

## ABSTRACT

Today researches all over the world are focusing on ways of utilizing either industrial or agriculture wastes as a source of raw materials for the construction industry. These wastes utilization would not only be economical, but may also help to create a sustainable and pollution free environment.

Sugarcane bagasse is one such fibrous waste-product of the sugar refining industry, along with ethanol vapor. Bagasse ash mainly obtains aluminium ion and silica. In this project, untreated bagasse ash has been partially replaced in the ratio of 0%,10%,20% and 30% by volume of fine aggregate in concrete.

Fresh concrete tests like Slump flow, V-funnel and L-box were undertaken along with Strength properties tests like compressive strength, split tensile strength and flexural strength. The result shows that bagasse ash can be a suitable replacement to fine aggregate.