

# Earthen Living



**Sri Lanka's charming *katu mati gewal* can transport you back to the beauty of simplicity.**

**Words** Daleena Samara **Photographs** Rasika Surasena

If you chance upon a humble wattle and daub house when driving through central Sri Lanka, stop awhile for you are looking at a fast-disappearing facet of Sri Lankan life. In ancient times, such dwellings were the norm. Today, however, they are the exception, despite the rise of eco-friendly wattle and daub travel lodgings. While the latter is quaint and attractive, the former is fascinating, especially because they resonate of times when people here lived closest to the earth. It is a time when sustainability was a norm and not an option.

Then, homes were made of earth, and inhabited by folk who worked with the earth for a living, melding their lives into the natural rhythms of nature. Even though these homes were not as strong as brick houses, they were welcome because the raw materials were from the immediate environment, construction was simple, and the process of building one was a bonding family or even communal event.

The houses, known as *katu/mati gewal* (house made of wattle and daub) were beautiful in their simplicity. Family homes were usually single-storey structures with earthen walls and roofs of thatched palm leaves. They provided natural insulation that made them eminently suited to the tropics. The porous clay surfaces acted like a sponge after sunset, breathing in the cool wetness of the night, and breathing it out as the sun climbed high in the skies during the day. In this way, the earthen walls kept the heat at bay and those within cool and comfortable.

Wattle and daub remained the main form of housing construction even after the import of brick and mortar technologies from India in the 3<sup>rd</sup> Century BC. Writing on earthen architecture, Professor B D Nandadeva of the University of Kelaniya says earthen buildings must have been the only construction technology available to common folks here at the time, and that the new brick and mortar building

methods were confined at first to building temples and royal structures.

Over time, variations of earthen construction methods developed in different parts of the Island, yet wattle and daub remained the most widespread. Professor Nandadeva identifies it as the most common of six earthen building methods used in the country, the others including *taapa bitti* (rammed earth), *moda gadol* (adobe bricks), *kabok* (laterite) blocks, and *saka bammi* (mud and stone).

Wattle and daub itself is a timeless technology that has undergone very little change over the years. The wattle refers to the arrangement of timber in the frame, while the daub refers to the moist earthen balls that are pressed into and around the wattle to form a surface. The first step is to build a foundation, a raised damp-resistant podium out of rubble and soft clay soil. The height serves to keep termites at bay. Sometimes stone slabs are placed along the perimeter, with holes for wedging in timber poles. The floor is constructed, followed by the timber framework and then the roof of thatched palm leaves. It is only after that, that the walls are built and the doors and windows are fixed in place. The sequence of work protects the new walls from the elements and the workers from the heat of the sun. Once complete, the finishing touches are added with coatings of mud and cow dung mixture.

The *mati* floor is worth a special mention. Traditionally, it is made of moistened earth, spread out over the floor area and beaten into a solid slab with a heavy wooden mallet. Professor Nandadeva writes that the new floor receives three different coats of plaster. The first is of plain mud, the second a mixture of mud made of clay from a termite mound and cow dung, and the third a mixture of cow dung and water.

If the thought of using cow dung appears unseemly, then a visit to one of these homes may change your mind. The floor is even and gives off a scent of fresh earth, similar to that of grass after a rain. Surprisingly, these floors tend to be termite free. Only fresh dung is used, and from bulls, or cows that are neither lactating nor pregnant. The dung of calves and of buffalo are also unsuitable. The clay acts as a binder to hold the mix together while the soil gives it bulk and dimensional stability. The fibre in the dung acts as a binder while also controlling shrinkage and providing long-term flexibility. In modern times, however, builders cut corners and so termite attacks are common. To keep the pests away, battery acid, kerosene or soot is added to the coating.

Sri Lanka's heavy tropical rains can be a threat to clay dwellings. The rains wear down walls and soften and dampen floors. However, this very weakness is also its strength. The porosity of the mud gives the house a flexibility that helps it withstand the elements. Further, the daub blots up and disperses moisture.

Regular maintenance is required to reinforce roof, walls and the floor. Walls receive fresh wattle and daub infill and floors are primed every three to six months. In general, the floor receives a fresh coat of goma mix just before the Sinhala and Tamil New Year each year. Although construction of the house is a family effort involving husband, wife and children, friends and neighbours often join in. However, upkeep of the floor is usually the work of women. Men may assist in bringing the materials, but the women make the mixture and spread it on the floor.

In line with the general worldwide trend towards small house living, wattle and daub offers a charming alternative that is beautiful in its simplicity. The lure of an earthen home, a symbol of a wholistic time past, reminds us that we are but one with the earth.

