

9.7.3 Drainage and Cultivation Plan

The drainage and cultivation plan, (see map 3) whether mandatory (for areas of 10 ha or greater) or optional should address the following:

- Cultivation type and direction
- Appropriate exclusion and buffer zones.
- Number, type and location of sediment traps - ensure that they are on the more level part of the topography
- Location of any crossings of aquatic zones.
- Location and direction of collector drains/main drains/existing drains
- Clearance of vegetation prior to cultivation.

9.7.4 Drain types

Collector Drains

Collector drains (which collect water from mound drains, plough furrows, mole drains etc.) should not be greater than 80 metres apart and should run at acute angles to the contour. These acute angles should be no greater than 2 degrees (1 in 30) on slopes greater than 3 degrees (1 in 20). They should be excavated to a depth not greater than 10-15cm below the depth of mound drains. Where collector drains have to be extended into erodable material, 'mini' silt traps should be placed appropriately by deepening the drains in places. They should discharge via sediment traps and/or an interceptor drain (see below) into the buffer zone or in flat sites into the aquatic zone via sediment traps.

Interceptor Drains

These are constructed along the edges of aquatic buffer zones. They collect the discharge from the drainage subcatchment and allow it to overflow into the buffer zone.

Cut off Drains

These are constructed immediately up slope of a site and are designed to direct water away from the site.

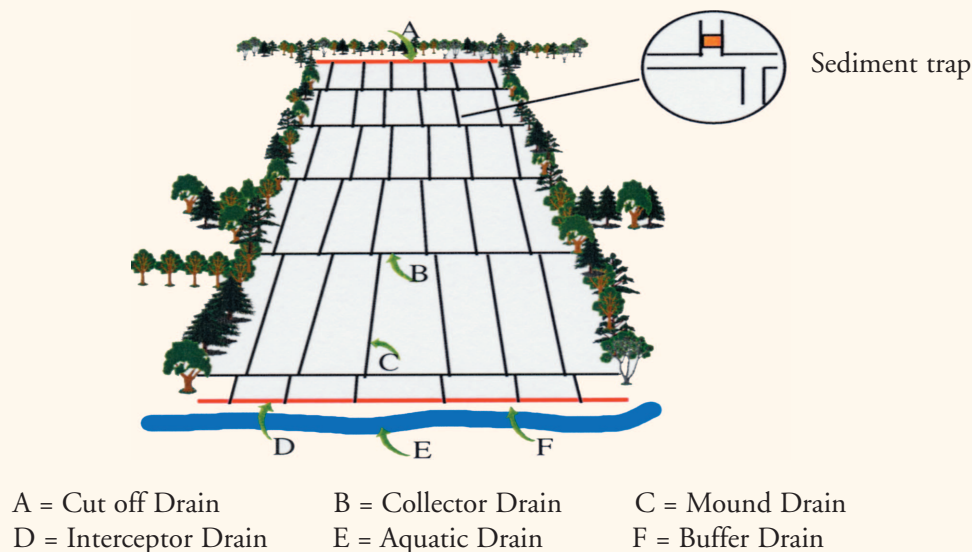


Figure 1. Diagram illustrating the use of sediment traps and different drain types. Note that each site will have to be assessed individually to determine the appropriate drainage design. Designs similar to the one above may be suitable for steeper erodable sites.