



Soil contour bunds

Soil contour bunds are ridges and ditches made of soil, dug across the slope along the contour. They are used to prevent run-off and to conserve soil and water.

Location

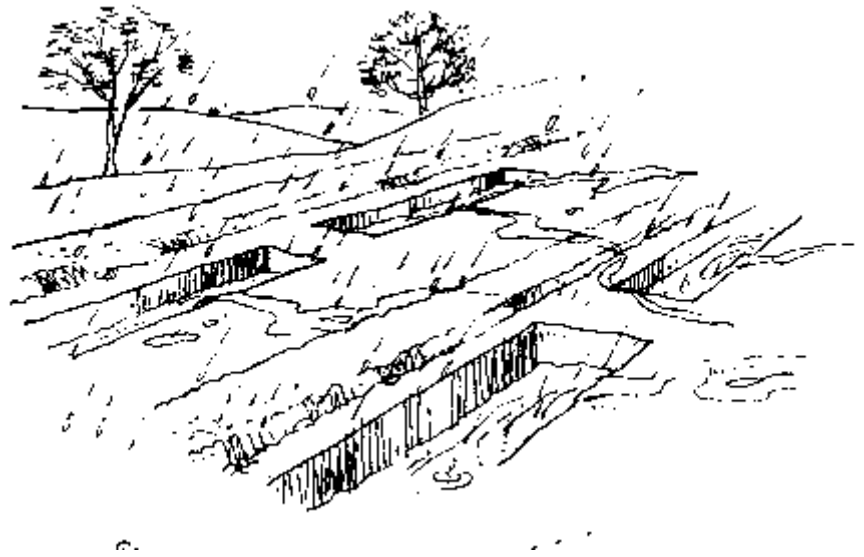
Moderate slopes (5–10%) with light or medium soil texture and less than 700 mm of rain per year.

Purpose

- To reduce soil erosion.
- To increase the amount of water the soil can hold.

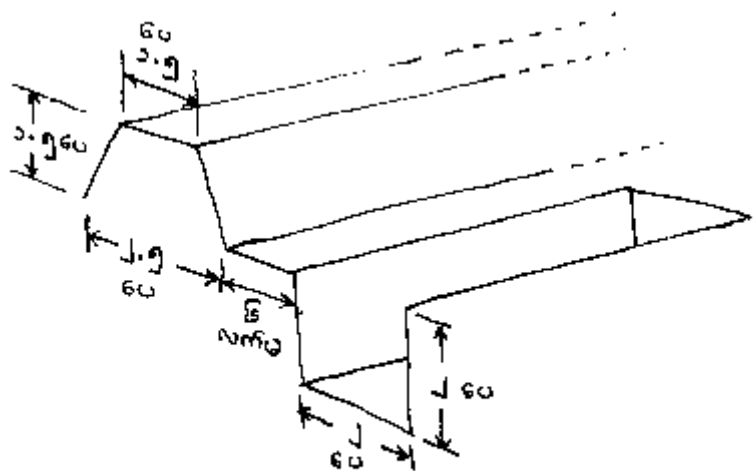
Advantages

- Simple to build.
- Bunds conserve topsoil and improve productivity.
- They keep water in the soil, allowing chemical fertilizers to be used effectively.
- They can be used both on cultivated and uncultivated land.
- Farmers can build contour bunds themselves without outside help.



Limitations

- The bunds take some land away from cultivation (though some types of crops can be grown on the bunds to stabilize them).
- May create temporary waterlogging problems in heavy soil.
- May interfere with the farm operations if the bunds are too close together.
- A lot of labour is needed to maintain and repair the bunds.

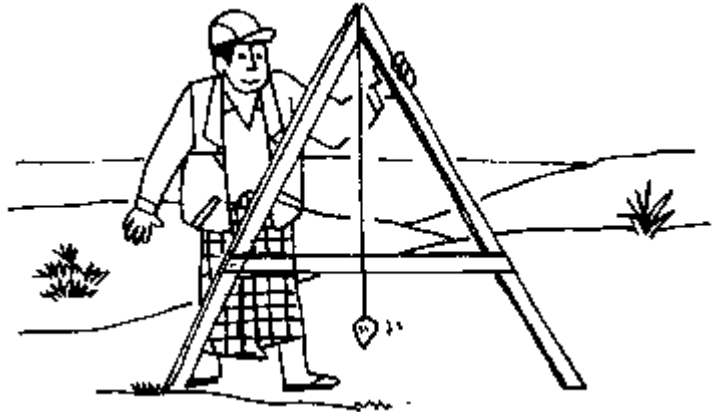


Requirements

- Manual labour, hoe, spade, line level or water-tube level and A-frame.
- Cost = 1500–2000 kyats/acre, depending on the soil type.

Procedure

1. During the off season, use a water-tube level or line-level to lay out a contour line across the slope. Mark the contour with pegs or stones.
2. Move about 70 feet up or down the slope, and mark another contour line. Repeat until you have marked enough contours.
3. Dig a ditch along the line, throwing the soil downslope to build the bund wall. Leave breaks in the ditch (called "tiles") to prevent water from flowing along the ditch.
4. Compact the bund with your hands and feet. Reinforce it with stones if possible.
5. Use an A-frame to check that the top of the bund is level.
6. Plant crops, grasses, shrubs or trees on the bund to stabilize it. If you plant trees, choose species that do not throw much shade, as you don't want to shade the crop too much.
7. Plant crops on the land in between the bunds.
8. During the first heavy shower, check for any breakages, and repair them immediately. One breakage may cause a whole series of breakages downslope.



Do's and don'ts

- Outside organizations that promote soil conservation must negotiate with the farmers beforehand to select the site, layout and construction standards for bunds.
- Compact the soil bund well, and reinforce it with stones if it is possible.
- Farmers in some areas already use contour bunds to conserve their soil. Encourage this, and help them improve what they do. For example, help them use an A-frame to mark contours for new bunds.
- Do not build bunds on steep slopes (more than 30% slope).