

Farm Production Losses in Arid Rainfed Condition of Bikaner District

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ABSTRACT

Rajasthan has 32 districts out of which 12 districts comprise the arid zone. Around 77% of the total population of the state live in villages and depend directly or indirectly on land or land based vocations. Rainfed cropping itself is a tedious and risky venture in arid region of Bikaner district. The achievable agricultural production from any farm, gives a direct loss in grain production to the farmers if different activities i.e. harvesting, threshing and storage are not managed properly. Therefore, the present study was conducted in Pugal tehsil of Bikaner district of arid region in Rajasthan during 1998-99 with the overall objective of assessing the shattering, harvesting, threshing and storage losses of food-grains in four selected villages. In each village 20 respondents were selected randomly and thus the total sample was eighty. About 4.87 per cent of the total food-grain produced was lost in the field itself through shattering, harvesting and transportation etc. Whereas 5.36 per cent loss was observed at other stages i.e. storage, cleaning and winnowing. The analysis of individual crop has revealed that the highest percentage of losses were noticed in *guar* (6.95 per cent), followed by *moth* (desi) (6.81 per cent), RMO-40 *moth* (6.33 per cent), *hajra* (5.26 per cent), *moong* (3.90 per cent) and in *til* (2.89 per cent) of total grain production in each crop. Among the different stages of losses identified, the shattering + harvesting and threshing + cleaning stages accounted for major losses which constituted 2.75 and 1.30 per cent, respectively. Thus, the present study revealed that if a farmer uses adequate preventive measures against these losses at a particular specified stage, then approximately 5.36 per cent of total production can be saved.

INTRODUCTION

Rajasthan occupies about 68 per cent of the country's total arid area. The state has about 81 per cent of area under arid and semi-arid condition out of total state geographical area of 34 million ha. The net cultivated area of the state is about 47.7 per cent with the cropping intensity of 119 per cent. The total cropped area was 19.6 m ha (1995-96) in Rajasthan. The net sown area was 16.5 m ha. The growth rate of food crops from 1952-53 to 1994-95 was estimated as about 3 per cent. The human population of the state was 17.4 million (1991) and livestock population was 23 million (1993). Though the crop and livestock production have great potential yet needs to be exploited. In Bikaner district, total area under crops was about 12.4 lakh hectares (1995-96) and the net area sown was 11.7 lakh hectares.

Cultural demand and land use are interlinked. Arid agriculture is now facing a great problem in productivity. The demand for food crops is increasing due to increase in population. Agriculture has the main base in Rajasthan as it contributed 40 per cent share in the total earning of State. To tackle the problems of farmers at various levels it is mostly required to make them aware about the proper use of their land resources.

With the advent of green revolution, the enormous increase in productivity and overall production of crops, has lead to the increased marketable surplus with the farmers of this region. Further, the other generated problems like inadequate time and method of harvesting, inadequate way of threshing/cleaning, storage, transportation and processing facilities etc. have resulted in sizeable losses of food-grains produced in spite of increased agricultural production.