

## Economics of production of papaya in Maharashtra, India

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### ABSTRACT

Papaya (*Carica papaya* L) is not only a source of food but has many use in industry and medicine. A survey was conducted in Hingoli district of Maharashtra in the year 2004-05 to study economics of production of papaya in Maharashtra. Data were collected from 60 papaya growers. Most of the papaya growers were in middle age group (45.6 per cent) and their main occupation was agriculture. The highest expensive item of expenditure was rental value of land (31.28 per cent) followed by human labour (14.45 per cent), followed by bullock labour (9.04 per cent), interest on working capital (6.85 per cent), irrigation (5.72 per cent) and family labour (5.79 per cent) the per hactore cost of cultivation of cost 'C' was Rs.147787.63. The net profit was Rs.129754.77. Papaya cultivation was profitable venture in the state. Per quintal cost of production of papaya fruit was found to be Rs.140.16

**Key words :** Papaya, Productivity, Gross return, Net profit.

### INTRODUCTION

Papaya (*carica-papaya*) is an important fruit of tropical and subtropical regions of the world. Infact, following the discovery and exploration of central America by the Spanish, this fruit was spread rapidly through out Caribbean region and introduced in India in 16<sup>th</sup> century. The diverse agro climatic conditions in various parts of India offer vast scope for growing papaya crop through out the year. Papaya garden provides a good source of income and play important role in human nutrition. The papaya is common fruit plant in kitchen gardens and is popular for its nutritional and medicinal properties as well as for its habit of bearing fruits continuously through out the year. The ripe fruits are excellent break fast delicacy. Jams, soft drinks, crystallized fruits are the other important product prepared from papaya. Unripe papaya is also used for cooking purpose. Papain product which is obtained from the unripe fruits serves as photolytic enzyme and is also used as meat tenderizer for clearing there and also as tool for detection of stomach cancer (Kumar and Vandana 2000). In India papaya is grown on 0.70 lakh hectare and its annual production is 17.60 lakh tonnes. Maharashtra state has area of 6,000 hectore under papaya crop with the production of 4700 tonnes. Hingoli district in Maharashtra leads in papaya production on commercial scale. Since no serious attempt has been made to know costs, return, profitability and per quintal cost of production in papaya cultivation. Keeping in view above, the investigation with respect to economics of production of papaya in Maharashtra was undertaken.

### MATERIALS AND METHODS

Multistage sampling technique was used to select district, tehsils, village, and papaya growers. In the first stage, Hingoli district was purposely selected on the basis of the highest area under papaya crop. Basmat tehsil was also purposely selected on the basis of the highest area under papaya crop. Five villages viz, Aral, Barada, Ganeshpur, Pimplachaur and Telgaon were selected on the basis of the highest area under Red lady papaya crop. From each of villages twelve papaya growers were randomly selected for present study. Thus the data were collected from 60 papaya growers in relation to production and inputs per garden for the year 2004 -05. Papaya garden starts commercial production only from the second year after plantation. The economic life of the garden is up to two years. Establishment cost may be distributed over two years through amortization as one of the item of the total cost of cultivation. The annual amortized establishment cost was estimated by using following :

$$A = P \left[ \frac{I}{1 - (1 - I)^n} \right] = \left[ \frac{PI}{1 - \frac{1}{(1 - I)^n}} \right]$$

Where,

A = Annual amortized cost,

P = Present establish cost,

N = Economic life of papaya garden i.e. 2 years ,

I = Interest rate @ 12%

The cost concepts like Cost-'A', Cost-'B', and Cost

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