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Sustainable Rehabilation of Ancient Structure

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Abstract : This paper focuses on the damage that has been occurred in the Ancient structures due to various factors such as rainfall, climate, insects, lifespan and also most important lack of technologies in the era of its construction. The structure is of lime surkhi masonry and is made a century ago. It has crossed its durability but is of historical importance for the area, that is the reason why it needs utmost importance for its Rehabilitation. The paper deals with the damage that has been occurred in the structure and how to repair and renovate the same keeping in mind that the material deviation could not take place because it shows how in ancient era structures are made of. The building has used lime surkhi mortar along with wood apple as fibrous material for providing adhesiveness in masonry binding. The paper helps in sustainable retrofitting of the structure without changing the integrity of the structure. This helps in maintaining the originality of structure in present era and also help in providing information to the upcoming generation how ancient civil construction has been carried out that withstand even more than a century.

Keywords: Lime Surkhi masonry, rehabilitation, sustainable development, historical building **Conference Title:** ICCGE 2025: International Conference on Civil and Geological Engineering

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