Constrains of Farmer In Adoption of Improved “Kachai Lemon” Cultivation Practices In Ukhrul District of Manipur, India.

ABSTRACT

The present study was carried out in Ukhrul district of Manipur during the year 2023 to find out the constraints faced by the farmers in adoption of recommended cultivation practices of Kachai lemon. Kachai village under LM Block was selected purposively as it is the only place where Kachai lemon is mainly grown. A total of 120 respondents were randomly selected from Kachai village. The primary data was collected using pre-structured interview schedule and appropriate statistical tools such as frequency, percentage were used to interpret findings and draw conclusions. The finding inferred that 89.16 % of the respondents faced the constrain lack of proper market, 80% of the respondents has the problem of scarcity of water and 75.83 % has less knowledge about plant protection measures. The respondents also suggested that providing of proper marketing facilities from the concern department and building of a water conservation tank in the village and more training on rain water harvesting and plant protection might help overcome the problems faced by the villagers.

Keywords: *Kachai village, Kachai lemon, contrains, improved production practices, Manipur*.

INTRODUCTION

Nature’s opulence reigns supreme in Manipur. The rich banquet of flavours that adorn the land of jewels bears a gem of unparalleled tartness Kachai Champra, a lemon with the highest vitamin C content in India. This citrusy marvel grows exclusively in Kachai village, ensconced within the mountainous contours of Ukhrul district of the state. The allure of the Kachai lemon, a vital part of the village’s economy and identity, lies not only in its succulence but also in its exceptional nutritional value. With a staggering content of antioxidant ascorbic acid or vitamin C ranging between 45mg and 51mg for each 100 ml of juice, this lemon stands head and shoulders above its counterparts grown elsewhere in India that record not more than 25-35mg/100ml. The secret behind the unmatched quality of the Kachai lemon lies in the village’s distinctive topography and climatic conditions. Enveloped in dense fog during the early hours of dawn, the village receives a bountiful supply of moisture, nurturing the lemon trees that thrive in its acidic soil. As the morning mist dissipates, the village basks in moderately hot and humid weather, providing the perfect environment for the citrus fruits to flourish. **Shatsang *et al.,* (2024)**

Kachai lemon is the pride of Manipur as it has been accorded with prestigious Geographical Indication (GI) No.466. The cultivation of lemon at Kachai village can be traced back to 1944, when one S. Paisho first planted the seed. Thereafter, lemon was grown as a fruit in the home backyard, with limited knowledge on modern farming, pest management system, nutritional and market value. In the late 90’s,

production declined due to excessive intercropping , decrease in the qu8ality of soil health, age- related and lack of irrigation. In January 6, 2005, the 1st Kachai Lemon festival was celebrated; thereon the festival is celebrated every year marking the revival and transformation of Kachai lemon cultivation from traditional to modern scientific methods. **Humao *et al.,* (2024)**

The study will help farmers to understand the importance of improve lemon cultivation practices and the adoption of new and improve technologies that will help them increase their yield and production also helping them to overcome their problems of climate change. But the success of these alternative is limited since they are cost intensive. The study will enable to investigate the constrain faced by the farmer in utilization of recommended safe plant protection measures and find solution to the existing problems.

METHODOLOGY

The study was conducted in Ukhrul district of Manipur. Descriptive research design was be followed for the present study. Multi stages sampling was be followed for the present study for the selection of samples required. Manipur has 16 districts and out of which Ukhrul district is selected purposively for the study because of maximum area under Kachai lemon growers. There are 4 blocks in Ukhrul district of Manipur, out of which Lungchong Meiphai block was selected purposively based on maximum area of Kachai lemon growers. Kachai village of Ukhrul district was selected purposively as maximum net sown area is highest. A total of 120 respondents were selected randomly for the present study from Kachai village. A pre-tested structured interview schedule directed towards the objectives of the study was developed for data collection. Survey method of data collection with the help of pre-structured interview schedule was used. The collected data from the respondents were scored, tabulated and analyzed to calculate frequency and percentage using statistical tools.

RESULTS AND DISCUSSION

Table 1 : Constraints faced by the respondents in adoption of improved Kachai Lemon cultivation practices.

Sl.No	Statements	Frequency	Percentage	Rank
1.	Lack of proper market	107	89.16	I
2.	Lack of irrigation water	96	80.00	II
3.	Lack of knowledge about plant protection measures	91	75.83	III

4.	Inadequate resources or machinery	69	57.50	IV
5.	Lack of good transportation/road	68	56.66	V
6.	Lack of storage facilities	63	52.50	VI
7.	Lack of funding by the government	47	39.16	VII
8.	Lack of technical guidance	37	30.83	VIII
9.	Lack of agricultural knowledge	32	26.67	IX
10.	High cost of plant protection equipment's (example: sprayer)	14	11.67	X
11.	Lack of knowledge about crop insurance	6	5.00	XI

The above table shows that lack of proper market 89.16% (Ranked I),lack of irrigation water 80% (Ranked II), lack of knowledge about plant protection measures75.83% (Ranked III), inadequate resources or machinery 57.50% (Ranked IV), lack of good transportation/road 56.66% (Ranked V), lack of storage facilities 52.50% (Ranked VI), lack of funding by the government 39.16% (Ranked VII), lack of technical guidance 30.83% (Ranked VIII), lack of agricultural knowledge 26.67 % (Ranked IX), high cost of plant protection equipment's (example : sprayer) 11.67% (Ranked X), lack of knowledge about crop insurance 5.00% (Ranked XI).

Suggestions given by the respondents for better improved Kachai Lemon production:

1. Proper marketing facilities to be provided by the concern departments.
2. Better government support such as subsidies and loan to be provided for a better production.
3. Building of water conservation tank in the village and more training on rain water harvesting.
4. More training and knowledge on plant protection.
5. More attention of the government and concerned organization on the Lemon festival conducted in the village every year.
6. Proper roads connecting towards the capital, neighbouring villages and farms.
7. Building of a cold storage in the village for storing the fruit to prevent loss after harvesting.

CONCLUSION

It is concluded that the major constrains faced by the respondents are finding proper market, lack of irrigation water, lack of knowledge about plant protection measures, inadequate resources or machinery and lack of good transportation /road. Some other problems commonly faced by the respondents are lack of storage facilities in the village, lack of funding by the government, lacks technical guidance, lacks agriculture knowledge, high cost of plant protection equipment's and lack of knowledge about crop insurance. Some of the respondents also suggested that providing of proper market facilities from the concern department, better government support, building a water conservation tank, more training on knowledge on plant protection, more attention of the government on the lemon festival, proper roads connecting the village to the capital and building a cold storage in the village for storing the fruits to prevent loss after harvesting will help to overcome the constrains listed above.

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