



Erosion **Climate Change** **World Sustainability?**

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Hello!

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1. Transition Headline

Let's start with the first set of slides



Erosion is the Geological process in which Earthen Materials are worn away and transported by natural forces such as Wind, Water, Air, Mass Movement, and Human Interruption

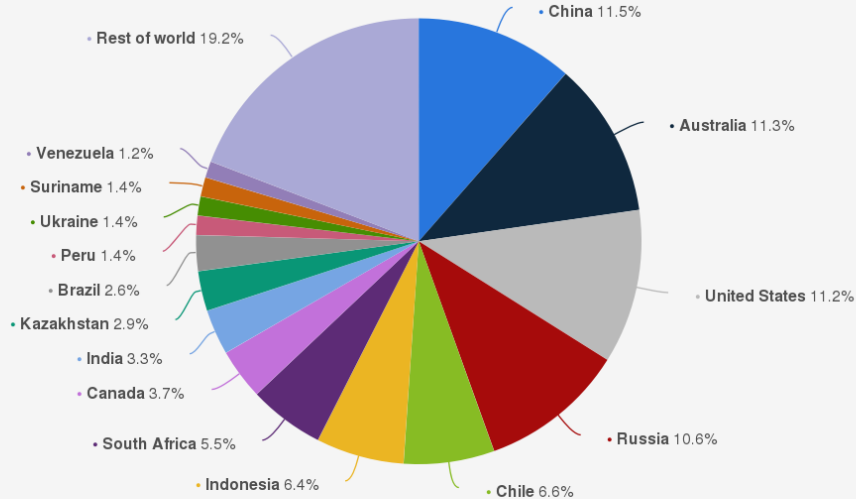


Symbol of Natural Destruction



29% of Earth's Land is 149 Million Sq.km

Distribution of the land area for mining activities worldwide as of 2020, by country (in percent)



Additional Information:
Worldwide, as of September 2020

Source
Nature
© Statista 2022

75 Billion Tons of Soil is Eroded from the land (Air, Water & Wind) per Year.

Essential to Revamp

Mining Land 49.9 million Sq.km of Earth's terrestrial land area (37%, excluding Antarctica)

Farm Land 1961-44,790,648 Sq.km, 2020-47,388,929 Sq.km

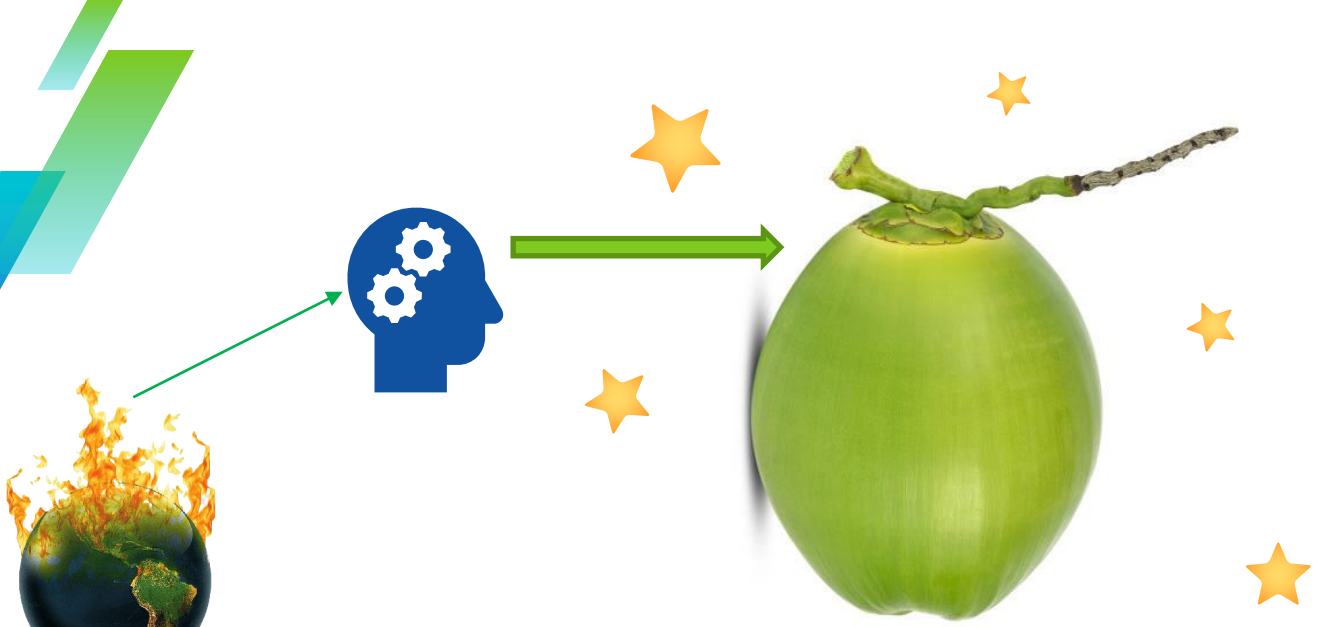
Barren Land 2020-28 Million Sq.km

Soil Erosion Creates World Poverty 2030



- Loss of Fertility,
- Natural hazard Facilitation,
- Destruction of Vegetation,
- Stormwater Pollution,
- Land Destruction
- Food insecurity.
- Aquatic ecosystem Degradation





Big concept

Ecology Employment Empowerment

Indian Coir

Whoa, We are proud of our Goals

5000 Sustainability Coir Product and 25000 Real-Time Applications

A picture is worth a thousand words

A complex idea can be conveyed with just a single still image, namely making it possible to absorb large amounts of data quickly.





Want a Big Impact?

Why Coir Technical Textiles?.. to explain our ideas



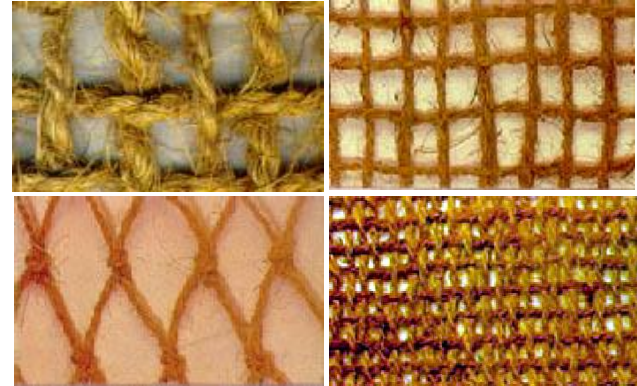
Physical properties of coir

ULTIMATE

Length (mm)	0.6
Diameter/width (microns)	16.00

SINGLE FIBRE

Length (mm)	150 - 200
Density (gm/Cc)	1.40
Tenacity (gm/ tex)	10.00
Breaking elongation	30%
Moisture regain <i>at 65% relative humidity</i>	10.5%
Swelling in water (dia.)	5%





Tables to compare data with Other Natural Fibers

Chemical properties of Coir

Water soluble	5.25%
Pectin & Related Compounds	3.30%
Hemi - cellulose	0.25%
Lignin	45.84%
Cellulose	43.44%
Ash	2.22%

Placed under soil containing Micro-Organisms

COTTON
Completely
consumed
after
6 weeks

JUTE
Completely
consumed
after
8 weeks

COIR
Retained 20% to 43%
tensile
Strength even after
ONE Year!

**Experiment I, Happens 1989
1997, P.S.G Polytech Best Project Award**

Experiment II, Subjected to
Flooding Water for 4000 hrs.



COTTON
Swelled and
broke apart

JUTE
Swelled and
broke apart

COIR
Remained
Undamaged!

Pine Apple, Banana Fiber, and Human Hair are also considered

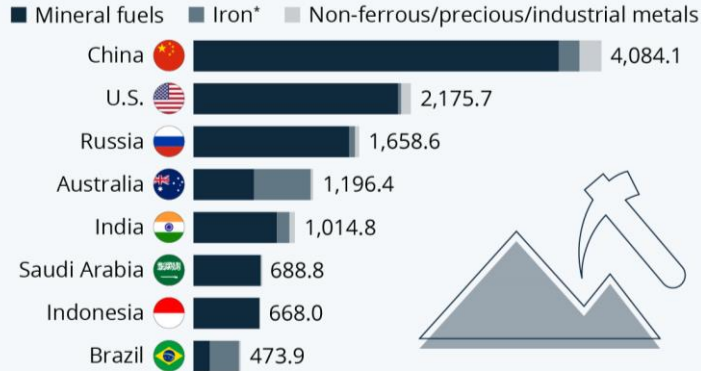
World Erosion Maps



World Should Rethink to Prevent Soil Erosion

The Countries That Are the Biggest Miners in the World

Extraction of mining products in 2018
(in million metric tons), by country



* Including ferro-alloys

Source: International Organizing Committee for the World Mining Congresses

Fair Solution From Indian Coir With Scientific Evidence

Mining Soil
Slope Angle
Climate conditions
Mining Depth
Water Flow
Nutrients Availability of Soil
Plant varieties
Plant Density,
Life of Products

After 3 to 5 Years, Reduce Temperature by 2 to 5 c
Create Birds Shelter and Rise Ground Water
Create More Oxygen and reduce CO2

Mining & Logging –Revamp Land –Create New Oxygen Generate Forest

The country's coastline is 6,631.53 kilometers long.

As much as 32 percent of India's coastline underwent sea erosion and 27 percent of it expanded between 1990 and 2018, according to a recent technical report by the National Centre for Coastal Research (NCCR) under the Union Ministry of Earth Sciences.

The West Bengal coastline has been particularly vulnerable: 60 percent of the coastline underwent erosion during the period, followed by Puducherry (56 percent); Kerala (41 percent); Tamil Nadu (41 percent); Andhra Pradesh (28 percent); Gujarat including Daman and Diu (26 percent); Odisha (26 percent); Karnataka (24 percent); Maharashtra (22 percent); and Goa (19 percent).
Odisha coast expanded by 51 percent.



• India has large reserves of iron ore, bauxite, chromium, manganese ore, baryte, rare earth, and mineral salts. India produces as many as 95 minerals, which include 4 fuel, 10 metallic, 23 non-metallic, 3 atomic, and 55 minor minerals (including building and other materials). In 2015-16, there were more than 2,101 reported mines excluding the atomic and minor minerals, natural gas, and petroleum (crude).

India is endowed with a wide variety of naturally occurring minerals. The country has a total geographical area of **328.73 million hectares**. Of this, the mining lease area, except for fuel, atomic minerals, and all minor minerals, constitutes around 0.09% (3,12,645.72 hectares).

Revamping Possible with Coir

Where do we need to use Coir Technical Textiles? and Save top SOIL

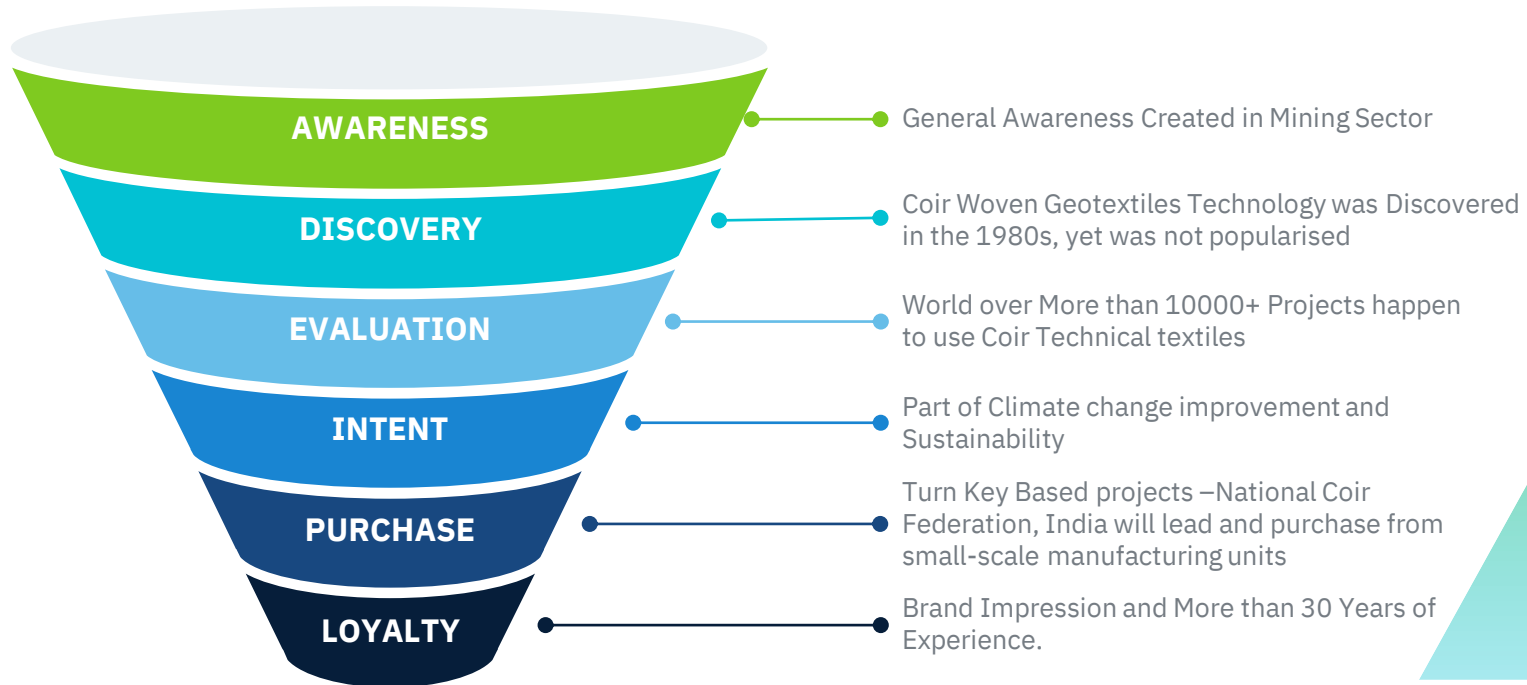
Let's review some concepts



Project Considered



Turnkey Projects for Mining Lands



Thanks!

Any questions?

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