



A SCIENCE AND TECHNOLOGY NEWSLETTER

NATURAL RESOURCE MANAGEMENT

Ridge-and-furrow method increased water-use efficiency of maize-crop

In Shivalik region (Chandigarh), ridge- and- furrow method of sowing maize-crop resulted in mean maximum grain yield of 2.91 tonnes/ha, and it also reduced runoff (12.8%) and soil loss (2.02 tonnes/ha) as compared to farmer's practice (maize yield of 1.92 tonnes/ha, runoff of 31.8% and soil loss of 6.45 tonnes/ha). If sowing could not be done with ridge-and-furrow method, ridges and furrows should be formed manually within a month of sowing by a spade or by opening a single furrow with a bullock- driven locally fabricated plough in between the interspaces of maize-rows, ensuring width of ridges and furrows 30 cm each with 25-cm height from the bottom of the

furrow to the crown of the ridge.

Demonstration of this technology on farmers' fields showed 29% increase in maize yield over the farmer's practice. Along with water-use efficiency increased from 3.341 kg/ha/mm under farmer's practice to 4.311 kg/ha/mm with this technology.

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