

Constraints in Commercial Banana Cultivation

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Abstract

Banana is one of the important commercial tropical crops in India. This study carried out in Thiruvananthapuram district of Kerala, identifies and analyzes constraints in commercial banana cultivation as perceived by the growers, as a part of formulating an extension strategy for improving commercial banana cultivation. The results reveal production constraints including incidence of pests and diseases followed by labour scarcity while economic constraints include high cost of inputs, high labour charges, price fluctuation, inadequate credit and marketing facilities, high transportation charges etc. The study suggests that, most of the production and economic constraints can be addressed by promoting group farming, farmers consortium, decentralized planning and building market linkages to make banana cultivation a profitable enterprise.

Banana fruit known as the poor man's apple is an item of food consumed from the lowest hut to the royal palace. It is one of the most important commercial tropical crops in India. The scope of banana processing and exporting is high enough to improve our economy through foreign exchange and employment generation. However, its potential to be grown as a commercial cash crop has not been exploited so far in Kerala. Hence, it is necessary to look into the factors limiting the cultivation and marketing of banana to tackle this crisis. Delineation of constraints in adopting the recommended technologies would help the research and extension system to strengthen the efforts and bridge the gap between technology transfer and adoption (Trivedi et al. 2008). Thus a study was conducted to identify and analyze the constraints in commercial banana cultivation as perceived by the growers as a part of formulating an extension strategy for improving commercial banana cultivation.

Methodology

The study was carried out in Thiruvananthapuram district of Kerala state among 150 commercial banana growers. Stratified two stage proportionate sampling method was employed for the selection of respondents. The list of constraints

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collected through review of literature, discussions, pilot study and experience of the researcher, were given and the respondents were asked to indicate whether they were experiencing any constraints during the cultivation of banana. The frequency of responses for each of the constraints was worked out separately and ranked.

Results and Discussion

The identified constraints as perceived by the banana growers, along with the frequency distribution are given in the Table. These constraints are grouped into Production and Economic constraints.

Sl.No.	Constraints	Frequency	Rank
I	Production constraints		
a.	Incidence of pests and diseases	107	I
b.	Labour scarcity	95	II
c.	Non-availability of inputs	58	III
d.	Weather problems	54	IV
e.	Staggered production	12	V
f.	Unawareness of plant protection measures	8	VI
II	Economic constraints		
a.	High cost of material inputs	92	I
b.	High labour charges	85	II
c.	Price fluctuation of the produce	40	III
d.	Inadequate credit facilities	31	IV
e.	High transporting charges	29	V
f.	Inadequate marketing facilities	27	VI

The results reveal that among the production constraints, incidence of pests and diseases ranked first followed by labour scarcity. The growth and yield of banana is affected by the incidence of various pests like pseudostem borer, rhizome weevil, lace wing, aphid, nematode etc. and diseases such as bunchy top, kokkan, panama wilt, sigatoka etc. If we do not give proper care and attention, the pest and disease may spread and cause severe damage. Any pest or disease attack may have to be diagnosed and controlled at the initial stages, or else; it will be

difficult to control them. Labour scarcity is the second important production constraint. It can be seen that there is a tendency among the labourers to shift from agriculture to more profitable non-agricultural jobs. The young generations' attitude towards agricultural work is also not promising. Non-availability of inputs is identified as the third important problem. Timely supply of inputs through service agencies will help the farmers to a great extent to solve this drawback.

The weather problem viz., storms, drought, land slides, floods etc , is a serious threat to banana cultivation, resulting in heavy loss to the growers. These unexpected blows of nature add oil to the flames of farmers' indebtedness and poverty. Staggered production is yet another problem in banana cultivation. Staggered production means lack of uniformity in bunch emergence and its maturity which increases labour charges and thereby the cost of production. Uniformity in production is necessary for easy cultural operations, harvesting and marketing. Wrong diagnosis of pests and diseases and lack of knowledge about proper control measures is another dilemma faced by the farmers. Proper training in this area is of utmost importance.

Among the economic constraints, high cost of material inputs ranked first. The cost of manures, fertilizers and pesticides are so high that they are not affordable to the farmers. As in other crops, the high labour charges cause increase in the cost of cultivation affecting the net profit. The price fluctuation of the produce is another crisis and the price of the produce varies according to the season, market, locality etc. There may be inflations in price even during the earlier and later stages of the same season, which in turn causes loss to the farmers. Improper credit facilities, high transportation charges and inadequate marketing facilities are the other limiting factors in the cultivation of banana. As the farmers are not able to sell their produce directly, the major share of profit is going to the hands of intermediaries.

Recommendations to overcome constraints

Some of the recommendations to overcome the constraints as suggested by commercial banana growers may be seen below:

1. Appropriate measures are to be worked out and suggested to reduce the cost of cultivation and promote Banana farming as a gainful endeavor.
2. Farmers may be mobilized to take up cultivation as a group, or group farming encouraged in banana.

3. Most of the farmers are economically backward. Financial assistance needs to be provided to the farmers for taking up cultivation of crops. There is also need to improve or re-organize the existing credit facilities.
4. Efforts should be made for the formulation of farmers' consortium so that profit will reach the hands of the producers.
5. Losses in cultivation should be compensated adequately by strengthening crop insurance programmes.
6. Necessary steps should be taken to reduce the price of fertilizers by increasing the rate of subsidy.
7. Appropriate measures should be taken for providing accurate and timely information to farmers and improving the existing facilities. Frequent training programmes should be arranged at Krishi Bhavan level. Public information system should be strengthened by displaying notice boards at Krishi Bhavans as well as different locations of public gatherings.
8. Experts should visit farmers' fields frequently for finding out the drawbacks in cultivation and provide suitable remedial measures on the spot.
9. Adequate measures should be taken for reducing the problem of labour scarcity and high labour charges. Mechanization should be promoted for reducing labour problems.
10. Irrigation facilities should be improved. Assistance should be given for digging wells and for installing pump sets.
11. Soil and water conservation measures should be enhanced.
12. Timely availability of inputs like good quality suckers, fertilizers, plant protection chemicals, propping materials etc. should be ensured. Farmers' co-operative societies should be established for necessary and timely supply of inputs at subsidized rates.
13. Pest and disease resistant high yielding short duration varieties of banana should be evolved. Low cost propping measures should also, be developed for reducing the cost of cultivation. A need based research system should be strengthened for releasing improved hybrid varieties and low cost technologies.

14. Transportation and marketing facilities should be improved. Enough marketing centers should be established at each locality and the Government should arrange transportation services and sufficient packing, storing and keeping facilities exclusively for agricultural commodities.
15. Ensure price stabilization. The fluctuations in price can be controlled by encouraging farmer manned markets / regulated markets which reduce the interference of middlemen, thereby assuring a reasonable price to the producer.
16. Promoting value added products by establishing banana processing units and banana fiber industries will be helpful for employment generation as well as for the improvement of the socio-economic status of banana growers.

Conclusion

Incidence of pests and diseases ranked first among production constraints followed by labour scarcity. Non-availability of inputs, weather problems, staggered production, and unawareness of plant protection measures are other limiting factors in banana cultivation. High cost of material inputs ranked first among the economic constraints. High labour charges, price fluctuation of the produce, inadequate credit facilities, high transportation charges and inadequate marketing facilities are the other economic constraints faced by the banana growers. Through an organized attempt at the grass root level, by promoting group farming, farmers consortium and decentralized planning process and building market linkages most of the production and economic constraints can be abridged to a great extent, which will make banana cultivation a profitable enterprise.

References:

- Trivedi, M.K., Chauhan, N.B. and Chinchmalatpure, U. (2008). Constraints faced by cotton growers in Bt. Cotton cultivation. *Journal of Agricultural extension Management*, IX (2): 117-121

