

Constraints in Mentha (*Mentha arvensis* L.) Production in Pratapgarh District of U. P.

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ABSTRACT

The present study was conducted in three villages in three development blocks in Pratapgarh district U.P. to documents the constraints experiences by the mentha growers. The research results were grouped into technical, financial and social constraints. The study revealed that mentha cultivation are quite primitive and traditional, resulting low yield and poor quality of produce. It is evident from the study that lack of improved techniques of mentha cultivation, availability of quality seed, farm machinery, distillation plant, Procurement agency, market and related information, organized farmers are major constraints faced by the farmers. The cultivation of mentha becomes more difficult when growers are not getting credit facilities and are paying more rent for land.

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Introduction

Medicinal plants have received much less attention in genetic and cultural improvements in comparison to other economic crops. During recent past the world trade in herbal products has registered a tremendous increase. It is also expected to grow further at a faster rate on account of increasing demands of Ayurveda medicines and herbal cosmetics world over. Over 30 percent of world's plant species have at one time or another been used for medical purpose. The developing countries contribute about two third of plant species required for the purpose. The modern pharmaceuticals use about 120 chemical compounds of plant origin. WHO has reported that over 80 per cent of the world population relies on traditional medicine largely plant based for their primary health care requirements. The international market of herbal products is estimated at 62 billion US \$ which is poised to grow to 5 trillion US \$ by 2050. India also relies much on the herbal products for various economic uses; however, government has not given adequate attention.

India has to enhance its research & development preparedness in the field of medicinal plants to a level to meet not only country's current needs but also to emerge as front runners at international level Ghosh (2000). Maiti (2000) reported that market promotion was an important issue for development of this sector. By encouraging scientific cultivation and setting up of more processing units, the export of these products could also be increased.

It was observed by Chaudhary *et al.* (2003) that due to over exploitation, a serious threat to existence of many valuable species had emerged that has necessitated an urgent need to conserve and scientific cultivation of medicinal and aromatic plants for their sustainable production and supply to the users. Jain (2003) suggested the cultivation of medicinal plants on scientific basis. His emphasis zed the need of med culture in view of the economic and social importance of medicinal plants.

Ahlawat (2004) reported that mentha growers which need to be exploited by way of providing latest technical knowhow, extension support, processing and value addition, Post harvest handling techniques and organized marketing avenues to the growers. Considering the above observations, the present study was conducted to evaluate the technical, Financial and social constraints in mentha crops cultivation in Pratapgarh district of U.P.

Materials and Methods

The present study was conducted in district Pratapgarh, U.P. in the year 2015 and 2016. The district comprises 17 blocks out of 17 blocks, 3 blocks were selected considering area under mentha cultivation and its productivity. One village from each block was identified and selected. 20 mentha grower farmers were selected from each village and total number of farmers (respondents) was sixty. The Primary data were collected through personal interview using structural proforma. The data were tabulated, processed & analyzed in percentage and ranked. The sampling frame was constructed by enlisting names of all farmers who received the training from KVK, Kalakankar.

Result and Discussion

Social Profile

The analysis of primary data revealed that 56.7 per cent of the respondents belonged to middle age group followed by 30.0 percent young age group and 11.3 percent old age group. The majority of respondents (70%) belong to OBC. The Schedule caste constitutes only 8.3 percent and general caste 21.7 percent. Considering the educational qualification, respondents studied up to intermediate 88.3 percent. Land holding distribution revealed that 38.3 percent respondents were having land holding only 1 ha. and 30 percent between 2 to 5 ha.. Only two farm families were having land holdings more than 5 ha. Family structured showed that 65 percent families were nucleus family while 35 percent were joint family.

Linkages between the respondents and social, scientific and financial organizations revealed that 80 percent respondents were linked with banks, 78.3 percent with KVKs and 45 percent with cooperatives. It was also observed that main occupation of the majority of respondents was agriculture.

Sources of Information of Mentha growers

The information collected by interacting with the respondents revealed that relatives and friends are main sources of information 66% for mentha cultivation in the district followed by 29 % from Krishi Vigyan Kendra (fig. 1). The important aspect to be noted is that the friends (31%) who are the prime stalk holders and relatives (35%) are the second source of disseminating information in this area has been found sluggish by the respondents.

Source of Information

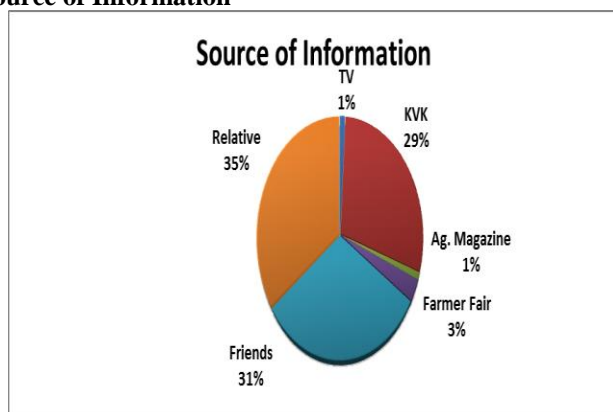


Fig. 1. Different sources of information for Mentha growers in Pratapgarh, U.P.

Constraints in Mentha Production

The mentha cultivation needs high inputs and more irrigation water which involves high cost of cultivation. During the interaction with farm families in three adopted villages in three blocks, the respondents revealed various constraints in mentha cultivation. These constraints were grouped into technical, financial and social constraints.

Technical Constraints

The productivity and marketing of menthe crop is influenced by non-availability of technical knowhow. The farmers are not getting improved technologies, quality seeds, and suitable farm machineries and grading facilities to get more production & income. The higher requirement of irrigation water for mentha crop is other major problem. The analysis of data collected from different informants is given in table 1.

Table 1. Technical constraints faced by mentha growers in Pratapgarh, U.P.

Constraints	MS	VS	S	NSS	NS
Lack of proper technology	3 (5.0)	4 (6.7)	37 (61.7)	15 (25.0)	1 (1.7)
Quality seed availability	2 (3.3)	11 (18.3)	36 (60.0)	10 (16.7)	1 (1.7)
Lack of farm machinery	0	16 (26.7)	23 (38.3)	21 (35.0)	0
More water requirement	7 (11.6)	18 (30.0)	23 (38.3)	11 (18.3)	1 (1.7)
Lack of grading facility	3 (5.0)	10 (16.7)	38 (63.3)	9 (15.0)	0

Table 2. Financial constraints faced by mentha growers in Pratapgarh, U.P.

Constraints	MS	VS	S	NSS	NS
High cost of distillation plant	1 (1.7)	10 (16.7)	36 (60.0)	12 (20.0)	1 (1.7)
High rental of land	2 (3.3)	6 (10.0)	25 (41.7)	23 (38.3)	4 (6.7)
No subsidy for distillation plant	2 (3.3)	14 (23.3)	27 (45.0)	17 (28.3)	0
Lack of credit facility	1 (1.7)	6 (10.0)	19 (31.7)	30 (50.0)	4 (6.7)

MS: Most sever. VS: Very sever, S: Sever, NSS: Not so sever, NS: Not sever, Figures in parentheses denotes per cent

Financial Constraints

The mentha cultivation can be made remunerative if farmers are supported by the subsidies by govt. and loan from banks. The study revealed that the majority of farmers need help for purchase of distillation plants and credits for mentha cultivation. The data presented in table – 2 showed that more than 50 percent farmers came under sever to very severe financial constraints categories.

Social constraints

Analysis and documentation of information resulted that the respondents are selling their produce at low price and there is no Govt. agency for procurement of their produce at higher rate. The Mentha growers are unorganized and communication system in respect of marketing and sale is non-existing. The data analyzed for the severity of market, procurement etc. are presented in table – 3.

Opportunities

Mentha crop cultivation is very remunerative to the farm families in and around district Pratapgarh, U.P. there is need to supply quality seeds, Production technologies, soft credit, distillation and marketing facilities to menthe growers for high productivity and good return. The state and central govt. and pharmaceutical companies may take lead in this direction. There is a need to restructure the functions of key stalk holders such as Mentha Board so that they can provide efficient extension services to the client's door. Extension agencies should be strengthen for on farm demonstrations with farmers participation and training to menthe grower for new technologies, marketing etc. at regular interval. The farmers should be organized for menthe cultivation, processing and marketing by creating societies as it is done in Gujrat for milk production

Conclusion

Our study revealed that the mentha growers in the district Pratapgarh, U.P. are interested in growing mentha in large area but they have no access to quality seeds, credit from financial institutions, distillation facilities, marketing & technical knowhow. The most pertinent source of information for mentha cultivation is relatives and friends and there is no institutional help to farmers to adopt scientific methods of menthe cultivation for more yield and high return.

Table 3. Social constraints faced by mentha growers in Pratapgarh, U.P.

Constraints	MS	VS	S	NSS	NS
Lack of procurement agency	5 (8.3)	15 (25.0)	22 (36.7)	16 (26.7)	2 (3.3)
Lack of market information	3 (5.0)	13 (21.7)	35 (58.3)	7 (11.7)	2 (3.3)
Lack of organized cultivation	3 (5.0)	16 (26.7)	37 (61.7)	4 (6.7)	0
Lack of organized market	4 (6.7)	22 (36.7)	32 (53.3)	2 (3.3)	0

MS: Most sever, VS: Very sever, S: sever, NSS: Not so sever, NS: Not sever; Figures in parentheses denotes percent

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