Runoff recycling model for enhancing farm income through land modification

TECHNOLOGY BRIEF

This technology is applicable for rainfed areas to increase production and profit where single crop is practiced. where only single crop is grown for runoff harvesting, 12% of the total area is diverted and water-harvesting structure is to be constructed in the lower part. Some portion of excavated soil is used for pond dyke and left over soil is used for construction of paraboloid heap at a distance of 7.5 m (row to row and heap to heap) with 1 m height and 4 m diameter having gradual slope all around the heap. During *kharif*, paddy is transplanted in the inter row spaces of the heap following recommended package of practices. On the side slope of the heap, cowpea is grown for supplying vegetable, fodder, erosion control and nitrogen fixation. On the pond dyke, papaya variety Red Lady is to be planted at distance of 2 m. In the harvested water, 1500 fish fingerlings of Indian Major Carps is released and recommended feeding schedule is followed. During *rabi*, harvested water is used for growing mustard, cabbage, broccoli, black gram and green gram following their recommended package of practices in the inter row spaces of the heaps.

In *kharif*, total 32% of excess runoff can be harvested in water harvesting structure and utilized for *rabi* crops. Due to land modification, 4% extra surface area is created for cultivation which enhances production and profit

HIGHLIGHTS

- Net income increased to Rs 180000/ha
- B:C ratio - 2.66

IMPACT / UTILITY

The cropping intensity is increased from 100 to 200% in single cropped rainfed area. Water productivity in terms of monetary return per m^3 water used is increased to Rs 19.33.

Project Name	Development of a runoff recycling model for production and profit enhancement through alternate land and crop management practices
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