

"Use it, experiment with it, have fun with it and drop the idea that it is only for the rural poor"

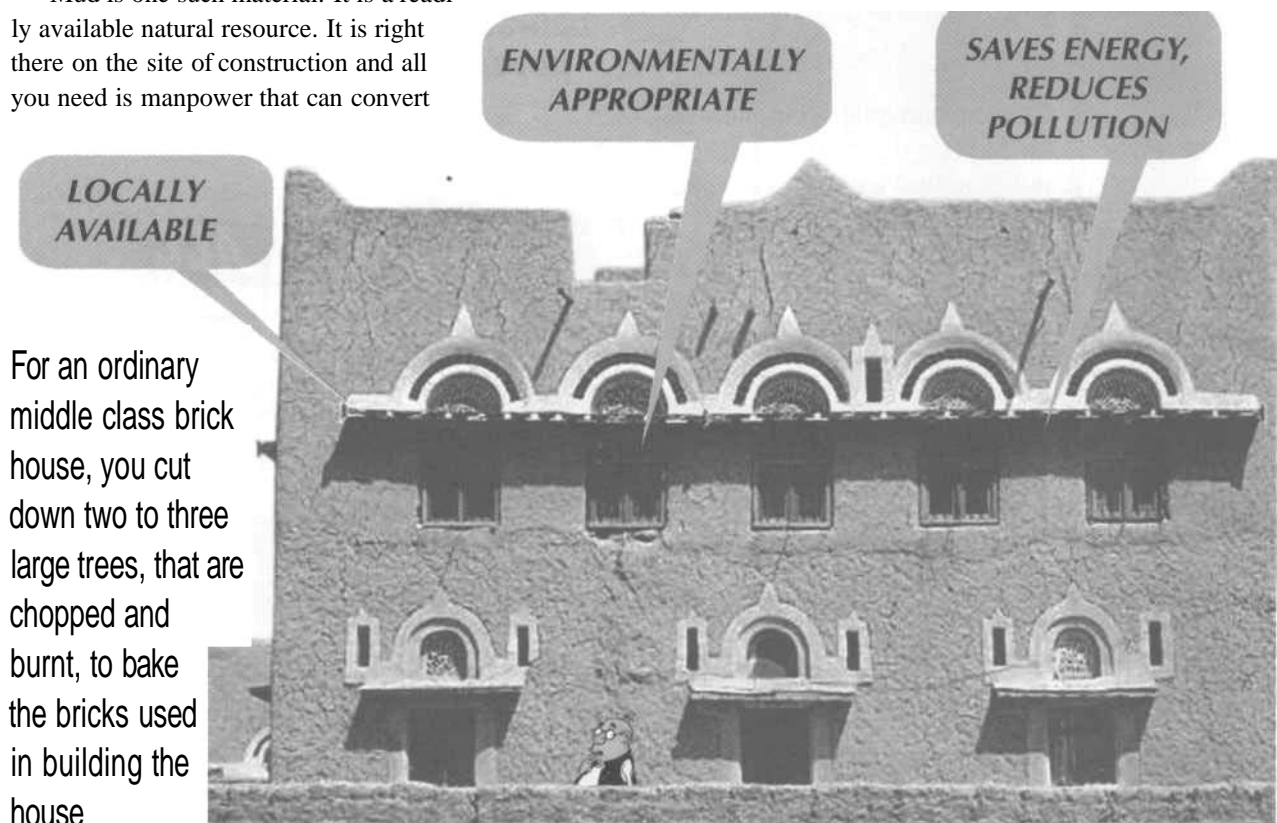
Laurie Baker, the master earth builder from Kerala tells us why mud

Modern building material are energy intensive. The 'properly' built houses of today are made of items like reinforced concrete, cement blocks, burnt bricks and so on. These are not naturally available material and have to be manufactured. The manufacturing processes of these material are very energy-intensive. Enormous amounts of energy in some form of fuel. Large quantities of cement are imported from Korea, as we do not have enough cement. Although bricks are made of mud, we burn or bake them before we build. If you build an ordinary middle class brick house, you are cutting down two to three large trees to bake the bricks used in building the house. In many parts of the country, fire-wood is a very scarce commodity. Therefore we ought to develop methods of house construction using materials that are not expensive, are not imported and do not use a lot of our natural resources to provide the fuel for manufacturing these building materials.

Mud is one such material. It is a readily available natural resource. It is right there on the site of construction and all you need is manpower that can convert

the mud that is lying around on the ground into a wall to surround you and protect you. Even if the surface soil is unsuitable, there may be suitable soil beneath. You can also bring mud from a different site nearby. Or add stabilisers so that it is made suitable. A 25 sq m house on a 250 sq m plot would require about 60 cubic metre of mud for its walls. By digging all over the plot, except the basement area, to a depth of 0.266 m (10 and a half inches) you have the right amount of soil to build the house.

There are more houses made of mud in India than of any other material. So why have we stopped using it? Actually we have not stopped using it. Many rural families and many of our poorer people still use mud - but official or Government housing schemes and the 'middle class' rarely use it. WHY? Firstly because people are not building their houses themselves. They



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get others to build it for them. They have jobs to do and the older children also cannot help because they carry on their education until they are grown up. So there is no time to do and make things. Secondly because we seem to have become more 'class conscious' and MUD is connected in the people's mind with "the poor" and with "poverty". Who will marry my daughter if I live in a mud house?

Mud is the material for the 21st century. The plus point of mud as an old fashioned material is that it has been tested and tried over the years whereas cement and concrete has been in circulation for less than 100 years. If all of us are to live in the 21st century with a roof over our 700-800 million heads we would be able to do it only if we put mud into its rightful status.

One of India's major tasks is to provide a home to everyone. If we are to build the houses with burnt bricks, concrete and cement - it would add to the vast energy crisis and to the overall cost of housing for millions of people in the country. If only we apply our 20th century know-how and techniques to our age-old mud, we can solve this housing need without adding to our energy problem.

Mud can be used to make fashionable houses such as in Australia where there are many mud houses which are not distinguishable as such.

Therefore everyone - rich, poor, lower middle or upper class - should understand and accept that mud is a reasonable, acceptable, strong, durable basic building material that has stood the test for hundreds, if not thousands of years of time.

So don't say mud is old-fashioned. You can make it the latest fashion.

Extracted from an article by Laurie Baker, 1981



LAURIE BAKER, INDIA

Born in Birmingham, England on March 2, 1917, Laurence W. Baker went on a cycling tour of Europe when he was seventeen. A tour that changed his life. He was fascinated by the landscape, and the differences in the houses and soon joined the Birmingham School of Architecture.

During World War II, he became involved in the treatment of leprosy in West China. Meeting Mahatma Gandhi for a short while made him come to India, where he married a doctor from Kerala, Elizabeth Jacob in 1948. While they worked with leprosy patients, Baker went into problems of rural India and traditional architecture. Today, Baker model houses can be seen across the country. He also went into the industrial field and his work on alternative energy systems in building grew.

HASAN FATHY, EGYPT

Hasan Fathy's book *Architecture for the Poor*, published in 1969, was the first serious attempt to focus on mud architecture. Fathy's fascination with mud began when he was a young man, seeing the peasants' homes on his father's farm. "The peasant built his house out of mud, or mud bricks, which he dug out of the ground and dried in the sun...We, with our modern school-learned

ideas, never dreamed of using such a ludicrous substance as mud for so serious a creation as a house." Today Fathy is an inspiration for many earth architects the world over. He encouraged a deeper respect for the use of tradition in architecture. Noting that the word 'tradition' itself comes from the latin 'tradere', to carry forward or transfer and thus implies the cyclical renewal of life.

