# Traditional Maldivian Houses – Unfolds the Maldivian Craftsmanship and Lifestyle

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# Abstract

The paper explores traditional Maldivian houses in order to have a better understanding of the lifestyle of the Maldivian community. Homes are one of the most fundamental elements that teach rituals and behavioural patterns in a community. The techniques used to build the houses bear testimony to the skilled craftsmanship of the ancient Maldivians. In addition to the exterior, the interior also plays a vital role in portraying the daily routine of residents. The orientation and size of the openings are allocated to respond well to the hot and humid climate of Maldives.

This paper further explores how the spatial arrangement of the different forms of dwellings exhibit different functions.

Studying and researching the traditional Maldivian houses provide a better opportunity to observe the rituals and long lost lifestyle of the ancient Maldivian. Moreover it will broaden our knowledge on the building materials and construction methodology of that era.

# Introduction

The Maldives is a chain of coral islands situated in the Indian Ocean, south of India and south west of Sri Lanka. There are approximately 1,192 islands. There is no written history of the Maldives before its conversion to Islam in 1153 CE. However, various archaeological and heritage sites bear evidence that the country has been inhabited for at least two thousand five hundred years. There are no records of the first settlers, but folklore and oral tradition handed down through many centuries give clues to the identity of the original people of the Maldives.

... it has been said that if we knew the period when the people first settles in Maldives, we would learn when travel first begun in the Indian Ocean. The islands lie almost in the center of the most frequent routes of the Indian Ocean, the most travelled ocean in ancient time. (Mohamed 2008: 25) It is even written that these travelling journeys were very dependent on the monsoon. Therefore these foreign travelers had to stay in Maldives till the wind changed to go back to their home towns. This could take many months, and often sailors married Maldivian women for this time period. Subsequently this became a reason for the travellers to settle in Maldives.

Since the Maldives atolls are full of reefs and shallows, shipwrecks were very common at that period. The survivors of the shipwreck usually did not find a way back home, therefore they also settled in Maldives.

No matter what the reason was to settle down in Maldives, it is quite overwhelming to learn and explore how the people managed to survive in these isolated islands. These people came with the knowledge from their forefathers and had utilised the readily available resources to obtain food and build their shelters. At that ancient time these islands were covered with different types of tropical green vegetation. The coconut tree was the most abundant of all (**Fig. 1**).



Figure 1: Maldives having an Abundants Amount of Coconut Trees

... passing seaward to the south of this country 'Seng-ka-la' (Ceylon, Ratnadvipa) about thousands of 'li' we arrive at the island 'Na-lo-ki-lo-chou' (cocoa- nut island = Maldives) The people of this island are small of statue, about three feet high, their bodies are those of man, but they have the beaks of birds, they do not raise any crops, but live on coconuts. (Vilgon 1991: 1)

Understanding how the Maldivians used the coconut palm trees and other available resources in the construction of the early dwellings helps us to widen our scope of traditional knowledge of Maldivian architecture. Homes are the most fundamental element to learn the core of the livelihood of the ancient Maldivians. Moreover learning the traditional knowledge and traditional expression reflected in the techniques in assembling these structures will help to celebrate the fine and outstanding Maldivian workmanship and craftsmanship.

# The Size of the House and the Selection of Material

Before constructing a house the occupants cleared out an area to build the house. During this process different types of trees were cut and removed to clear a ground area for construction. This removed pile of vegetation that became the raw material to construct the house.

The major raw materials used in the construction of these houses were coconut palm timber, sand stone, palm leaves, magū dhandi (Sea Lettuce tree) and Dhumburi dhandi (Cork wood). All these materials possessed characteristics that helped the dwelling to adapt to the hot and humid climate. The sand stone which was used to lay the foundation was easily collected from the beach area. Many of the Maldivian islands underwent natural changes, some grew in size with the collection of sand brought in with the changes in tide at different times of the year, while others underwent erosion at other times. During this natural process, sand stones got collected at the edge of the beach areas. When the foundation is made from a raw material that is already a part of the island ground, it gets rooted well in the soil. Moreover selecting a material that easily adapted to the soil condition of Maldives provided houses a stable and sustainable foundation. The magū dhandi (Sea Lettuce tree), which is usually used for the frame work of the house has a very unique feature of acting as a damp proof membrane. These sticks have an inner membrane which has the capability to absorb and store the moisture. Therefore these kept the houses damp proof and provided a comfortable interior for the occupants. Next Dhumburi dhandi (Cork wood) and palm leaves are weaved to be the skin of the house (Fig. 2).

As Vilgon (1991) points out "... with the palm- leaves they cover their houses. Because of all this they hold the coconut-palm for the best and most precious of all trees" (75).

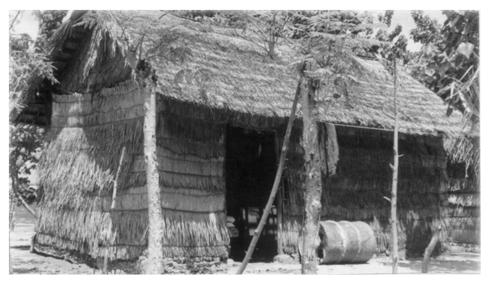


Figure 2: Traditional Maldivian House built using Readily Available Resources

When it was weaved small apertures were created. These openings were too small to allow water in, but were big enough to allow circulation of air. Thereby this technique allowed a good ventilation system in the Maldivian traditional house (**Fig. 3**).

Initially the size of the house was determined by the biggest wooden bench kept in the house. The typical traditional Maldivian house was 66 feet by 42 feet. These houses were designed such that they could be extended if the family grows in size.

Among the islands some have 1000 houses, others 500, others 100, others 10 and some 5 houses. On the islands there are no towns. There are no houses of stone, but all are constructed of coconut-wood and coconut leaves. They can join two or three tree houses together to keep the father and the son's families at same place. (Vilgon 1991: 69)

The techniques used to assemble the whole structure were connected in a way that enabled the structure to adapt to change. Furthermore the house can be relocated or new parts can be attached.Vilgon (1991) states "Usually their houses are constructed so as they are able to be taken apart and removed. When they do not like the place where it is, they move it to some other place" (69).

The orientation of the house was very much dependent on their traditional beliefs. Therefore placing the house facing east to west was considered to be brave and also believed that it brought good fortune into the house. By orienting this way, the elongated sides of the house were exposed to the north and south side, which was a very climate-friendly design. As it is a country that has a hot and humid climate, by orienting the house like that, it was expected to avoid the intense heat from the sun during the morning and evening times of the day. Therefore I believe that the ancestors' belief is not essentially just a myth but it contains a logical and practical base.



Figure 3: Good Ventilation System in the Traditional Maldivian House

# **Construction and Methodologies**

Like houses in most of the Asian countries, to avoid the ground moisture, the floors of the Maldivian traditional house also were raised a few meters above ground. Unlike most traditional Asian houses, traditional Maldivian houses did not sit on stilts, but the floor sat on layers of stacked stones.

Their buildings are of wood and they take care to raise the floor of their houses some height above the ground, by way of precaution damp, for the soil of their island is damp. This is the method they adopt, they cut the stones, each of which is of two or three cubits long, and place them in piles... (Vilgon 1991: 27)

After determining the placement of the house and collecting the raw material for building, the construction work begins. Next the collected sand stones are cut into approximately 4 to 6 feet pieces. The tools used at that period were stone cutting axes and they were shaped and smoothed using local carpentry tools. Next the stones are buried to an extent that they were stable, outlining the outer wall of the house and the partitioning wall. The builders straightened the stone layer using a stretched coir rope. After this step a timber beam is laid down vertically, with the narrow edge fitted on top of the stone layer. Then the vertical timber columns are established in the most load bearing locations of the house (usually long span walls have 6 to 7 columns, while short span walls have 4 columns.) These

columns tend to have the same height as the walls of the house. Next a horizontal timber strip is laid above the columns connecting them as a whole. After this again timber strips are laid in equal distance apart facing the long span side. Above this, another piece of timber is laid crossing the lower layer. Tongue and groove interlocking were commonly seen in most junctions of the house. Next, vertical timbers are attached with the lower timber pieces.

The height of these vertical components determines the slope of the roof. Maldivians preferred to increase the heights of these components to achieve steeper roofs thereby enabling them to easily collect rain water. Above these vertical components, timber rafters are laid to complete the roof skeletal structure. Before laying out the roof skin, a timber framework is assembled in a very traditional way. Initially they collect timber sticks called *Dhumburi dhandi* (cork wood). After this procedure they take these bundles of sticks to the sea and they gather in clusters and cleaned these sticks. It was a very social activity, which

strengthened communal bonds. Next the sticks are tied together with coir rope in a grid form to create the roof framework. They attach this framework carefully to each other from the bottom to the top. Next they weave the palm leaves to create the thatch roof skin (**Fig. 4**).

Tying this skin onto the framework requires about 7 to 10 people. Towards the end of the roof edge on the ground two people are needed at each side to tie it from the side. Moreover on the top of the roof at least 4 people are needed on the roof to tie from the center. And also extra two to three people are needed to hold the roof while work is in progress. Similar to the roof, the walls were



Figure 4: Weaving Palm Leaves to Create the Skin of the House

also made from palm-thatched layers. The systematic and organized construction techniques not only bound the house together but also create a working atmosphere, which brought people of the community together as each person contributes his/her own share in constructing the house.

# **Interior and Spatial Layout**

The normal Maldivian traditional house followed a typical rectangular floor plan. Usually it was partitioned into two rooms, one is the private and the other is the public room.

In the vestibule of the house they construct an apartment with they call the "*malem*", that divides the house into two parts, and there the master of the house sits with the friends ... The interior of house is divided into two parts, one for the men and the other for woman and children. Both are equipped with suspension beds. The women part of the room also has a swing called "*Aendhu*". The two parts of the room is separated by a curtain to seclude the sex. (Vilgon 1991:97)

The public room (outside room) was usually used by the men and the male guests who stayed in the house, while the private room (inside room) was occupied by the women and children of the family (**Fig. 5**).

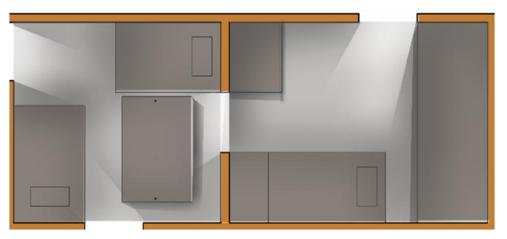


Figure 5: The Inner Room where the Women and Children Sleep

Furthermore the public room was mostly utilised to hold communal activities such as dining, conducting religious rituals, holding family gatherings, etc. Unlike

the public room the private room was used for more personal activities like women giving birth, etc.

Near the entrance of the house there is a jar full of water with a bowl called *Ouelendj* (coconut-shell on a handle stick) made from coconut shell. The main purpose of keeping this jar is to encourage everyone to wash their feet before entering the house as in the ancient time all the inhabitants except the king walked on bare feet. The streets were swept well and kept clean.

Every person who enters a house is obliged to wash his feet with water from the jar placed near the "Malem", and rub them with course fabric of "Lif" (Stipau with envelope the base of the stalks of the palm leaves), places there after he enters the house. (Vilgon 1991: 29)

The interior of the public room had three items of furniture. A big wooden bench (*bodu ashi*), small bench (*kuda ashi*) and front bed (*dhimā endhu*). Once visitors were welcomed into the house, they were directed to be seated on the lavishly decorated small wooden bench that was located on the west side of the house. This wooden bench is considered to be the most dominating piece of furniture in the public room. In accordance with the belief at that time, this wooden bench was meant to be occupied by the master of the house and distinguished visitors. Moreover these benches were covered with colourful hand woven mats. These mats were usually woven by women of whom some carried out this work as an occupation, while others did this work because it was their passion and to pass time. They combined colours such as black, yellow-brown and white together to create a very tasteful and vibrant product (**Fig. 6**).

Above these, colourful mats, bolsters and pillows were kept especially for the comfort of the master of the house. In front of this bench there was a bigger bench which was situated at the east side of the house and it was used by other men excluding the master to sleep, rest and eat. Vilgon (1992) notes that there were "1160 mat weavers, of whom 1155 are females" (209).

Moving to the *Etherege* (inside room) this space also usually had 3 items of furniture. They were the *vihā* endhu (Labor bed), dhekunu endhu (south bed) and the undhoali (swing). These bed frames were done by timber and mattress was made by tightly woven coir ropes. These ropes were made from a long and elaborate process carried out by the skillful Maldivian women. Initially these coconut husks were soaked. To achieve this they burried these coconut husks near

the beach area where the waves broke or in any shallow water area. Once these coconut husks were burried in rows these areas were called *bonbifaa*. It took 3-4 weeks for the coconut husk to be fully soaked. Next these were shifted to remove dirt and other rubbish, dried in the sun and packed into bales. Twisting was simply done by making a rope of the hank of fiber and twisting by hand. This work usually took place outside and it was considered as a community binding activity (**Fig. 7**). As Vilgon (1991) observes "The fiber which covers the outside of the coconuts is made into ropes both thick and fine" (57).



Figure 6: Making Coir Ropes

The swing in the interior room is a very important piece of furniture in the room. Maldivian women used to sit on this swing and rock the children to sleep. This is also a place where women read out mythical stories and sang lullabies. Therefore this became an area where a close bond between mothers/sisters/aunt and the children developed (**Fig. 8**).

The interior space of the Maldivian traditional house was small and they tried their best to utilise every square meter of the house. Even though the spaces were compact, they wisely utilised the available space. One of the most effective techniques the Maldivians used was to place multifunctional furniture.

They do not possess any furniture, nor other belongings, unless who have brass pots and boiling vessels to make sugar ... Some houses contain a few articles

of furniture, such as a small table, chairs and boxes or trunks (Vilgon 1991: 139)



Figure 7: Weaving Colourful Mats



Figure 8: The Swing Bed in the Interior Room

This spatial separation justifies the importance of the spatial hierarchy of the house. Moreover, it also conveys the idea that the Maldivian women and the children at that time were kept very protective since they were fragile. Even through a simple design ideology the livelihood of the Maldivians at that time could be roughly visualised.

# Outdoor utilized as an extended space

The Traditional Maldivian houses usually had a big outdoor space. Usually people built their houses more or less in the center of the island in accordance with the size of the island. Generally the houses were protected against the intense sunrays by the shade of the coconut palms and breadfruit trees. These houses were almost all surrounded by thick vegetation. Some of this vegetation helped give shade to the occupants, while others provided fruits to eat. According to Vilgon (1991) "They are almost all surrounded or attached to a fenced garden, where we could see some banana plants, lemon trees, sugar canes and cotton bushes" (183).

Next thing the housewives practiced was to work out door in their backyards. They sat in groups under the shade of the trees and conducted their daily household works. Moreover this outdoor was fully utilised while celebrating important occasions. To adapt this space into a temporary festive space, people built a temporary shelter over the area. Furthermore, different types of natural things such as vibrant flowers, varieties of leaves, and different types of sea shells were used to decorate the space. Therefore this open space being adjacent to the traditional Maldivian house was vital because the space was a focal space for the community activities to take place (**Fig. 9**).



## Figure 9: Working in the Outdoor Space

In addition open spaces were filled with different vegetation so this green landscape provided a cool ventilated atmosphere for the occupants.

### Conclusion

The ancient Maldivians who built these traditional houses may not have been professional architects, but I believe that these houses comprise one of the best examples that captures the traditional knowledge and traditional expressions of Maldives. From the way the house is positioned on the site to the finest details of the joints, everything truly reflects the precision in Maldivian craftsmanship. Moreover the household items and the furniture narrate the way Maldivians lived in that era. The spatial arrangement and interior show the simple and orderly manners of the Maldivians at that time. It is very interesting to know how the Maldivians selected the required material from nature and creatively assembled them according to their traditional knowledge.

Studying and researching the traditional Maldivian houses provides a valuable opportunity to observe the rituals and long lost lifestyle of the ancient Maldivian. Moreover it will broaden our knowledge on the building materials and construction methodology of that era.

Replicas of these traditional houses are seen in resorts, but they are only similar in physical appearance, the traditional methodologies are often not applied. To safeguard the Maldivian craftsmanship, the techniques need to be revived and practiced. More outdoor spaces are needed around present day houses in order to increase social interaction and strengthen community bonds.

The Maldivian traditional house was designed to be very climate-friendly and to stand strong in any climate. Present day houses can also explore similar designs by conducting research on these traditional building techniques. We should incorporate these aspects in present architecture to create buildings that represent Maldivian identity and pass on this knowledge to the future generations as these houses will provide them with a guide to the early lifestyles of Maldivians.

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