

Module 3.12 SOIL CONSERVATION: MANAGEMENT		STATEMENT OF INTENT Farming operations are managed well so as to prevent soil erosion
Measures		Notes
Better management practice	<p><b>Implement better management practices to minimise soil erosion:</b></p> <ul style="list-style-type: none"> <li>• A maximum of 20% of the soil surface should be tilled as a percentage of land under cane per annum.</li> <li>• Minimum tillage is practised on slopes greater than 11% on erodible soils, 13% on moderately erodible soils and 16% on resistant soils.</li> <li>• Where conventional tillage is practised, the slopes need to be less than those above, and practised on the contour.</li> <li>• Row alignment is at right angles to the slope.</li> <li>• Row alignment may run with the slope only under the following situations: <ul style="list-style-type: none"> <li>- on slopes of less than 2%;</li> <li>- on parallel crest areas of less than 2% on erodible soils, 3% on moderately erodible soils and 4% on resistant soils;</li> <li>- conservation structures must be in place; and</li> <li>- rows must not run over conservation structures.</li> </ul> </li> </ul>	<p><b>Tillage</b></p> <p>Minimum tillage (including hand chipping) must be practised on slopes greater than 11% on erodible soils, 13% on moderately erodible soils and 16% on resistant soils with a maximum of 20% of the soil surface being tilled as a percentage under cane. Refer to the SASRI Nomograph for sugarcane panel width and the DAEA upper slope limits for the cultivation of sugarcane in KZN. Refer to Module 3.10: Soil Conservation: Layout</p> <p>On slopes of less than those above, conventional tillage is acceptable provided ploughing is carried out on the contour and not up and down the slope. Ploughing should be discontinued with the advent of high intensity storms in summer.</p> <p><b>Row alignment</b></p> <p>Row alignment should be at right angles to the slope, and should preferably be established by the master line technique – refer to Senior Certificate Course notes on Land Use Planning. On slopes of less than 2% and on parallel crest areas of less than 2% on erodible soils, 3% on moderate soils and 4% on resistant soils, row alignment may run with the slope provided conservation structures are used and rows do not run over the conservation structures.</p>