

Bamboo as a Potential Option for Land Reclamation and Restoration¹

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Abstract: Bamboo is an umbrella term used to represent over 1600 species of related grasses, native across every continent except Europe. Bamboo applications have been expanding for food to fuel, timber to paper, engineering structures to landscape restoration. Bamboo has the potential for being used for land reclamation and ecosystem restoration across the world. Examples of successful land reclamation and restoration using bamboo from degraded gold mine sites in Ghana, coal mines in Indonesia, brick mines in India, degraded mountainsides in Nepal, and eroded coastlines in Thailand will be presented. The main features of bamboo that make it such a successful reclamation species are its extensive root system and self-regeneration capability. Land reclamation projects using bamboo can help to achieve the three pillars of sustainable development, namely environmental stability, economic viability, and social equity. For instance, bamboo is one of the fastest-growing plants and can provide early investment returns as it can be used for the shoot in less than a month and timber harvest within 3 years in addition to sequestering large amounts of carbon. Lastly, simple management and propagational techniques that can be used across different landscapes will be presented.

Additional Keywords: sustainable development, carbon sequestration, degraded landscapes.

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