

Comfort measurements have been conducted over a period of one week, four times each year, inside several houses of different types in Lamu Town, a traditional Swahili settlement on Lamu Island off the Kenyan North Coast.

The house types investigated consisted of the traditional Lamu house (single and double storey), a 19th century Arab residence, and modified houses.

The Hygrothermal (HGT) factor according to Scharlau was applied as comfort indicator. For reasons of comparison an  $HGT_N$  index was introduced by the author to evaluate the comfort levels at different recording positions and periods against the overall climatic impact as recorded at the meteorological station.

The  $HGT_N$  index contains the following information: the actual comfort stress level (HGT) and N, its duration in time, expressed as a percentage of the measured period. For instance: —6.0  $HGT_{30}$  indicates a stress intensity of —6.0 HGT exceeded for 30% of the time.

The result of the investigation gives an indication of the actual performance of the buildings under discussion, in respect of their reaction to the prevailing climatic conditions. Hence, detailed conclusions for particular design features can be arrived at.