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Plastics and Resource Conservation: Land, Water, Forest and Energy – A Summary

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In view of the global ecological concerns, the concept of sustainable development has been put forth as progressive and balanced achievement of the sustained economic development, which includes social equity and environmental quality.

United Nation's World Commission on Environment and Development (WCED) defines sustainable development as “a development that meets the needs of present without compromising the ability of future generations to meet their own needs”.

Polymeric materials work for a sustainable future.

Plastics consume 4% of the world fossil fuel (crude oil or natural gas). It is estimated that the use of plastics (which are lighter, stronger and more adoptable and corrosion free) in myriad applications actually saves more oil than they require for their manufacture and have much lower impact on environment. In addition to direct energy savings, plastics contribute to environmental protection including the preservation of other natural resources. No other material can match plastic characteristic of meeting application demand in tandem with resource (land, water and forest) preservation.

**Part of Macro National Study
on Plastics & Environmental
Issues – Conservation of Land,
Forests, Water, other Natural
Resources**

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Extruded tapes made from plastics raw materials offer many advantages. A comparison made on life cycle analysis of PP-HDPE woven sacks vis-à-vis Jute/Paper sacks in terms of environmental considerations (study carried out at IIT Delhi) is revealing. (*Separate Publication available at ICPE*).

The volume of water available on earth is 1.4 billion cu.km of which more than 97% is saline and present in the oceans. Less than 3% of water on the earth has originated from the ocean, passing billions of times through the water cycle. Nearly 77%

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