1: INTRODUCTION

The proposed research work “Natural Ventilation for Enclosed Buildings in Rural Areas” is basically a problem oriented research. The Buildings construction methodology adopted in rural areas is totally different from that in urban areas. Urban buildings are constructed on well planned layouts hence each building is isolated from other buildings hence practically it is possible to provide windows and ventilators in all external walls of such buildings to suffice the need of natural ventilation. That is not the case with buildings in rural areas where the buildings are enclosed by adjacent buildings on two or even three sides in some cases. Practically one couldn’t provide windows and ventilators in common walls and here comes in to picture the need for natural ventilation of enclosed buildings. The indoor conditions in such enclosed buildings are unhygienic and uncomfortable due to lack of fresh air and light. Of course traditionally there are certain measures like providing small openings in the roof for ventilation of such enclosed buildings. But air and light entering indoor through such openings is concentrated only below such openings keeping other parts in darkness where the habitants have to use electricity (if available) operated fans and lights. Otherwise to stay in darkness without fresh air. A lifetime and maintenance free solution can be worked out to solve above problem and considerable amount of electricity can be saved. The light bills for such naturally ventilated enclosed buildings can be reduced by almost about 75% to 80 % since electricity is not at all required during day time i.e. 6am to 6pm.

The solution can be user friendly for society and energy conserving also because it is always said that energy saved is energy generated……..