

Sustainable Development of Bio- Bricks using Agricultural Waste

Radha Ajay Powar¹, Abhishek Baburao Patil², Aditya Sambhaji Kalake³, Kiran Anil Chalake⁴

Assistant Professor, Department of Civil Engineering¹

UG Students, Department of Civil Engineering²

D. Y. Patil Technical Campus, Talsande, Kolhapur, India

Abstract: This paper endeavour the utilization of Agricultural waste (Sugarcane trash) for making Bio Bricks and other construction materials to reduce burning and disposal problems of Agricultural waste. India is an developing country and population of India goes on increasing that puts huge burden of burn clay bricks. Burnt clay brick produced huge amount of greenhouse gas. Bio brick is one such material that has potential to be sustainable and cost effective solution. Bio brick is an economic and environment efficient construction material and it has also carbon negative footprints . Sugarcane trash burning is a significant source of pollution in India, especially after the harvesting season. Bio-bricks was developed as an alternative and sustainable building material that is made up of agricultural waste. And at the same time will also lead to the reduction of air pollution and create new jobs at the grassroots level. The use of Sugarcane trash in construction materials is one of new way to deal with disposal and burning. India is home to some of the most polluted cities of the world in terms of its air quality. Data shows that around 20 out of the 30 most polluted cities of the world are in India. So the research highlight to provides green building material through Agricultural waste for sustainable development of Bio Bricks. Some additional work in this project can be done which will help environment with decreasing Air pollution by reducing of sugarcane trash burning . Bio-bricks can be developed as a carbon- negative, sustainable and economically viable material for construction. With the right kind of product development and incentives, it can diversify into numerous products satisfying the needs of an ecologically sensitive future.

Keywords: sustainable development, lime binder, gypsum, fly ash, stone dust bio brick, agricultural waste, burning of agricultural waste

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