

A NOTE ON THE ROLE OF STRIP-PLANTING IN CONSERVATION FARMING IN THE SUGAR BELT

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It is sometimes said that no conservation practices are needed in the sugar belt, as cane is itself the best conservation crop that can be grown. This statement may well be true when fields are fully established, but it is far from being correct during the period of plough-out and re-establishment of fields.

A further statement often made is that there is very little erosion in the sugar belt. This is also erroneous, and one does not have to look very far to find ugly scars and other evidence of considerable erosion which has taken place over the years. Happily, however, and largely as a result of the advice of our extension officers from the S.A.S.A. Experiment Station, there is a new awareness of the necessity to protect our soil, and statements about the absence of erosion hazards in cane lands are heard less frequently than heretofore.

Most cane growers will readily accept that the majority of the damage and erosion caused by heavy storms and floods, occurs on fields that have either been ploughed out preparatory to re-planting or on fields that have been newly re-established. During this period of five to seven months, all such fields, but particularly those on the lighter, sandier soils, are extremely vulnerable and susceptible to erosion, and it is therefore essential that they be protected. It is here that strip plough-out and planting can, and should, play a most important and vital role.

By identifying bottom lands as separate fields, and by ploughing out the slopes and hillsides in

strips on the contour, the danger of erosion can be considerably reduced. Erosion can be minimised if, by careful planning, one is able to ensure that the strips immediately above and below the one to be ploughed out have a good cover of cane of a reasonable age. Where the ideal of strip harvesting is coupled with that of strip planting, the mature strips across the hillside play a further important role by conserving moisture. They hold up the water from heavy storms and release it gradually down the hillside, preventing the rapid run-off that would occur if the whole hillside were recently cut or ploughed.

I firmly believe that:

- (1) no whole hillside or slope should be ploughed out at one time, left bare to the elements, and thus be extremely vulnerable and susceptible to erosion over a lengthy period of 5—7 months.
- (2) strip plough-out and planting is the most important single factor in conservation farming, and should be practised on all slopes and hillsides throughout the industry, and
- (3) wherever possible strip harvesting should also be practised.

For anyone interested in seeing what can be accomplished by conservation methods, a visit to "Stone Lodge" Estate on the north coast may be well worth while. When the area was purchased in 1957, there were 13 dongas on the farm, the largest being 1,7 hectares in extent. By practising strip planting and harvesting I believe that loss of soil from hillsides has virtually been eliminated.