A STUDY ON YIELD CONSTRAINTS OF BANANA CULTIVATION IN THOUTHUUDI DISTRICT

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ABSTRACT:
Agriculture has been a way of life and continues to be the single most important livelihood of the masses, Agricultural policy focus in India across decades has been on Self-sufficiency and Self-Reliance in food grains production. India is an agricultural country; the Indian economy is basically agrarian. In spite of economic development and industrialisation, agriculture is the backbone of the Indian economy. As Mahatma Gandhi said “India lives in villages and agriculture is the soul of Indian economy”. Nearly two-thirds of its population depends directly on agriculture for its livelihood. Agriculture is the mainstay of India’s economy. It contributes about 26 percent of the gross domestic product. Agriculture meets food requirements of the people and produces several raw materials for industries. Hence in the present study to analyse yield constraints of banana cultivation in Thoothukudi district.

KEYWORDS: Agriculture, Policy, Banana Cultivation & Economy.

INTRODUCTION
From agricultural point of view, India is a unique country. It has vast expanse of level land, rich soils, wild climatic variations suited for various types of crops, ample sunshine and a long growing season. The net sown area in India today is about 143 million hectares; India has the highest percentage of land under cultivation in the world. In spite of the fact that large areas in India, after independence, have been brought under irrigation, only one-third of the cropped area is actually irrigated. The productivity of agriculture is very low.

Farming depends mainly upon monsoon rain. Most of the production comprises food crops. About one-third of the land holdings are small, less than one hectare in size. Banana is one of the important cash crops produced by the farmers, mainly for cash returns. The Indian government took several steps to improve the agricultural condition in the country. The government has encouraged consolidation of land holdings to promote use of modern farm machines. Land reforms were introduced. Hence in this paper to study the yield constraints of banana cultivation in Thoothukudi district.

OBJECTIVES OF THE STUDY
1. To study the yield constraints of banana cultivation in Thoothukudi district and
2. To offer suitable suggestions for the improvement of banana cultivation in the study area.

METHODOLOGY
In order to study the yield constraints of banana cultivation in Thoothukudi district. There are 120 small and large farmers were
selected on the basis of proportionate probability random sampling technique in banana cultivation in Thoothukudi district with help of Assistant Director of Statistics and Joint Director of Agriculture, Thoothukudi. The selected 120 sample farmers in banana cultivation were stratified in to two groups namely small and large farmers based on the area under banana. The farmers of less than 5 acres were considered small farmers and farmers with 5 acres or more were considered large farmers.

**Yield Constraints of Banana Cultivation**

The important yield constraints under farmer’s condition are 1) Inadequate credit facilities 2) water shortage 3) Non-availability of inputs (plants) 4) Severity of disease and pest attacks 5) Traditional methods 6) weeds

Garrett’s ranking technique was adopted to identify the main constraints to potential yield in the study area. The sample farmers were asked to rank the constraints faced by them as per priority. The order of merit assigned to each constraint by the respondents was converted into scores by using the formula

\[
\text{Per cent position} = \frac{100(R_{ij} - 0.5)}{N_j}
\]

Where

- \(R_{ij}\) = Rank given for the \(i^{th}\) factor by \(j^{th}\) farmer and
- \(N_j\) = Number of factors ranked by \(j^{th}\) farmer.

The per cent position of each rank thus obtained was converted into scores by referring to Garrets ranking table. The scores of all respondents experiencing that particular constraint, The mean scores of each factor thus arrived at were arranged in a descending order and the corresponding ranks allotted.

The farmers cultivating banana, reported six factors among the various biological constraints as the major yield constraints which limited them from achieving the potential yield in the study area. It included inadequate water shortage, credit facilities, non-availability of inputs (plants), severity disease and pest attacks, traditional methods and weeds.

The mean score and ranks assigned to the six identified factors for small farmers presented in Table 1

<table>
<thead>
<tr>
<th>S.No</th>
<th>Constraints</th>
<th>Mean Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inadequate credit facilities</td>
<td>58.15</td>
<td>I</td>
</tr>
<tr>
<td>2.</td>
<td>Water shortage</td>
<td>45.99</td>
<td>II</td>
</tr>
<tr>
<td>3.</td>
<td>Non-availability of inputs (plants)</td>
<td>35.64</td>
<td>III</td>
</tr>
<tr>
<td>4.</td>
<td>Severity of disease and pest attacks</td>
<td>31.49</td>
<td>IV</td>
</tr>
<tr>
<td>5.</td>
<td>Traditional methods</td>
<td>30.19</td>
<td>V</td>
</tr>
<tr>
<td>6.</td>
<td>Weeds</td>
<td>26.62</td>
<td>VI</td>
</tr>
</tbody>
</table>

It is inferred from Table 1 that the inadequate credit facilities were ranked first followed by water shortage. Non-availability of input (plants) was ranked third and severity of disease and pest attacks ranked fourth. Traditional methods and weeds ranked fifth and sixth.

Table 2 clearly highlights the yield constraints of large farmers producing banana.

Available online at www.lbp.world
Table 2

Yield constraints of Large Farmers cultivating Banana

<table>
<thead>
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<th>S.No</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>I</td>
</tr>
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<td>2.</td>
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<td>III</td>
</tr>
<tr>
<td>4.</td>
<td>Non-availability of inputs (plants)</td>
<td>32.15</td>
<td>IV</td>
</tr>
<tr>
<td>5.</td>
<td>Weeds</td>
<td>30.62</td>
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<tr>
<td>6.</td>
<td>Traditional methods</td>
<td>22.64</td>
<td>VI</td>
</tr>
</tbody>
</table>

It is found from Table 2 that the water shortage was ranked first followed by inadequate credit facilities. Severity of disease and pest attacks was ranked third and non-availability of input (plants) ranked fourth. Weeds and traditional methods were ranked fifth and sixth.

SUMMARY OF FINDINGS

In the present work, comprehensive study of yield constraints of banana cultivation in Thoothukudi district shows that the inadequate credit facilities were ranked first followed by water shortage are faced by the small farmers, whereas in the case of yield constraints of banana cultivation of large farmers indicates that the water shortage was ranked first followed by inadequate credit facilities in the study area.

SUGGESTIONS

1. The farmers in the study area were of the opinion that they could not achieve the maximum yield due to severity of disease and pest attacks.
2. It is suggested that the farmers should be educated properly to put the fertilizer at the prescribed level and this may be done through the agricultural development officer and attached to the Panchayat Unions.
3. Non-availability of credit was the important constraint. It is suggested that financial institutions revamp the existing credit facilities in the study area so that the farmers could get credit for undertaking improved cultivation of banana practices.

CONCLUSION

Thus, it is concluded from the analysis that the inadequate credit facilities were ranked first followed by water shortage are faced the problems of small farmers. Whereas water shortage was ranked for followed by inadequate credit facility are faced the problems of large farmers of banana cultivation in Thoothukudi district.

REFERENCE