CONSTRAINTS IN COMMERCIAL PRODUCTION OF VEGETABLES

The study was conducted in the Pananchery and Puthur panchayats of Trichur district in Kerala to delineate the constraints in the adoption of improved agricultural practices by commercial vegetable growers. Data were collected from 100 randomly selected commercial vegetable growers of the area. A list of constraints identified based on review of literature and consultation with experts, was presented to the farmers and their responses were collected on a dichotomous pattern as 'most important' and 'least important'. The frequency percentage of each constraint was worked out and ranked in order of importance. The major constraints experienced by the fanners are presented in Table 1. These constraints were ranked based on the severity with which they were felt by farmers as indicated by them.

Increased cost of plant protection chemicals was reported by 98% of the respondents as the most important constraint followed by 'inadequate market facilities' (88%) and 'poor storage and other post-harvest facilities' (74%). The other constraints in the order of importance reported were 'inadequacy of capital', 'high labour charges' and 'water scarcity'. The constraints in the order of the rank are also presented in Table 1.

Incidence of pests and diseases seriously limits vegetable production. The high incidence of pest and diseases necessitates repeated and intensive use of plant protection chemicals in vegetables prompting the farmers to perceive the high cost of plant protection chemicals as the most serious constraint in vegetable production. This calls for further research to introduce high yielding varieties that have resistance to pests and diseases in the field.

In commercial vegetable production, market demand and marketing facilities decide the income of farmers. Majority of farmers have rated inadequate marketing as an important constraint experienced by them. It was observed that maximum sale of vegetables was through local markets and through interme-

diaries which marginalised their profit. Organising collective sales of vegetables through regulated markets and farmers-manned self-help societies can be viable alternatives.

Table 1. Constraints regarding the adoption of improved practices by commercial vegetable growers (n=100)

S1. No.	Constraints	Frequency,	Rank
1	Increased cost of PP chemicals	98	Ι
2	Inadequate market facilities	gg	II
3	Poor storage and other post- harvest facilities	84	Ш
4	Inadequacy of capital	72	IV
5	High labour charges	70	V
6	Water scarcity	59	VI
7	Low price of the produce	48	VII
g	Uneconomic holding size	41	VIII
9	Lack of knowledge about sci- entific vegetable cultivation	40	IX
10	Non-availability of labour	28	X
11	Inadequate guidance by Extension Personnel	26	XI
12	Non-availability of credit	19	XII
13	Non-availability of PP equipments	18	XIII
14	Non-availability of supply and services	10	XIV

The perishability and low keeping quality of vegetables warrant immediate local disposal of the produce even at low prices. The urgency of the need to overcome this was reflected in treating this with high priority among the constraints. Gearing our research pursuits to evolve varieties with long shelf life and also

developing simple post-harvest technologies that can be practised by farmers to increase the products' keeping quality would be workable solutions to overcome this constraint. Also, setting up of vegetable processing centres after analysing the demand for **proce**ssed vegetables would be helpful.

Majority of **improved** practices in commercial vegetable cultivation are capital intensive. This was reflected in the constraint *inadequacy of **capital**' perceived as important by the **farmers**. This indicated the lack of incentives provided specifically for boosting vegetable production. Government sponsored schemes and **develop**ment **programmes** should give priority to vegetable cultivation through incentives and subsidies.

College of Horticulture Vellanikkara 680 654, Trichur, India The constraint 'high labour charges' and 'water scarcity' were ranked as fifth and sixth in the order of importance as perceived by the farmers. As most of the operations in vegetable growing are labour intensive, it would be helpful if collective farming is introduced in the vegetable production. The problems relating to water scarcity can be overcome by popularising river-bed cultivation of vegetables and also by improving minor irrigation facilities by way of construction of check dams. ponds etc. All other constraints as evident from the table show percentage frequencies below 50 per cent. So, once these six major constraints are taken care of, it would help a great deal in enhancing vegetable production and increasing dietary requirements.

> Binoo P. Bonny R. M. Prasad