

SWALES



also called:	used in:	
• bunds	gardens	✓
• contour ridges	fields	
• berm 'n basin	grazing land	
• contour ditches		

A swale is a furrow with a low ridge on its down-slope side, made along the contour of a slope. The swale catches water runoff, spreads it out and helps it sink into the ground.

Usually permanent crops like fruit trees are planted just below the ridge of the swale, while seasonal crops like vegetables are planted between the swales. Over time, seeds and organic matter accumulate on the ridge of the swale, causing vegetation to grow, which stabilizes the ridge. The ridges can also be planted with long-living plants such as comfrey, marigolds, nasturtiums or grasses.



Swales prepared for planting

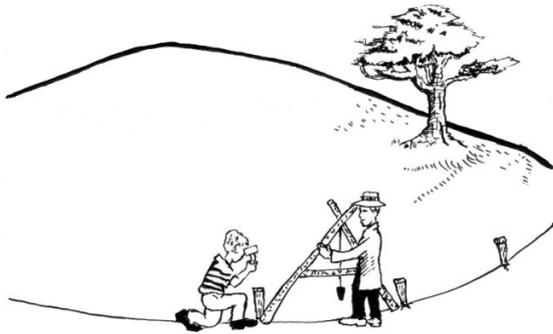


Vegetables growing on the swales

Soil	Slope	Rainfall	Tools & Equipment
Any soil. The sandier the soil, the thicker the swale should be. In clayey soil, swales can be a bit higher and narrower.	5-25%	Swales should be used with caution in areas with high rainfall (1200 mm or more) as waterlogging can occur.	spade* A-frame/line level* pegs/stakes *essential



METHOD



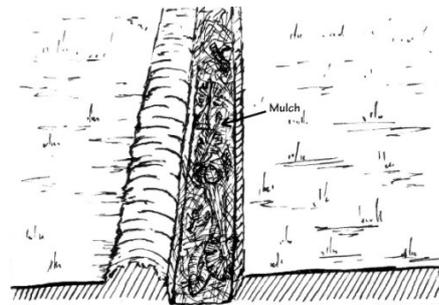
1. Decide where you want to grow your crops and mark out contour lines at 5 metres apart. If the slope is steeper, the lines can be closer (up to 3 m apart).



2. Dig a shallow furrow along each contour line (30-40 cm deep and 50 cm wide) and put the soil on the down-slope side of the furrow.



3. Use the soil you have dug out to make a ridge (30-40 cm high and 50 cm wide) on the downslope side of the furrow. Use an A-frame to make the top of the ridge level. Walk along the ridge and stamp on the soil to compact it.



4. Fill the furrow with mulch. Put the coarsest mulch at the bottom.

5. Plant permanent crops (e.g. fruit trees and shrubs) just below the ridge of the swale, and seasonal crops between the swales. If necessary, dig diversion furrows or extend the swales to bring additional water runoff into the planting area.

