Coconut at the coast….by all means

Coconut tree and coast are synonymous for us. This lofty monocot standing near the seashore is a visual relief for tired seafarers, a phenomenal example of water-based seed dispersal and plant migration, livelihood resource for coastal people, and a potential blocker for seashore erosion nowadays. Seashore erosion is a global problem and conventional remedial measures like seawall and groyne construction, sea dykes, revetments have drawbacks like high cost and environmental damage. Coconut tree, a suitable alternative, remain instrumental as soft measures of coastal erosion protection. Coastal bioengineering project in the USA has applied coconut husk (also known as coir) to make natural fibre blankets and coir rolls to prevent coastal erosion and maintain habitat and ecosystem function for coastal-adapted species. Blankets are mat-like structures where coirs are loosely woven or sometimes are stitched together with other bio-degradable materials. Coir rolls are cylindrical structures very different from blankets and nicely are packed with fibre and tied with netting, in some instance, coir fabrics with the sand-filled interior known as coir envelope are also made. These protective structures are often dotted with saplings of soil binding species so that mature plants can replace their protective functions when the main framework eventually wears out. The main advantages of using coconut are its abundance, easy to use, cost-effectiveness and acceptability. A recent example of its application can be seen at Karangjaladri village of Pangandaran Regency of Indonesia, south-east Asia. Scientists of Bandung Institute of Technology along with local villagers installed a 20-meter-long coconut husk sea-wall to arrest the loss of land near the village. Multiple coconut coir rolls were stacked and dotted with saplings of local species to prevent the coastal erosion in the long run. So, coconut at the seashore is deeply desired by all means.

.Source: https://climateactiontool.org/content/restore-natural-coastal-buffers-bioengineering-coastal-banks

https://theconversation.com/we-built-environmentally-friendly-sea-walls-from-coconut-husk-heres-what-we-learned-122725

Image: Rick Gibbs, Susanna Nurdjaman

Collector: Rajasri Ray