civilization many aspects of which are still vibrant. It gives foremost priority to the development of individual and society. Our cultural heritage was fostered and sustained through commitment and affirmation of the principle of interdependence, interrelationship and the co existence of different racial, linguistic and religious communities. So the heritage items of a locality are the common property of the people there in total belonging to all communities, religions, and economic and social levels.

From ancient times to the present from the great cities to the humblest villages, the arts have been part and parcel of the functionality of life and integral to ordinary work. The extra ordinary monuments and products of other arts are mainly the work of ordinary people, largely in anonymity. The people from lower strata of society develop even the sustainable science and technology and major part of knowledge. They were not the prerogative of minority elite. The makers were the ordinary underprivileged. The art form of Theyyam, and the science of Vasthu, as well as ecological thoughts of Kallen Pokkudan are best examples. It is the sweat of our ordinary people that bind the heritage structures and elite have no right to dismantle them on any account.

ICT for Heritage Conservation

Information and Communication Technologies can help to save our heritage. Like environmental movements for saving endangered species of flora and fauna, there is an urgent need for saving the endangered heritage items too. Of this in the text sub-domain, a number of books, paper manuscripts, palm leaves, stone inscriptions and other such materials stand the risk of loss. Old paintings sculptures and buildings are getting degraded every day. Traditional folklore items are vanishing without any one taking interest in practicing and sustaining the art form in these days. Music is also meeting a similar fate. Even ancient life styles are getting wiped out. Life support heritage systems like traditional medicine have already lost considerable knowledge. All these have one thing in common - along with the loss of physical material heritage, the knowledge content in them also are lost. In the case of the material heritage, preservation technology has been applied for a long time. But ICT based efforts concentrating on the preservation of content as well as digital replica of environment and incidents are relatively new. ICT can help to document natural resources, heritage buildings; sites etc create awareness about them as well as help the technical experts in managing and conserving them.

Looking from the informatics angle, expressions of cultural heritage fall into texts, images, video and sound categories. ICT can be used to conserve all these items. In a cultural archives material relating to different varieties in the original and in the other forms of copies are collected, classified, catalogued, preserved, displayed and made available for use. Such archives can be enriched by personal collections and cultural exchange. These archival collections can be digitized conserved, documented and made available for the purpose of research and reference. The materials that can be collected can be classified into a few categories as listed below. Details of selected sample items also will be provided later.

Text: The text information may be palm leaf manuscripts, stone tablets, handwritten paper manuscripts, old printed records, etc. Some existing items that can be mentioned are the approximately 3500 documents on trade, commerce etc related to the British period, and various reports and manuals available in Revenue Reference Library, Thalasseri Records collected by Hermann Gundert, Old and antique books available at Brennen College, Bishop's, House, Trade records with Keyis Family, private collections of different families etc.

Architecture, Sculpture and other Artifacts: This group will consist of Sculptures, models, plans, drawings and other photographs of heritage buildings, town plans, maps, information on earlier building materials etc. Household articles, ornaments etc. Some buildings that can be sited are Thalasseri Fort, Collectors Building, British Residents house later purchased by Moosa Family, Ayisha Manzil built in 1862, Juma Masjid, Brennen (Indo Anglican) church, Cricket Monuments, Jagannath Temple, Sri RamaSwami Temple also known as Brass Pagoda, Odathil Palli, Thodikkulam Temple, Cosmopolitan Club, Pandikasalas mainly of the Keyis Family, Residential houses of many Muslim, Christian and Hindu families, Cemeteries near the fort etc. Then there are ornaments for the neck, like kallumala, kannimala, alochana mala, padimala etc, bangles like kannadi vala, parangivala, karivala etc, earrings like kathon, murthilattom etc, waist ornaments like aranjanam, leg ornamens like padasaram, hair ornaments like mudichakram are becoming extinct.

Images: One good example the rare mural paintings of Thodikkulam Temple. There are such paintings in many Hindu and Christian places of worship in and around Thalasseri. Many churches and ancient houses have glass paintings in their window and other openings. Still photographs of various aspects related to earlier Thalassery and Malabar exist with people of this town as well as with newspapers, and families in Western countries from where their ancestors came and worked here under foreign governments or as missionaries. Photographs of important personalities connected to Thalassery, missionaries, educationists, artists, leaders of the national movements etc can be collected. Brennen who has contributed much for the educational and social development of this region lived and died in this land. A search for his photograph, which I know Prof. Richard Hay and others have attempted a decade back, has not yet succeeded. Like this I don't know if the photographs of Keeleri Kunjikannan the grand master of the art and science of circus and similar other people are available in any institution in Thalassery or not. Even now it is not very late to attempt a collection and conservation of such items using ICT

Music: Different regions of Malabar and Thalassery have their own traditional musical instruments, and music. Now the technology enables recording and conservation of such arts using CT.

Dance: Dance forms prevalent in Thalasseri and other parts of Malabar can be documented using multimedia technology. Most of them are ritualistic art forms and are not performed for entertainment or taught with that motive. The knowledge practicing them is inherited only by those belonging to some families or castes and so they will immediately become extinct as in these days of urbanization new members are not prepared to learn and practice them for it moulds their way of life also. Of this activities like digitally archiving available videos on such art forms, filming items still performed and arraigning performances of items becoming extinct, in their original settings and documenting them using multimedia technology can be undertaken.

Events: Events: Various events that are specialty of the region can be documented using Multimedia technology and preserved for the future experience. Festivals, like those at Andalurkavu, ST Mary's Church, rituals and rites in temples or in families like marriages etc come under this category. Heritage Archives on personalities, art forms, or a specific festival or rituals each covering one or more of the categories mentioned above can be developed in Thalassery. Some sample heritage archives and museums that can established are suggested below.

Environment: Conservation of heritage of an area includes the conservation of the ecosystem specific to that area also. There are many areas on the sea cost as well as small lakes and marshy areas that need to be conserved or regained from recent degradation that has happened. Such places can be environmentally developed and used as places of attraction for tourists. One place near Thalasseri that has possibilities is Chirakkal Chira. ICT can be applied in documenting as well as planning the conservation and sustainable development of a region. Many software and systems for Remote Sensing, geographical information systems etc are available for this purpose. UNESC has also developed one software named IDRISI for the purpose. Information on the regions environment and eco system and life and work of people who worked for conservation that like Kallen Pookudan.

Sample Sites and Suggestions

Ancharakkandy- A Lost Heritage and a Warning: It is one of the best examples from Thalassery for Architectural heritage sites that may vanish in a single night. One of the most important heritage areas testifying the history of more than a century's industrial and commercial activity in North Kerala.

Thalassery Fort: Even though the fort is declared as an archeological monument many monuments situated around it of the same importance have not been identifies and listed. They are in highly dilapidated condition Ministry of Tourism and Culture can consider developing the areas with all the old and antique structures into a heritage site with a Good Guest House of International standard. The collector's house can be conserved and maintained as an International Guest House under the Heritage Tourism Project. A Virtual Thalassery can be developed using ICT.

Gundert Bungalow and Archives

Another site is the Gundert Bungalow. It is understood that many attempts have already been made to remove that heritage building for some business complex. It is one of the rare and beautiful specimens of Indo Anglican Architecture; two centuries old. Hermann Gundert lived and worked here from 1839-1859. The life of Gundert is inseparably connected to the growth of Malayalam language.

It is here that Gundert established first Malayalam printing press, he prepared first Malayalam-English Dictionary, published the first Malayalam Newspaper, first Malayalam Magazine- Rajyasamacharam, and wrote 24 books and edited or compiled more than a hundred works on Kerala's history, language, literature, religion etc which still remains the most authentic source for our researchers. The first textile mill and many such things have also originated in this building. His contribution to the knowledge related to our region, is many times more in guality and guantity than that which has been produced by any of the universities or other institutions in Kerala throughout their existence spending crores of rupees. Any remnants of his work in that house have been cleared to make the dismantling of the building easy and speedy. In one fine morning the building or even the hill famous as Illikkunnu will not be there and our conservation activists will surely not get a chance to interfere very much like what happened in the case of Ancharakkandi. Even though we have made memorials and museums to many who have not even contributed 10% of what Gundert contributed to Malayalam, and with all legislation and norms that can support the declaration of Gundert Bungalow as an archeological site, why still we are hesitating. Is it due to the power of the so-called land mafia? The structure still stands due to the efforts of a few people acting like one-man armies who interfere by creating timely public awareness. But for how long it will succeed. Some huge concrete structure will before long dominate that serene place and we will forget about the great sage and his place of work. Thalassery can consider converting it into a Museum, Archive and Centre for Indological studies in remembrance of Hermann Gundert. An international guesthouse for scholars also can be constructed in that campus without disturbing the visual aspect of the Bungalow and also not disturbing the environment. It can attract scholars from universities and research institutes worldwide.

Gundert's books and many of the items related to Kerala; he collected for his research is still preserved in Tubingen University. They contain Malayalam books printed during nineteenth century at the presses Chapitham and Vidyarthisanthanam Achiukudam in Thalassery. That Foreign University is proud of possessing them but we are not. It is only appropriate that Kerala should at least prepare digital copies of that collection and make it available at Gundert Museum and archives that can be established at Gundert Bungalow.

Edward Brennen Archives

Brennen is one whose work has greatly influenced the social, economic and political development of Thalassery. His savings of a lifetime as per his will were allowed for starting an educational institution to give the children of all castes, creeds and color a sound English Education It has grown to the present Brennen College. Had it not been for him a large majority of people in the region would not have entered the portals of higher education. He also contributed for construction of the Anglican Church, ICT for Conservation of Cultural Heritage of Thalassery

Thalassery Poor Fund', and even fund for Government hospital building came from his savings. Conserving items related to Brennen is important.

Kallen Pokkudan

Even information on people of this generation contributing to development can be archived. One important example is the legendary Kallen Pokkudan, a name now synonymous with mangrove conservation all over India. Within the tremendous boon of science, technology medicine etc there is a gradual realization all over the world that still there are so much to learn from the people who are rooted with the nature and whose sense of collectivism, respect and reciprocity with their surrounding ecosystem is not yet driven by market forces or by the narrow sense of individualism and instant culture under the fashionable wave of globalization.

There are also many other personalities like O Chandhu Menon, Keeleri Kunjikkannan, and Champadan Vijayan, on whom archives or museums can be developed.

In Thalassery there are numerous heritage items, belonging to text, image, sound, performing arts, sculptures, buildings, etc most of them built up or created from the sweat and blood of the common people of the region. The continuous vandalism of the greedy and wealthy minority who belongs to the economically and socially higher strata of society can remove them in no time. What exist, exist due to mere chance. It needs to be prevented by the people because it is something indirectly related to sustenance of the common people of the region. In the name of industrialization, development of trade and commerce, providing accommodation to the affluent, which is also a business, all the remaining symbols of people's culture are getting distributed for the benefit of a wealthy minority. The poor man's life support system, water, air and agricultural land all destroyed. So preserving culture and heritage as well as the environment is not something related to culture for its own sake or the pleasure of the affluent minority. It is related to preserving the environment that could sustain the life of the majority of people of the region. It is our need, our right.

ICT can be used to primarily conserve the knowledge content of all the abovementioned heritage items. It can also create and maintain virtual replicas of everything of current or past with their environments. It can also be used for heritage items management.

Digital Archives and Museums

The progress achieved in the digital technology and secondary storage media like high capacity hard disks and compact discs facilitates durable storage of information of all kinds. The hypertext and hypermedia features enables integrating text with graphics, sound, video and animation, which can be used in an interactive manner. In a networked environment the digitized information can be transferred regardless of space and time. Digitized information lasts as it is for a long period.

Digital archives, or museums are not mere mechanical store of digitized content or images or replicas of antique materials. It is a fusion of resources in a variety of forms, including services and people supporting the entire life cycle of knowledge. A digital archive or Virtual museum gives a hundred times more useful information and entertainment by enabling the jump from one exhibit to related ones, and from one media to another at any point in the sequence instead of sequential journeys inside the traditional museum. At the same time they share common goals with their traditional counterparts.

Consider a virtual Museum covering Thalassery Fort. The user distant in space feels like entering its gateway, move around the exhibits inside and standing in front of an exhibit in which he is interested calls for and uses information on a specific item as text, graphics, sound files, posters, video or maps. The same method can be used for even whole Thalassery also with its heritage sites.

Digital Archiving Packages

Keeping the above goals in mind UNESCO and similar organizations working on conservation of heritage have developed various open source software like GenISIS, Greenstone, DSpace and Nitya to achieve selective access to information from digitally organized text, graphics, sound and video.

In Nitya any piece of information can be searched out from a huge store of information within seconds. Documents like palm leaf manuscripts, handwritten paper records, old books, sound files, video files etc. are first converted to required digital formats. A database is created for the digital copies using special DBMS.

In digital archiving systems Index will contain searchable terms arranged under different categories such as subject, name of creator or producer, author, etc. Number of categories depends on the type and characteristics of the collection. For example, ICT for Conservation of Cultural Heritage of Thalassery 8

categories of an archive of palm leaf manuscripts may be author, title, leaf number, first line, subject, etc, where as categories of an art collection can be artist, media, title of picture, collection number, or owner etc. Search can be done by typing search term or selecting them from the Index. Then terms are transferred to `Query' area. Queries are submitted to search and results are exhibited in the hit area and then in Reference area exhibiting a record with details of the item along with an abstract of content of the file from which user can decide if he is to view the file which may be manuscript, sound or video.

All that we specify as heritage including the environment are interrelated directly and indirectly. Destruction of heritage items has close relation to indiscriminate exploitation of natural resources and systems by a greedy minority for their selfish motives in the name of development. There is no doubt that through such appropriation of natural resources a few power full elites have accumulated wealth whereas even today the majority of people are striving for their livelihoods upholding the principle of sustainable resource use. So heritage conservation is in truth a requirement of the weaker sections of the society and a people's movement only can achieve success and thereby a sustainable development.

References

Hussein K H, Raman Nair R, and Raveendran Asari, K. Importance of Search and Retrieval in CD-ROM Full Text Publishing: Experiments Using PDF Documents and 'Nitya' Archival System. Information Studies, Vol. 8, N o. 3, July 2002.

Kapila Vatsyayan. Development, Cultural Expression and the arts. Meeting of the World Commission on Culture and Development established by UNESCO. Manila, UNESCO, November 1994.

Kothari, A. Communities and conservation: natural resource management in South and Central Asia. New Delhi, UNESCO-Sage, 1998.

Raman Nair, R. Charithrathinte Uravakalkku Samrakshanam (Conservation of Sources of History). Veekshanam, 19 July 1987.

Raman Nair, R. Digital archiving of manuscripts and other heritage items for conservation and information retrieval. Proceedings of the All India oriental Conference (42nd Session), 4th to 6th November 2004, Varanasi, Sampurnanand Sanskrit University, 2004.

Raman Nair, R. Microfilimum Granthasamrakshanavum (Microfilm for Conservation of Documents). Vijnanakairali 29(7), July 1998.

Ramesh C Gaur. Digitization and preservation of archival material: Experiences at IGNCA. In proceedings of the national workshop on Preserving Our Scientific heritage. 21-22 January 2008. Bangalor, IIAS, 2008.

Shaji, K A. Mangrove Man. Tehelka, 15 March 2008.

Sulochana Devi, L. Information System for Research in Sanskrit and Indology. In the Proceedings of the National conference on Vedic Sciences. Madras, JGRCVS, 1997.