

Research  
Paper

## Resource use efficiency of pigeonpea in Bharuch taluka of South Gujarat

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### ABSTRACT

The present investigation was undertaken with the specific objectives viz., to study the resource use in production of pigeonpea. The basic data were obtained from the selected sample farmers by survey method through personal interviews with the help of a specially designed questionnaire. The tabular and regression technique were the main tools of analysis. The study showed that at the overall level, per hectare use of family human labour and hired human labour was found to be 33.80 and 50.40 man days, respectively. The per hectare bullock labour, seeds, chemical fertilizers (P and N), plant protection and manures were 19.15 pair days, 15.42 kgs, 9.69 kgs, 6.00 kgs, 2.76 lit and 2.46 cart loads, respectively.

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**Key words :** Economics analysis, Proportion cost, Variable cost, Fixed cost, Pigeonpea, Cost and return

### INTRODUCTION

In predominantly vegetarian population of India, pulses are an excellent supplement of protein which play an important role in Indian agriculture. Pulses form integral part of the vegetarian diet in the Indian sub-continent. Besides being rich sources of protein, they maintain soil fertility through biological nitrogen fixation. Thus pulses are considered "life blood" of agriculture. Pulses have been cultivated under rainfed conditions which are characterized by poor soil fertility and moisture stress. Sixty per cent of pulses area in *Rabi* and forty per cent in *Kharif* season. Pulses account for roughly one-fifth of the total area under food grain crops and contribute about one twelfth of the total food grain production in the country. In the year 1999-2000 the area under pulses crops in India was around 21.19 million hectares, the production around 13.15 million tones and productivity about 630 kg/ha. India is the largest pulse producing nation in the world. The data reveal that the area under pigeon pea in Gujarat was 3,323 hundred hectares in the year 2001-2002 out of which

1,094 hundred hectares was in South Gujarat. The production of pigeon pea in the Gujarat state was 1,870 hundred million tones in the year 2001-2002, while the production of pigeon pea during the same period was 746 hundred million tones in South Gujarat. The pigeon pea is the main pulse crop grown in South Gujarat region which contribute 39.89 per cent of total pigeon pea production in the state. Thus in present state of technology, resources diversion to pulse production would only be possible by making production more economically. It is of vital importance to all concerned, to know the different resources, which go in production of pigeon pea, what is the the resources use efficiency of various inputs. and the details of by the farmers in selected region. *i.e.* Bharuch taluka in Bharuch district of Gujarat state (Anonymous 2003).

### MATERIALS AND METHODS

To fulfill the selected objectives of this study, the three stage stratified random sampling has been adopted