DEVELOPMENT OF SHORT SPAN BRIDGE (SSB) STRUCTURES USING INDIGENOUS AGRO-BASED MATERIAL

RESOURCES: DESIGN EXPERIMENTATION USING FEA

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ABSTRACT

In bridge and building construction, indigenous agro-based materials are still under employed in structural forms compared to steel construction. For indigenous agro-based materials to succeed on the construction market it is necessary to develop new material forms and construction methods that will allow for economic use of the material. Design and analytical study of a SSB is a project to design a short span bridge which is less than 10 meters and to determine deflection and bending moment of SSB under static loading condition. This project is implemented by using LUSAS software. This software is selected because of its capability to deal with uncertainty factor and capability of learning from the given input.