Behaviour of Laterized Concrete Beams Under Moment and Shear.
Falade, F (1991)

The science and technique of substituting laterite for fine aggregate in normal concrete work is rapidly increasing in Nigeria. Studies of laterized concrete elements have been devoted primarily to observation under unit actions like the cube strength, split tensile strength, modulus of rupture and creep characteristics. The present report gives the results of twenty-four reinforced-laterized concrete beams, they were tested under combined actions of moment and shear. The principal variable are the mix proportions, percentage tensile reinforcement and shear span to effective depth ratio (aid). The results showed that the higher the percentage tensile reinforcement and cement or aggregate ratio the higher the shear and moment capacities of the beams. When the shear span to effective depth ratio was increased, the shear capacity of the beams decreased while moment capacity increased. The shear span to effective depth ratio is the single most important factor that influences the mode of failure of the laterized concrete beams.