**Current Restoration Approaches for Advancement of Forested Wetlands and Stream Channels to improve the Hydrological Connectivity in Forests of Chhattisgarh**

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**ABSTRACT**

The sustainability of freshwater systems and the creation of wildlife habitat as well as improved or protected surface water quality are intimately tied to forests as natural systems. Complex plantations and infrastructures with logistical and economic advantages, such as dams and water holes, can best achieve some restoration objectives. Multiple species can be arranged in different ways in real mixtures or intercropping mixtures as part of complex plantations for restoration. The survival of freshwater ecosystems depends on such robust, diversified forests. Restoration of these forests is thought to be crucial to raising the quality of the water since riverine forests have a direct impact on freshwater systems. In addition to being crucial for groundwater recharge, forests are essential for reducing extremes in stream and river discharge (such as increased flows during droughts and lowered flows during floods). By filtering, storing, and regulating the discharge of nutrients into streams and rivers, forest cover reduces erosion. Similar to this, the creation of water bodies has a significant ecological impact on the health of stream, river, and estuarine systems by constructing and stabilising channels, supplying habitat for fish and other aquatic life, and boosting productivity. The issue of forest cover is frequently at the centre of discussions about global warming because it directly affects the quantity and quality of freshwater supplies around the planet. A comprehensive strategy for the global sustainability of freshwater ecosystems must start with the restoration of forests and water bodies. In this chapter, we have focused on the applied tools and techniques of restoration whether by establishment of forests or through development of water aggregators that can boost the hydrological connectivity of streams and wetlands in the forests of Chhattisgarh to secure the sustainable availability of water resources for current and future generations.

**Keywords-**restoration; wetland; stream; forest**; s**ustainability.