

Cattle-proof Trenches

Contour trenching on denuded hillsides is carried out to reduce the velocity of runoff water and also to re-vegetate the hillsides to check soil erosion. The greatest danger for a re-vegetating hillside is stray cattle. To protect the treated area until the plantation is mature enough to look after itself, a continuous cattle-proof trench is dug around the boundary. The trench is 1 m deep, and 1 m wide at its base and 1.25 m at the top. The soil removed from the trench is placed along the treated side of the hill.

Dry Stone Dykes (Walls)

Where a hard ground surface makes the digging of a cattle-proof trench difficult, and there is a large quantity of loose stones available, dry stone dykes (walls), constructed by placing one stone on top of another to a height of 1 m, with a base width of 1 m and the top width of 0.8 m, can be used instead of cattle trenches to protect treated areas. The choice of the strategy for cattle-proofing is dependent on the cost-effectiveness of cattle-proof trenches and dry stone dykes in the particular treatment area.

Agro-forestry

Agro-forestry is a sustainable land management system in which trees are grown along with agricultural crops. This system is not confined only to agricultural land, but is also applicable to waste and marginal land. Under the watershed development program, fruit and forest plant saplings were distributed to farmers so that they can be planted amidst field crops or as a plantation. The main objective of tree plantation with grasses and/or crops is to rehabilitate degraded land. This results in optimum land productivity; conservation of plants and grasses, soil and nutrients; and enhancement of the production of food, forage, firewood, timber and other products.