

PBS COIR WORLD

Geotextiles







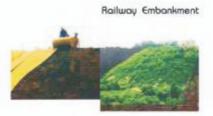
Wherever the earth is denuded of vegetation, some sort of covering has to be provided to prevent soil erosion due to rain or wind. This cover is called geotextile. In the early periods reeds, bamboo, wood and animal hide were used to bind soil. Now synthetic materials like polyester, polyamide and polypropylene are mainly used as geotextiles forcivil engineering applications. The share of natural geotextiles is a mere 5% in the market.

In an age of growing environmental awarenesss, sythetic geotextiles have some disadvantages. Since the synthetic geotextiles are not biodegradable, they cause soil pollution. Further, their production processes cause air and pollution. Hence the search for a suitable natural geotextile.

Here coir is the sure winner. Experimental studies have proved that while cotton and jute degrade within six months, coir geotextiles provide good support on slopes for about 5 years. It is resistant to saline water. Its greatest advantage is that it provides an ecological niche for a rapid re- establishment of the vegetation cover. Coir resembles natural soil in its capacity to absorb solar radiation. This means that there is no risk of excessive heating as happiness sometimes in the case of synthetics.

All these experiments were successful and coir geotextiles were identified as ideal material for preventing soil erosion. Recently geotextile applications were successfully carried out for the protection of mud-bunds in the water-logged Kuttanad in Kerala India.





Hill Slope Protection









