Maldivian Seafaring in the Pre-Portuguese Period

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Abstract

The settlers of the Maldives came from many lands, but in the battle for survival in difficult conditions, they melded together into one nation. In a country that is more sea than land, they learned to live in harmony with the ocean, developing a unique culture suitable to their environment. Oral traditions, evidence from archaeological sites, some available historical documents and foreign notices, serve to prove that in the past they were one of the most nautical of all the countries on the Indian Ocean rim. They learned to use the monsoon winds to their advantage during journeys to distant places. By the fourth century of the first millennium, they had navigational knowledge and sea-going craft which enabled them to undertake long voyages The Maldivians discovered the money cowrie in their islands and used it for trade with neighbouring countries. Fishing was the main economic activity and the chief exports consisted of cowries, coir rope, fish, tortoise shell and ambergris. Boat-building became an art and a skill that earned them the attention of other countries, and a craft was developed that was unique to Maldives and yet accommodated useful features from other ship-building lands. The sea-going vessels were versatile enough to be adapted to all necessary conditions.

The purpose of this paper is to trace the tradition of Maldivian seafaring, up to the time of the arrival of the Portuguese in the early sixteenth century. With this objective in mind, we shall be looking at information from archaeological findings, oral traditions and historical records where these exist, and also from present-day Maldivian writers. Relevant foreign notices studied include very early records written by Amminanus Marcellinus, Ptolemy and an unknown Chinese author from the Chinese T'ang Dynasty period. Also included in this paper is material from Chinese author Ma Hwan who came to Maldives in 1414 with the fleet of Chinese Admiral Cheng Ho, and writings of Persian and Arab authors Sulaiman, Abu Zaid, Masudi, Idrisi and some others whose records contain relevant information on Maldives.

Introduction

Lying in a north-south direction in the central area of the Indian Ocean, Maldives comprises of approximately 1192 low lying islands. Of these, 199 islands are inhabited, the total population being just under 300,000. The islands are of an ephemeral nature, some smaller islands disappear while new islands slowly form. This constituted one of the wonders of these islands for early seafarers in the Indian Ocean. These islands are grouped into twenty-six natural atolls, within which they are protected by surrounding coral reefs (Fig. 1).

Maldives has always been one of the most nautical nations of the Indian Ocean region. Over ninety-eight percent of the country consists of the sea; therefore internal travel between the atolls as well as voyages outside the country required the people to be seafarers. This factor is in evidence, throughout the known history of Maldives.

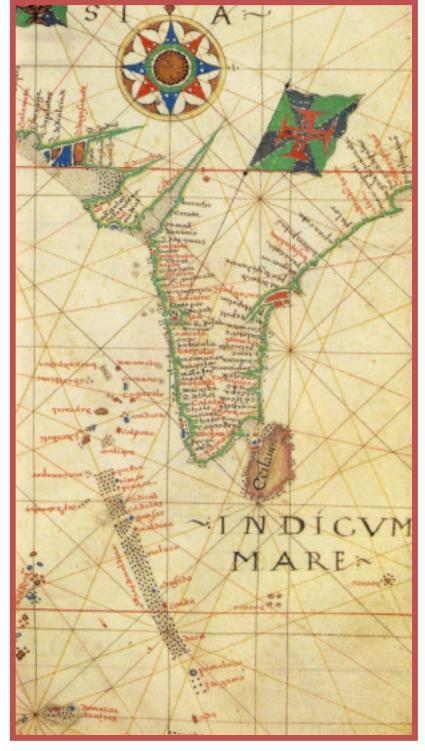


Figure 1. Indian Ocean. *Atlas Universal* by Anonymous and Bartolomeu Velho, circa. 1560. The Huntington Library, San Marino (California).

According to history and tradition, Maldives has been peopled for over 2500 years, tradition stating that the first settlers arrived from the Indian subcontinent from a place called Kalibangan (Shihabuddine c.1588-1658). These first settlers would have arrived by sea, beginning the nautical culture of Maldives that continues to this day. If they did not understand the movements of the seas when they first arrived, they soon learned and became expert navigators. They learned the vagaries

of the ocean and its currents, and the north-east and south-west monsoons that were a major influence on travel, and therefore on their lives. The sea-going craft called *dhoani* was their most important invention, as the livelihood of the far-flung island communities depended on these vessels. The population of each island used them for their fishing and internal travel, as well as communication with other island communities. The north-east monsoon brought trading vessels from the eastern board of the Indian Ocean, and they stayed in the islands until the arrival of favourable winds from the south-east monsoon to return to their home countries. During the south-west monsoon, trading ships arrived from the eastern littoral regions of Africa and from Arabia and Persia on their way to the east, following the spice trade. Maldives became a convenient stop on these voyages for replenishing water and food, and as a safe harbour during rough weather.

Maldivian seafarers learned navigating skills and the use of navigating instruments and used them on their long voyages. Early recorded journeys included a visit to Rome to the court of Emperor Julian and three centuries later, two visits to China carrying gifts to the Chinese Emperor. Written records also bear witness to regular voyages to Aceh during the appropriate monsoons (Thaajuddheen et al 1981).

Many of the early settlers may have come from agricultural lands, but the soil in Maldives was not suitable for farming and with so much of ocean around, fishing became the main occupation of these people. Along with the trade in coir, cowries and ambergris, fishing remained the chief economic activity and mainstay of the country for many centuries. The boats built by Maldivians were modified for better use; adaptations were made using ideas from some of the foreign vessels that called at Maldives. The seventeenth and eighteenth centuries were economically a very profitable period for Maldives. In the latter half of the nineteenth century, when Bengal finally abandoned the cowrie currency, Maldives faced grave economic difficulties, having to depend solely on the export of fish to bring in much needed foreign exchange.

The introduction of tourism in 1972 saw the beginning of a new industry which would bring economic benefits to the country and lead to less dependence on the export of fish and fish products. The nautical traditions of Maldives fitted perfectly into this new industry, to fulfill the needs of tourists who were fascinated by the new destination of Maldives, with its sun, sea and sand. Boats were needed for the transfer of passengers, for pleasure cruises, for fishing and camping trips. A very important effect of the new tourism industry was that it opened up the islands to the rest of the world, many countries of which had until then been unaware of Maldives' existence.

Historical Background

According to oral tradition, the first settlers were a tribe called *Dheyvis* from *Kalibangan* in the Indian subcontinent. These people were nature-worshippers and their leader was the head of the group who addressed him as *Sawami*. After the *Dheyvis*, other tribes including *Redis* and *Kunbis* and later, *Sarandivis* arrived. *Aryas* came to Maldives in c. 500 B.C. according to the tradition. People from South India settled in some of the northern atolls. At this time the Hindu religion was also introduced to the country. The tradition of having a ruling monarch also began around this time. The first king is said to have been a prince from *Kalinga* expelled from his country by his father who is said to have been a king by the name of *Brahmadhittiya*. The story goes on to say that at the time of Emperor As'oka, in the second century B.C., some people came from *Bairat* in India, bringing the Buddhist faith to Maldives (Shihabuddhine c.1588-1658).

The language of the Maldivian people was an Indic idiom called *Dhivehi*, with its own script, which developed over many centuries. Buddhism prevailed in Maldives for more than a thousand years, the evidence of which are the numerous ruins of Buddhist structures that still exist in many of the atolls (Bell 1940, Mikkelsen 2000). The ninth and tenth century artifacts found in some islands and in Male' the capital, show that the *Vajrayana* sect of Buddhism had a place in Maldives in the latter centuries of the Buddhist period, before Maldives embraced Islam in 1153 A.D.

During the early period of Maldivian history, Maldives consisted of fourteen atolls. The northernmost atoll was Minicoy, called *Maliku Atholhu*. The country was said to consist of *Malikadduu demedhu*; meaning "the islands between Maliku and Addu Atolls". The cultural and historical affinities can be seen in the language, oral traditions, customs and most of all from the close relationships and inter-marriages between families of Minicoy islanders and Maldivians. Between the tenth and twelfth centuries A.D., the Chola King Rajaraja I captured the two northernmost atolls of Maldives, *Maliku Atoll* (Minicoy) and *Thiladhummathi*. These two atolls remained under the Cholas until 1121 when King *Mahaabarana* of the *Theemuge* dynasty defeated the Cholas, and brought them under Maldivian sovereignty (Shihabuddine c. 1588-1658). According to present information, Minicoy remained part of Maldives from then on until the early sixteenth century, when the island passed into the hands of the ruler of Cannannore.

Maldives was a monarchy ruled by dynasties of kings and queens over a long unbroken period of time, beginning from c. 1500 B.C. until the Portuguese occupation in the sixteenth century. The Portuguese conquest of Maldives took place at a time when there was bitter rivalry and infighting within the Maldivian royal family. When the reigning sultan Hassan IX fled to Cochin in 1551 and sought the help of the Portuguese to regain his throne, it was an opportune moment for them to step in. After some failed attempts at capturing the capital of Male', they led a successful attack in 1558, killing the reigning Sultan Ali VI in battle. The Portuguese ruled Maldives for fifteen years, until they were defeated by *Muhammad Thakurufaanu* and a small group of his compatriots in 1573. This defeat came after five years of bitter guerilla warfare, fought at sea and on land,. With the defeat of the Portuguese, the monarchy was re-established and *Muhammad Thakurufaan* became Sultan of Maldives.

Seafaring

It is an obvious fact that a country ninety-nine percent of which is sea must have a long tradition of seafaring. Sailing from one island to another is a way of life for Maldivians, and has been so for many centuries. Information on the early seafarers is vague and difficult to find in Maldives since few written records of the early period are available. However, many foreign notices do exist, and these give some information on the long history of seafaring in Maldives. Excavations of some of the archaeological sites in Maldives also give some information on this aspect of Maldivian history.

Researchers and writers have also contributed some insight on Maldivian seafaring. According to Moosa Ali, the oldest method of getting from island to island within an atoll was by rafts. But longer distances were travelled on boats using sails woven from palm leaves. In later years, sails made of cloth were used (Ali 1994).

Maldivians had to undertake travel within the atoll, as well as from one atoll to the other. Since very early times, each atoll had a main island where the Atoll Chief, entrusted with the running of the Atoll, had his administrative centre. All important transactions required the islanders to come to this chief island. In the same way, islanders had to go to Male' to obtain rice and other commodities not

available in the atoll. Whereas people from countries with large land areas could travel the required distances by land, the Maldive Islander had to travel to his destination by sea. The difficulties were not only for the ordinary islander. There was a tradition in Maldives that the reigning king and members of his court officially visited the furthest areas of the kingdom, to see to the welfare of the people. These journeys were made to the northern and southern atolls, in a fleet consisting of a number of boats. With the difficulties of travel and the inclemency of winds and weather, these journeys could take a few months.

The islanders were adept at travelling with the monsoon winds, using the direction of the monsoon to travel long distances fairly quickly. Maldivians divide the year into two distinctive periods, *Hulhan'gu* (the south-west monsoon) and *Iruvai* (the north-west monsoon). The season for sailing east was during the south-west monsoon, which started from the second week of April when travel to Bengal, Burma, Thailand, Aceh and Indonesia could be undertaken. Strong evidence of close contacts between the Indonesian islands and Maldives is the fact that part of an atoll was called *Java Kara*, by islanders. These islands lie on the eastern side of the atoll of *Faadhippolhu* and face the Indonesian Archipelago. This leads to the theory that these islands may have been the starting point of ancient trading missions to Java and other islands of Indonesia. Alternatively, these islands may have been settled by immigrants from Java.

The north-east monsoon, which began during the second week of December, was the time of the year for travel to Arabia, the Persian Gulf and the East Coast of Africa. With a good knowledge of the direction of monsoon winds it was possible for Maldivians to travel throughout most of the year following the trade routes in the Indian Ocean (Fig. 2).

Just as Maldivians travelled to countries around the Indian Ocean, trading ships from these countries came to Maldives. The trading vessels from Maldives would travel to their destinations in the east during the south west monsoon each year. They would conduct their business during the following months until the beginning of the next monsoon, when it would be time to start their journey home. This was during the north east monsoon when the winds were favourable for travel to the west. Traders from Indonesia and the east would come to Maldives during the north east monsoon and travel back during the south west monsoon. It meant that a considerable time was spent by traders in travel. This often led to the custom of temporary marriages between foreign traders and Maldivian women during the period of their stay.

The term used for travel was *dhathuru-fathuru kurun*; *dhathuru* meaning journey and *fathuru*, navigation. Some of the earliest schools in Maldives were navigation schools, showing the importance given to the tradition of navigation and seafaring by the islanders. The compass, called *samuga* in Dhivehi, is said to have been introduced to the Indian Ocean by the Chinese. Maldivian pilots, called *malimi* in Dhivehi, used the compass only when sailing to destinations away from home, finding their way round the islands using the knowledge gained from familiarity (Maloney 1980). Indigenous charts were also used in the old days, copies of which were seen by James Tennant in 1860 (Maloney 1980). Captain Moresby who came to Maldives in 1834 saw Maldivians making and repairing astrolabes, quadrants and wooden sextants (Moresby 1835), which were probably introduced to the islands some time after the Portuguese occupation. When detailed almanacs became available, the islanders used them too, but this happened some centuries after the Portuguese arrival.

Oral tradition from Addu Atoll has the story of a family of immigrants from Yemen who were wrecked on a nearby reef and settled in an island of the atoll during the Buddhist period in the early

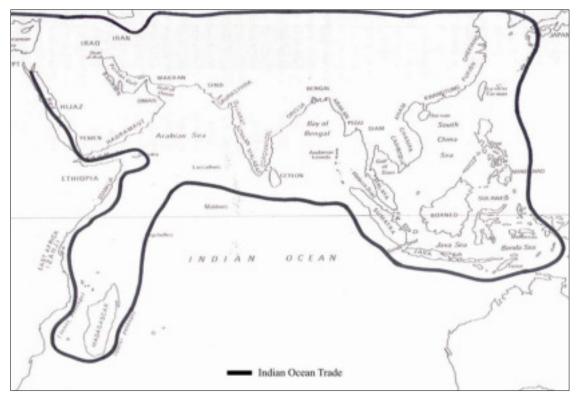


Figure 2. Map of the Indian Ocean showing the Arab – China Trade Route. Adapted from K. N. Chaudhuri, 1985. Trade and Civilisation in the Indian Ocean.

twelfth century. The story relates that the owner of the house they stayed in, had travelled in many countries of the world, and was conversant in the Arabic and Persian languages (Shihabuddine1588-1685). It is also related that the family members sometimes visited their relatives in Yemen. The graves of some members of this family are still to be seen on the island. There is also a story of another man called *Dorabu* who arrived from *Pataliputra* in India, before the advent of Islam to Maldives. Such stories told in the islands, intimate a knowledge and familiarity with the foreign countries spoken of in these traditions that can only come about from visiting them.

Foreign Notices

A great deal of information about ancient Maldives is available in the memoirs and records of travellers who visited the islands. These records prove that Maldives has been known to sailors for close to two thousand years. Much information on Maldives' seafaring history can be gleaned from various accounts of voyages to the Indian Ocean written by Middle Eastern, Western and Chinese travellers. The ancient Greek navigator Hippalos who lived in the first century A.D. and is credited with discovering how to use the monsoon winds in the Indian Ocean (Plinius 1875) would most certainly have passed the Maldive Islands on his journeys to and from India. Ptolemy (c. 90-150 A.D.) wrote of 1378 islands located around Taprobane (Stevenson 1932), and listed some names, a few of which could be names of Maldivian islands.

Palladius, Bishop of Helenopolis (c.360-430 A.D.) also wrote of "a thousand other islands" called *Maniolae* (Maldives) that lie around Taprobane. He also writes of a magnetic stone that was located in the region:

In these islands, which are called *Maniolae*, the magnet-stone which attracts iron is produced. So that if any ship built with iron nails should approach these islands, it will by virtue of the stone be drawn thither and stayed in its course. That is why those who sail to Taprobane employ ships built with wooden bolts especially for this voyage (Palladius c.360-430).

Referring to the "magnet stone" mentioned above, a magnetic mountain in the sea is mentioned in an old folk story told in Maldives, but the location of this so – called mountain in the story is now unknown. Maldivians used to build their boats using wooden pegs rather than iron nails, probably because iron and other metals were not locally available.

The earliest foreign notice of Maldivians travelling abroad is given by Ammianus Marcellinus (*c*. 330-400 A.D.) a Greek from Antiokia who fought under Emperor Julianus. Describing the power of the Emperor and the awe with which he was regarded by the rest of the world, he writes:

On one side, the peoples beyond the Tigris and the Armenians begged for peace. On another, the Indian nations as far as the *Divi* (Maldives) and the *Serendivi*, competed the one with the other, in sending their leading men with gifts ahead of time. (Rolfe 1937).

In the above, the old name *Divi* is used to refer to Maldivians and *Serendivi* for people from Sri Lanka Looking at the sea routes to the Mediterranean, it is certain that part of the journey to the court of the Roman Emperor Julian would have been made by sea, and the rest by journeying overland. This event recorded by Ammianus Marcellinus shows that the Maldivians of that period were aware of the tides of politics and power in the Indian Ocean region. At that time the Romans were a trading force in India, and the Maldivians were aware of this, probably because they often travelled to Indian ports. They also realized the importance of keeping good relations with major powers who had a presence in the region.

The next two notices of Maldivians travelling abroad are recorded in a Chinese document of the Tang Dynasty, written between 785 and 805 A.D. This document records two visits of Maldivians to China, the first in 658 A.D and the second in 662 A.D. These were visits made during the reign of the Maldivian King *Baladitiya* (Pelliot 1904). The Chinese scribes wrote thus:

After four days' journey from Sri Lanka you come to the country of *Mo-lai* (Maldives) which is situated in the extreme South frontier of South India. The third year and the eighth month (658 A.D.), the king *Fa-t'o-pa-ti* of the kingdom of *Tsien-su-fou* (not known), the king *Cho-li-kiun* of the kingdom of *Che-li-t'i-p'o* (Serendive/Ceylon), the king *Che-p'o-lo-ti-to* (Sri Baladitya) of the kingdom of *Mo-lai* (Maldives), sent ambassadors to pay tribute (to the Emperor of China)..... These Kingdoms are extremely far away, and recognize for the first time their relation of dependence to China. At this time, after being at sea for many months, they arrived in *Kiao-tcheou* (China). Here they gave tribute of their country's products.

Records show that another embassy bearing gifts was sent from Maldives to the Chinese Court four years later, in 662 A.D.(Pelliot 1904). Taking this evidence into consideration, we may safely state that Maldivians of that period had seaworthy craft and adequate navigational knowledge to undertake long voyages and frequently undertook such travel.

Many travelers in the Indian Ocean knew of Maldives because they used the islands regularly as a halting place for ships and boats travelling from Qish in Yemen, Hormuz in Persia, Mogadishu in Somalia, Zanzibar in East Africa and Abyssinia by the Red Sea (Van Mehren 1866). Just as ships from these regions visited Maldives, Maldivian ships also visited those places for trading. In 1442, countries who bought and sold their valuable goods in the port of Hormuz in Persia. Abdur-ur Razzak, who as an emissary travelled widely, wrote of the traders from many different Among these, he included traders from Maldives, the islands of *Divah-Mahal* (Major 1857).

The fact that Maldivians were experienced sailors with a good knowledge of many countries, even before the Portuguese conquest of the country, can be proved from the experience of two French

brothers, Jean and Raoul Parmentier who came to Maldives in 1529. They were commanders of two French ships called the *Pensee* and *Sacre* and travelled down to the southern atoll of Fua Mulaku. They were very impressed with the chief of the island's mosque whom they described as a man of much discretion and knowledge. He was said to be aged about 45 or 50, of middle height, white-bearded, and was a devout and amiable man. He showed the captain the directions in which lie the countries of Aden, Persia, Hormuz, Calicut, Ceylon, Moluque and Sumatra, proving that he was both learned and well-travelled (Estancelin L.1832).

Trade in Cowries and Coir

From very ancient times, cowries were thought to have a symbolic meaning. The fact that the cowrie could be exchanged for necessary goods gave rise to an ancient and continuous trade between

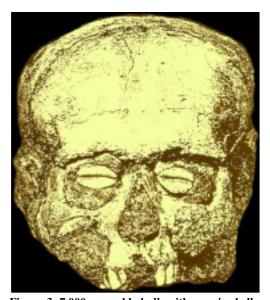


Figure 3. 7,000 year old skull, with cowrie shells as eyes, excavated from a grave in Jericho. At the Ashmolean Museum, Oxford. UK. From: Vilgon. 1991-99. *Maldive Odd History Vol. 1-9*.

Maldives and the Indian subcontinent. The buyers of the cowries gave differing values and cultural significance to these shells. From the Indian subcontinent, cowries were exported to East Africa and the Middle East, and through overland caravan trade and bilateral exchanges to West Africa (Chaudhuri 1985).

The exact period when Maldives started exporting cowries is not known. But the Maldivian cowries, i.e. the money cowrie (cypraea moneta), have been found in many different parts of the world, some dating back many centuries. Cowries have been found in the ruins of Lothal, a port used during the Indus Valley Civilization (Heyerdhal 1986). Cowries have been found placed on the eyes of the skull of a woman excavated in Jericho, estimated to be at least 7000 years old (Fig. 3). Cowries have been found in China in a tomb of the Yin Dynasty of 1401-1122 B.C. (Vilgon 1991-99). Cowries had also found their way to four A.D. seventh century graves in Northern Norway, north of the Arctic Circle (Mikkelsen 2000). In the ancient world, Maldives had the monopoly on cowries,

leading us to question whether these cowries could have come from Maldives.

The Persian merchant and sea-captain Sulaiman who lived in the first half of the ninth century, was the first Persian writer to describe the Maldives. He observed that a woman ruled the country, and writes of ambergris and cowries being exports of Maldives. He also describes the industriousness of the islanders and talks of their weaving skills and construction of houses. He is also the first writer to write about shipbuilding in Maldives:

The wealth of the people is constituted by cowries; their Queen amasses large quantities of these cowries in the royal depots. They say that there is not in existence a people more industrious than these islanders, so much so that they weave tunics of a single piece with two sleeves, two facings of the collar and the opening of the chest. They build ships, houses and execute all sorts of work with a consummate art (Renandot 1718).

Suleiman also describes how the cowries are collected and their usage as currency in Burma and Bengal. Sulaiman's description of cowrie use, their trade and methods of collection is repeated by Abu Zaid (890A.D.) and Mas'udi (916 A.D.). Abu Zayd, who lived in Iraq from 850-934 A.D, was known to be the first author of all classical Arab geography. In his manuscripts he writes of

Maldives as *Dyvah*, and describes how some coral islands in Maldives become eroded and new islands formed. He was the first writer to distinguish between the Maldives and the Laccadives according to their principal production. He called the Maldives *Diva-Kauzah* (The Cowrie Islands) and the Laccadive Islands *Diva-Kanbar* (The Coir Islands) according to the chief produce of these islands. At that time the principal product of Maldives was cowries and that of the Laccadives, coir rope made from the fibre obtained from coconut husk. Maldives also produced coir, but was better known for its cowrie shells. The same distinction was also made by later writers, including Al Biruni in 1030. Al

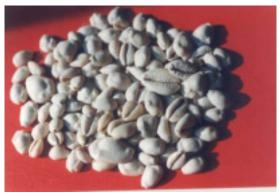


Figure 4. Collection of cowrie shells found at Kaashidhoo site. From Mikkelson. 2000. Archeological Excavations of a Monastery at Kaashidhoo.

Mas'udi in 916 A.D. also wrote of the cowrie and coconut production and export of ambergris from Maldives (Sprenger 1841).

Abul Hassan, writing in Persian in his book, *Modjmel-Alte-Varier* in 1026, talks about Maldive ships transporting the islands' produce to Africa. He too referred to Maldives as *Diva-Kouzah* and the Laccadives as *Diva-Kambar* (Du Laurier 1844):

One group of islands is called *Diva-Kouzah*, which means the Cowrie Isles, because of the cowrie shells that are caught by means of the coconut branches placed at the sea-shores of the Ocean. The other group of islands is named *Diva-Kambar* which means the Coir Islands. Coir is the fibre that is produced from the coconut husk and used for making ropes for the ships......The ships from these islands (Maldives) transport dried fish, tortoise shells and white cowries to Africa and the large oyster shells are sent to Italy where they make cameos of it (Du Laurier 1844).

The above information clearly states that at that period, Maldivian ships travelled regularly to Africa, carrying the islands' products for sale in that continent. On the other hand, the oyster shells were "sent" to Italy, implying that these shells were carried by others to Italy. It may be that Maldivians regularly travelled and traded in the littoral regions around the Indian Ocean but did not travel regularly to the European countries.

In 1290, Marco Polo described the use of cowries as currency in China and Bengal. (Fig. 4). In some passages he has placed their origin sometimes in *Insulinde*, and sometimes in India. (Heimann 1980). Ibn Batuta who arrived in Maldives in 1343, writes of the exports from Maldives which included among other things, cowries, coir rope and woven fabric for turbans. He describes the method of preparing the rope, and says that it was exported to China, India and Yemen. He also mentions the fact that in India and Yemen, this rope was used to "join" the boards of their ships (Gray 1882).

In 1349, a Chinese writer, Wang Ta-Yun, who had visited a number of oriental countries, wrote about the Maldivian cowrie trade with Eastern India:

Every sea-trader takes one shipload of cowries to *Wu-tieh* (Orissa) or *Peng-ka-la* (Bengal), where he is sure to exchange it for a shipload of rice or more, for these people use cowries as money, and it is a very ancient style of currency (Rockhill 1915).

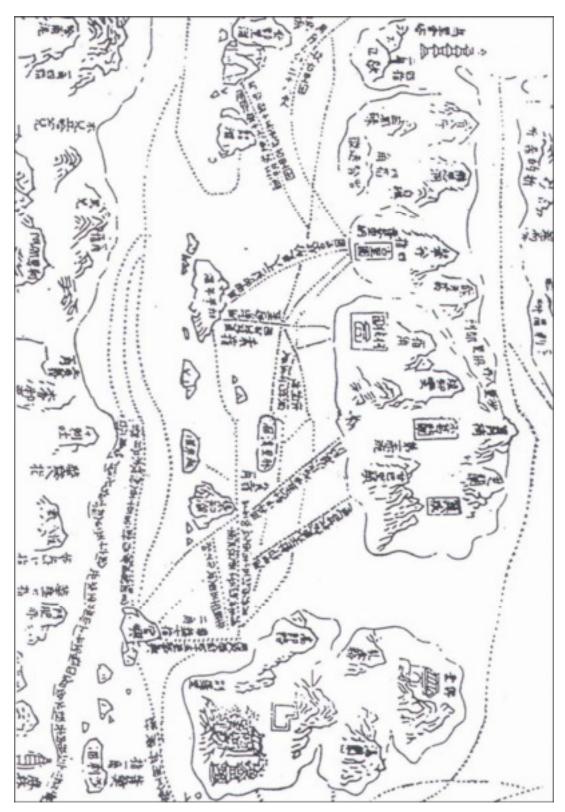


Figure 5. Cheng Ho's Chart of Arabian Sea. The Maldives and Minicoy, Centre. India to the right, Ceylon at the bottom, and Africa to the left. Drawing 1440. Wu- Pei – Chin. From Vilgon. 1991-99. *Maldive Odd History. Vol. 1-9*

During his fourth Expedition to the Indian Ocean which took place in 1413-1415, the great Chinese Admiral Cheng Ho made a visit to Maldives (Fig. 5). This visit is said to have taken place in 1414 (Lo Mou-Teng, Chu Shao-Hua 1597). A more detailed description of Maldives, its produce, the

people and their customs and occupations is given in 1425 by Ma Huan, a Chinese Muslim who was attached to this expedition. He has recorded names of some islands and atolls of Maldives including *Mulaku* Atoll, *Kelaa*, *Fenfush*i and Minicoy, and some islands of Laccadives, i.e. *Kalpeni*, *Kavaratti and Androth*.. Giving details of Maldives, he says that the whole population is Muslim, describes their occupations, which include fishing, weaving, rope-making, collection of cowries and ambergris. He writes of Maldivians exporting cowries for sale to Kedah (in Malaysia) and Bengal where they were used as money. Ma Huan wrote that the coir rope made of the husk of the coconut, was stored in huge quantities in houses, and that it was in great demand from buyers who arrived at the islands in their foreign ships. He also speaks of the dried fish produced in the islands and sold to traders, who would take it away and then sell it in other countries (Phillips 1895). The dried fish was used by many travellers as a good protein source during their long voyages.

Archaeological Evidence

Some archaeological sites in the country have yielded evidence which also proves that trading contacts existed between Maldives and countries in the Indian Ocean region. In 1958 a Roman Republican Denarius of Caius Pansa minted at Rome in 90 or 89 B.C. was discovered during the excavation of a Buddhist *stupa* on *Thoddoo* Island in *Ari* atoll (Fig. 6). This Denarius had a hole pierced at one side and was one of two coins found in a reliquary deposited inside the *stupa*. (Forbes 1983). The *stupa* has been tentatively dated to the sixth century A.D. The worn state of the coin and the hole pierced in it suggests that it was brought to Maldives at a much earlier period and had perhaps been used as a piece of jewellery for some time before it was finally placed in the reliquary. (Fig. 7).



Figure 6. View of Thoddoo dagaba in 1958.

Thoddoo in *Ari* Atoll, the site of an old Buddhist dagaba, was one of the islands used as a port by foreign-going vessels (Raadhavalhi 1779). The atoll is situated to the south west of the *Kaashidhoo* Channel, a route used frequently by vessels passing through the Maldives on their way to the East.



Figure 7. Both sides of a Roman Denarius coin found at Thoddoo, Alif Atoll. (From NCLHR Collection).

A cache of Roman coins dating from the first and second centuries A.D. was reportedly discovered about 600 kilometres to the north, on *Kadamat* Island in neighbouring Lakshadweep Islands (Indian Union Territory of Lakshadweep) in 1948.(Forbes 1983). The first and second centuries A.D. when these coins were minted was approximately the time when the advantages of using the monsoon winds to sail to India and the littoral regions of the Indian Ocean was discovered, and it is quite possible that the coins found in Maldives and in Lakshadweep were brought by Roman traders.



Figure 8. Both sides of a Byzantine coin found in Gan Island, Laamu Atoll. (From NCLHR Collection).

In 1986, a small cache of gold Byzantine coins were discovered at an archaeological site in *Gan* Island in *Haddhummathi* Atoll. The coins were found in a container, buried at the site of an old monastery that is thought to have existed on the island since the sixth century A.D. The coins are dated to the fifth and sixth centuries A.D. (Fig. 8). This find indicates travels undertaken by Maldivians possibly between the fifth and the seventh centuries A.D., a period during which there is documental evidence of Maldivians' visits to Rome and China.

In 1974, the eminent archaeologist, Professor John Carswell, conducted a survey in Male' that revealed that the Maldives were on the main west-bound route of Chinese trade. He saw that in Male' there was evidence of a thousand years of uninterrupted export of Chinese porcelain, from the ninth to the nineteenth century (Carswell 1980). The large quantities of ancient Chinese porcelain to be found in many islands provide proof of the trading links that had existed for centuries between

the Chinese and the Maldivians. The use of Chinese silk as wall draping has been documented in a twelfth century copperplate record (*loamaafaanu*) in Maldives also proves this point (Maniku et al 1986).

The excavation of the *Kaashidhoo Kuruhinna* archaeological site was carried out between 1996 and 1998, by a Norwegian team headed by Professor Egil Mikkelsen. It is so far, the only scientifically excavated archaeological site in Maldives, This is an ancient Buddhist monastery site established between the second and fourth centuries A.D. The island of *Kaashidhoo* was well known to travellers in the region and was a port of call for ships journeying to the East through the Maldives. Among the objects found here are pottery shards originating probably in India and Sri Lanka. There are coarse red pottery with thick rims from remains of storage jars and household items, and also finer pottery decorated with lines and "brush" patterns which may also have originated in India. There are also stoneware, and china which are mostly grey and light green bowls. The origin of many of these items dating from the ninth century onwards is Southern China (Mikkelsen 2000). As Maldives has no clay, all cooking utensils, storage jars and other such objects were brought to the islands from abroad, often by local sailing craft travelling on trading missions to countries of the region, mainly to India and Bengal. This was a custom that had existed from very early times and the findings from the *Kaashidhoo* archaeological site is evidence of this trade.

Boatbuilding

In Maldives boat-building became a highly developed skill, a skill that evolved over many centuries of the Maldivian relationship with the surrounding ocean. In Maldives, boatbuilding is called *dhoni banun*, the term *banun* meaning tying. This is just how the early boats were built; they were literally tied together, no iron or other metal was used, and the old term survives to this day. In the method of construction, prepared planks of coconut wood were tied together edge to edge, with rope twisted from coconut fibre threaded through holes bored around the edges of the planks. This rope was called *roanu*. The holes were later plugged with wooden pegs to ensure that water did not enter the hull. Foreign visitors have given accounts of this tradition of ship-building (Maniku 1998). A description of the method Maldivians used to build their boats is given by Al Idrisi in 1150 in his book *Kitab Nuzhat Almushaq Fikhtiraq Al Afaq* in which he writes of the boats used in the Indian Ocean region, including Maldives:

All travelling boats of the Sea of India and China are constructed of well-hewn wood. These planks are put edge to edge and trimmed, and then sewn with fibre. Then they were caulked with the small intestines and the oil of *al-baba* (the sperm whale). (Jaubert 1836-40).

The oil from the sperm whale may have been used for caulking as recorded by Idrisi, but in later centuries, shark oil was used for this purpose. Ibn Batuta also noted that the rope made from the husk of the coconut was used to join the boards of Maldivian ships and he felt that because of this, when the ship struck a rock it did not break up as did ships built with iron in them (Gray 1882). Other travellers also remarked on the unusual way in which the islanders' ships were built and sailors from some foreign countries regarded them as flimsy and inferior. In 1292, John of Montecorvino writes thus:

The islanders' ships are inferior and extraordinary, with no iron in them, and no pitch oakum. They are sewn like clothes with twine or rope. In case the twine breaks somewhere, there is indeed a disaster. Therefore there is more or less, once a year a mending of the ships, when they propose to go to sea. They also have a frail and flimsy rudder, like the top of a table, an ell in width, placed in the middle of the stern. They have but one mast and one sail. (Jorio 1932).

One foreign notice about the shipbuilding skills of Maldivians, indicates that there were people in other countries who knew of these craftsmen. In 1312, William Adam Guillaume who was a devoted Dominican Christian and had heard of the Maldivian ships, in his French document, *Recueil des Historiens des Croisades* suggested Maldives as one of three places for building armed galleys. All three places, Ormuz (Hormuz), Maldives and Ultima India with the shipyards in Thana, Cambay and Quilon, were known for their specific technique in building "sewn" boats. He writes of Maldives:

The second place for the building of these ships is the *Dive Insule* and that is the Maldive Islands. There are 20,000 Islands in the Indian Ocean of which 6,000 are inhabited. These are located 3,000 miles away from Aden, and have recently converted to the Muslim religion, which still is not strongly established (Adam 1316).

Writing in 1425, more than a century later, Ma Huan, the Chinese scribe who visited Maldives in 1414 with Admiral Cheng-Ho during his Fourth Expedition to the Indian Ocean, also described the boatbuilding he saw in Maldives. He too remarked as had earlier writers, that Maldivians did not use nails in the construction of their ships; they bored holes and used ropes made of coconut husk to bind them the wooden planks together and also employed wooden wedges (Phillips 1885). This description shows that the unique ship-building methods had not changed in the intervening years.

Researching the evolution of Maldivian maritime craft and the development of ethnic boat-building technology in the Maldives, Maizan Hassan Maniku felt that the standard shape of the Maldivian *dhoani* bore a marked resemblance to the shape of the reed bundle ships used by the Egyptian, Mesopotamian and the Indus Valley civilizations, and it could be deduced that this was the origin of the indigenous design of the *dhoani*. He thought that the Maldivian *dhoani* had even more in common with the Phoenician ships which were built from wooden planks, but retained the papyrus form of the older craft (Maniku 1998). When this information is examined in the light of existing oral tradition in Maldives linking the first settlers to a town in the Indus Valley civilization, it seems possible that such a connection may exist.

Maizan Hassan Maniku found no evidence of a change in the method of construction of the original Maldivian craft until the sixteenth century, when the Portuguese arrived in the Indian Ocean in their wooden galleons, named *guraabu* by Maldivians. These were found by local boat-builders to be constructed using dowels to fasten the planks. Wooden planks were fastened together using treenails which ran transversely through the planks. The hull was built first, and the ribs or frames built in afterwards. Maniku felt that this could have been the period when the Maldivian *dhoani* as we know it now, was developed in the way it is being built today (Maniku 1998).

The implication that dugout canoes were the origin of the Maldivian *dhoani* suggested by Clarence Maloney in his book, *People of the Maldive Islands* (p.153, 154), is difficult to believe, since the large trees needed to construct these canoes cannot be found in Maldives. He seems to have based his assumption on the name *dhoani*, which he felt, came from the Tamil *tondi*, (something dug out). Maloney has also said that neither dugout canoes nor outriggers are known in Maldives now (Maloney 1980). There is no reason to believe that they were ever there.

A Maldivian master boat-builder did not use diagrams or sophisticated instruments to turn out a perfect boat. He did it all, relying entirely on experience and observation. In Maldives, there were certain islands where the boat builders were considered to be expert craftsmen, and such masters of the craft would be engaged to build boats for people of other islands too. These boats were built of materials that were available in the islands. Different parts of the vessel were constructed of the kind of timber considered appropriate for that particular part, and its function in the finished boat. The

boatbuilding industry in the earlier centuries was self-sufficient because the timber and other materials used for boatbuilding were locally available.

In earlier days, square woven sails made of young screw pine leaves or that of the coconut palm were used even on vessels travelling on long journeys. These square woven sails called *fan riya*, were in use until the mid-nineteenth century after which they were gradually replaced by sailcloth and lateen sails. Boats differed in their structure and design, depending on the purpose for which they were built. There were boats built for travel between islands, boats built to travel between the atolls, and there were also vessels built for the specific purpose of trading and travel to foreign countries. Besides these there were smaller craft built for lighter work. The following are some of the different types of boats built by Maldivians:

Bokkura – Row boat
Mas Odi – Square-sailed fishing craft
Mas Dhoani – fishing vessel
Ban'du Odi – Schooner
Naalu Baththeli – Inter-island freighter
Vadhu Dhoani – Troll boat
Jaha Dhoani – Royal transfer boat
All these were modifications of the same hull. (Maniku 1998).

The basic kind of boat used in the Maldives from early times is the *dhoani*, which was used for fishing, trading and travel. Other vessels were mainly adaptations of this basic craft (Fig. 8). Foreign-going vessels were called *furedhdhe odi* by Maldivians; the word *furedhdhe* meaning "foreign". *Odi* was the name given to a boat larger than a *dhoani* and had two masts and a jib. It usually had a wooden cabin and could also carry passengers. A larger ship is the type called a *baththeli*, which was used to carry cargo to India and Sri Lanka (Maloney 1980). The largest craft used in Maldives was called a *nau*, a lateen-rigged vessel that came into use around the late eighteenth century. Many of these large vessels were built in India.

A unique feature of the smaller Maldivian *dhoani* is that it is designed to be steered with the foot. These smaller vessels that travelled between the islands and atolls carrying passengers and cargo were equipped with a long graceful tiller fitted on the rudder. The helmsman standing at the stern would steer the vessel with his foot, leaving his hands free for other work.

At the time of their first contact with the Portuguese in 1503, Maldivians were using a type of craft known to people of the region as a *gundra*. These were boats built of coconut wood, probably the type called *odi* that was frequently used for trading visits to the western coast of India. In this incident, four Maldivian *gundras* loaded with coir ropes, cowries and fish, and a great store of silks, were seized by the Portuguese. Maldivian seafaring and shipbuilding continued even during the years of the Portuguese occupation.

Conclusion

Existing information on the pre-Portuguese period of Maldives clearly shows that the sea and seafaring were pre-dominant factors in the lives of Maldivians. This was inevitable because the country consists of much sea and very little land. The ocean had to be absorbed into the lives of the islanders if they were to exist in harmony with their surroundings. It is possible that since the first settlers arrived by sea, they must have had previous knowledge and experience in seafaring. Travelling from one island to the other was a necessity.



Fig. 9 a : Bokkura



Fig. 9 b : Vadhu Dhoani



Fig. 9 c : Mas Dhoani



Fig. 9 d : Mas Odi

Figure 8. Different types of boats built by Maldivians. From: Boats of Maldives. By Maldives National Shipping Ltd. 2004.

Seafaring was important because, fish obtained from the sea was an integral part of the Maldivian diet. Also, rice and many other commodities were not available in the islands, and they had to be imported from abroad, mainly from Burma. These goods were brought to the islands in Maldivian vessels. By the middle of the first millennium, Maldivians had become expert navigators who could undertake long voyages. Frequent travel abroad and trading contacts gave them knowledge of the prevailing politics and affairs in the region.

A Roman Denarius of the first century B.C. and Byzantine coins of the fifth and fourth century A.D. found at different archaeological sites in Maldives suggest a long history of trade and inter-action with foreign countries. Pottery shards from the sub-continent and old Chinese ceramics found in many islands, indicate the trade that existed between the islands and China as well as neighbouring

countries. The value given to the money cowrie (*cypraea moneta*) is demonstrated by available foreign notices that record the use of these shells as money in some countries, including Bengal and parts of West Africa. Local historical records prove the fact that until the nineteenth century, cowries were used in financial transactions in Maldives.

Foreign notices show that in the fourth century A.D. Maldivians travelled to Rome, and in the seventh century undertook two long journeys, this time to China, carrying gifts to the Chinese emperor. Examination of copperplate records from the twelfth century A.D. again shows proof of long standing trade with China. In addition to these long voyages, Maldivian ships plied regularly to Bengal and the ports of Eastern and Western India. Other foreign notices also reveal that these ships travelled regularly to ports of East Africa with cargoes of cowries that would then be carried overland to West Africa and other places. Maldivian traders also travelled regularly to Hormuz. These trading contacts recorded in various foreign notices show that the Maldivians of the time were good sailors who were skilled at navigation and seafaring, and were able to sail long distances. Other records show that the Maldivians had developed sea-going vessels that were built by a method that was uniquely their own.

Documented writings reveal that a unique method of boatbuilding was developed by the Maldivians that included tying the wooden planks with rope made of coconut fibre. Another unique feature was that the smaller boats were always steered by the foot, using an especially long tiller built for the purpose. The construction of the sea-going vessels became first a skill, and then developed into an art, with expert craftsmen in some islands. Navigation was recognized as an important field and the knowledge was imparted to students by teachers of the subject.

The paucity of locally available information on the history of seafaring in the Maldives holds back satisfactory research on this important subject, which is an essential part of the history of the country. Maldivian seafaring of the pre and post-Islamic period is a subject of interest that needs detailed research, as the information gained would be very useful in understanding the history of navigation and trade in the Indian Ocean.

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