

LIGHTWEIGHT WALL PANEL BY USING RECYCLE PLASTIC BOTTLES

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Description of innovation

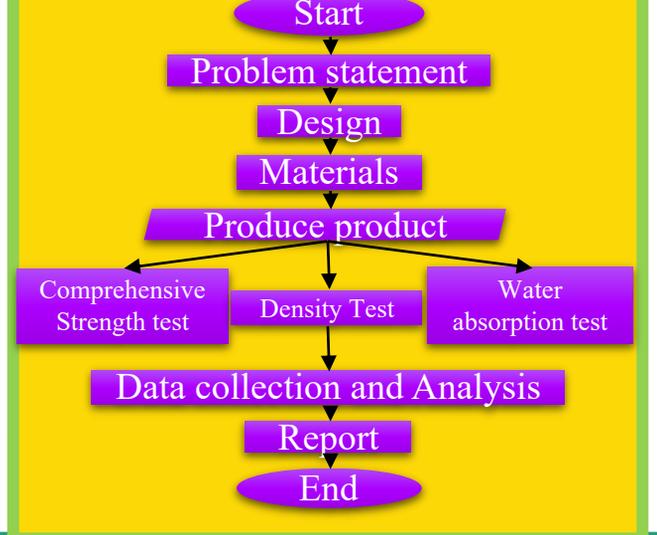
- In this age of globalization, more than 350 million tons of surplus plastic bottles are manufactured by companies every year but plastic bottles need 450 years to decompose.
- The waste of plastic bottles increasing critically and can affect the ecosystem also the aquatic life.
- to reduce waste at landfills, the project will recycle plastic bottles to produce lightweight wall panels by adding polyurethane (PU200) to strengthen and reduce the density of wall panels compared to standard brick walls or conventional wall panels

Impact of innovation

ADVANTAGE

The use of pu200 foam in mechanically recycled and explored plastic bottles to produce lightweight, durable and sufficient strength walls can be used as walls in buildings and at home

FLOW CHART



OBJECTIVE

- To produce wall panels using recycled bottles and polyurethane foam.
- To compare the density of wall panels using recycled bottles and conventional walls.
- To determine the compressive strength of the wall panels use a recycle bottles.

