## Nature has the answer



In Idukki's hilly areas where the landslides were damaging property and rendering soil infertile, the local farmers have revived an age-old tradition of planting vetiver crops. The women of the community have been benefitting from it as well by using its leaves to make eco-friendly baskets

Idukki, the district home to the Western Ghats of Kerala, is one of the landslide hotspots in the state. The drastic shift in climate change over the last ten years paired with human intervention in the name of development has resulted in frequent landslips in the area. In the last few years, Kerala has been witnessing changes in rainfall patterns. The intermittent downpour

followed by unexpected showers has taken a toll on the livelihoods of many, especially the small-scale farmers residing in the region.

To tackle the severe soil erosion and firmly bind the eroding soil, the farmers revived an age-old technique — planting vetiver as border crops on their farmland with the help of the project initiated by the Peermade Development Society (PDS), an NGO established in 1980, promotes sustainable and organic farming by helping the marginal, small, and tribal farmers in the region under its unit PDS Organic Spices.

"Under PDS, around 2,500 small-scale farmers are involved in farming spices. From monitoring the farm activities to the marketing of the organic spices to the international and domestic markets, PDS plays an integral role," says Jacob Jose, Business development manager of PDS organic spices.

## Vetiver solution

Vetiver, (Chrysopogon zizanioides) is a perennial bunchgrass of the family Poaceae. These crops are used to prevent soil erosion, as the roots grow 13 feet deep. This aids in binding the soil and holding nutrients in place. "I have been planting Vetiver in my farmland for the last 20 years, but not extensively. It was only recently that a majority of small-scale farmers in the region started growing Vetiver as a border crop," says Jose Thomas, a farmer who cultivate spices.

The crops are planted along the contours. The deep roots will help retain water in the soil, rather than washing off the slope. "During the 2018-19 floods which wreaked havoc in the state, the farmers who used vetiver hedges saw comparatively lesser damage. Since we practice organic farming, no chemical fertilisers are used. The available soil nutrients were also held intact by the crop during the heavy rainfall," explains Jose.

Most of the small-scale farmers of the region have a land holding of a hectare or less. According to Jose, large-scale farmers have the funds to utilise technology and pump chemical fertilisers to the soil to regain its fertility. As far as the small-scale farmers are concerned, Vetivers are a boon. The roots of the crop also hold medicinal properties, which is utilised by the Ayurveda unit run by PDS.



## Women power

Traditionally, the men of the region worked on the land while the women stuck to household chores. In 2011, PDS trained the women of the region to weave Vetivers baskets out of its leaves to provide an additional income through their project Vetiver Micro Entrepreneurship for Women Group. "We brought experts from Thailand to train them. At first, they trained around 20 women, who trained more bringing almost 50 women into the weaving sector," says Jacob.

The baskets are mainly used to market the spices cultivated by the farmers. "They are used to store the spices cultivated. The baskets are also used as gift boxes for corporate functions and in the tourism sector," adds Jacob.

PDS has also set up a unit for women to process the leaves before weaving. Betty Joseph, the leader of the group claims that the additional income from weaving the baskets has been a relief. "Monthly, we manage to get a fair income from weaving. After doing the odd jobs in the house, I

make use of the available time to weave. One has to invest at least six hours to weave one basket," says Betty, who went to Paris to receive the International Micro Entrepreneurship Award in 2014.

## **PANDEMIC BLUES**

The vetiver micro-enterprise, named Karunya Vetiver Group run by the local women, continues to weave baskets despite the downward trend in the market due to the pandemic. "The baskets are being purchased and stored by PDS in hopes of being able to sell them in the next season," says Jacob Jose