Application of Vetiver System on Land Stabilization and Environmental Protection in Brazil

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ABSTRACT

In Brazil the applications of Vetiver are recent, but the good results in tropical climate have expanded the applications and has stimulated the production of Vetiver grass (Chysopogon zizanioides). There are still very few nurseries that produce quality plants, Deflor Bioengineering began producing Vetiver plants in 2004 and currently have a production capacity of 5 million plants per year. Applications of Vetiver in Brazil are for improving the stability of slopes and hillsides and environmental protection at landfills, erosion and stream banks. This paper shows the use of Vetiver in the protection of slopes, and techniques used in the production of planting materials and planting systems on cut and fill slopes. In Brazil the main form of planting materials production is in plastic bags, since attempts to use bare rooted plants have not been successful in the field, due to high temperatures and prolonged periods of drought in Brazil.

This presentation will present case studies showing the effectiveness of Vetiver when combined with Biodegradable Blankets on uncompacted fill slopes and in the same area when only Vetiver was used, erosion and landslides occurred, damaging the drainage system and landslides in parts of slopes that have high costs for restoration and recovery