SOIL AND WATER CONSERVATION

Tracer for marking Contour Drains

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In view of the Government's emphatic drive to encourage the conservation of soil and water in the Island; the question arises as to how we could instruct the masses the primary need towards attaining that object efficiently and economically. The devastrating floods of 1957 is proof of the fact that our network of rivers and canals—which have silted up for centuries with the washed off topsoil of the highlands—could not cope up with the volume of water they were called upon to drain away and consequently swelled their banks flooding thousands of acres on either side, and when these waters subsided they left behind sandbanks ranging in height from 1 ft. to 4 ft. often inside dwellings as well.

This too was topsoil washed off from high land where no soil or water conservation methods had been adopted. It will therefore be seen that the opening of contour drains—to catch the maximum amount of water and the minimum wash-off of top soil—stands out prominent among the immediate necessities.

I shall explain below how to construct and use a very simple yet efficient tracer costing only a few Rupees for marking out contour drains which could well be afforded even by a small-holder who owns a little patch of undulating land.

Materials

Obtain two pieces of any light, hard wood (Halmilla) 1″ ×2″ ×6′ long and one piece 1″ ×2″ ×5′ long. One ordinary spirit level. Three aluminium or galvanized bolts each 3″ in length with nuts to fit. Maximum cost Rs. 8/–.

Assembling

Round off the ends of the three poles and join one end of each of the long poles with a bolt and nut placed 1″ from one end, slaken nut slightly to allow free movement. Now make a mark 4 ft. from the free end of each of the long poles and bore a hole in the centre and to one of these fix one end of the short pole. Figure 1 will show exactly how these are fitted.

Care should be taken when marking out the spacing holes A B C in the short pole. To mark hole A extend the two legs of the tracer to a width of 10 ft., now see where the short pole crosses the 4 ft. mark on the left leg and drill a hole to take the bolt. Likewise demarcate holes B and C reducing the width to 8 ft. and 6 ft. respectively and make two similar holes. Your tracer is now adjustable to three varing widths as may be required.

Method of Using

Tie the spirit level on the centre of the horizontal bar facing upwards, your tracer is now ready for use.

Once you have selected the site where the contour drain is required insert a peg and place one leg of your tracer beside it and move the other leg up and down the slope keeping an eye on the spirit level; stop moving when it indicates level and insert a peg beside the leg on the lower side, now repeat the process and peg out as far as you require. Open your contour drain along these pegs always keeping to the same side.

I have used this type of tracer in the field and found the results very satisfactory and I shall be glad to furnish any advice to anyone who requires further information regarding its method of construction and use.

Figure 1