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At Kota (Rajasthan), there is an excess of 301.9 mm rainfall over potential evapotranspiration during July to September which causes ravine erosion and floods. In one ravinous watershed, the surface runoff was managed through continuous contour furrows of 10 cm^2 cross-section at 1 m surface interval and the channel flow by waterspreaders and checkdams to develop *Dichanthium annulatum* grassland. The combined effect was practically cent percent control on the runoff and enrichment of the ground water storage which resulted into bigger and healthier plants yielding over 10 tonnes/ha of air dry forage. In another ravinous watershed, the surface runoff was managed by continuous double contour trenches (45 cm^2 C.S.; 2m apart), continuous contour furrows (10 cm^2 C.S.; 2m apart), half slanting pits (45 cm^3, 2m x 2m spacement) and saucer pit (45 cm^3, 2m x 2m spacement) to develop *Acacia nilotica* tree land. Perennial grasses were introduced in the interspaces. These structures with 1000, 5, 125 and 100 m^3 ha of runoff storage capacity produced upto 3.40 m tall plants within 3 growing-seasons in addition to about 2-5 tonnes/ ha/annum of air dry forage from the interspaces. Total phytomass production was highest under the treatment of contour trenches.