Gradient Correction

• By smoothing the slope of the field, the flow velocity of surface water is reduced, thereby decreasing the runoff of red soil.

Notes

• The slope of the field shall be capped at 3%.

• Placing green belts or levees around the adjusted gradient field further enhances the effectiveness of red soil runoff prevention.



Sediment Basin & Sedimentation Pond

• Sediment basins are installed at the end of water channels or levees within the field. They collect the muddy water that flows out, allowing soil particles to settle before draining the water into the drainage channel.

• Sedimentation ponds are installed at the middle or the end of a drainage channel. They guide the muddy water through the drainage channel, allowing soil particles to settle before discharging the water into rivers or other bodies of water.



Notes

 \cdot To maintain the effectiveness of preventing red soil runoff, it is essential to remove accumulated red soil and other sediments. If left as is, the accumulated sediments may become a source of red soil runoff.

 \cdot Sediment basins should be installed just before the drainage channel to make it easier to discharge accumulated water.

• The walls of both the sediment basin and sedimentation pond should be constructed with durable materials and structures, such as stone masonry or concrete, to prevent collapse.