

Disposal Pattern of Chakhao (Black Scented Rice) by the Farmers of Imphal West and Imphal East Districts of Manipur

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Known as “superfood” black rice is among the most sought-after varieties of rice in the market because of its various nutritional benefits. Among the black rice varieties found in the world, Manipur’s Chakhao which is naturally organic in nature with its unique aroma and glutinous properties proven to be of highest anthocyanin content variety is becoming the new trend in the global market. The overall total production of Chakhao was 34.28 qt per hectare. While on an average, farmer retained a total of 2.86 per cent (0.98 qt per hectare) of total production in needs of family consumption along with other requirements. Average marketable surplus was calculated to be 33.30 qt per hectare which makes up 97.15 per cent to the total production and the marketed surplus was observed to be 29.58 qt per hectare and there was no distress sale in the study area as the marketable surplus was larger than the marketed surplus.

Keywords: Chakhao, organic cultivation, aromatic glutinous rice.

Introduction

Chakhao, a scented glutinous rice which has been in cultivation in Manipur over centuries with traditional practices was awarded the Geographical Indication (GI) tag on 20th April, 2020 (GI No. 602) for its uniqueness characteristic feature and nutritional benefits. With the allotment of the GI tag it will further contribute in encouraging commercial cultivation and improve market potential of the crop. Naturally, Chakhao is an organic rice variety as the quality of rice reduces when chemicals and inorganic fertiliser are applied. Moreover, it has its own fertilization from the environment and is also resistant against the insect and pest attack. Chakhao is now one of the most demanded raw materials for agro-based industries in Manipur. In order to enhance and make more positive impact on the production of Chakhao thereby helping the farmers attain more prospective return through the organic cultivation and marketing of Chakhao, the paper aims to understand the per farm disposal pattern of the farmers.

Methodology

In this study tabular technique was used to illustrate the whole picture of analysis. To find out the marketing pattern followed by farmers; descriptive analysis was done to examine the marketable surplus, marketed surplus, price received, etc. Marketable surplus is the residual left with the farmer after meeting his requirement for family consumption, farm need for seed and for wages purposes.

$$MS = P - (C + W + S)$$

Where,

MS = Marketable surplus

P = Total production

C = Family consumption

W = Quantity usage for wage

S = Quantity usage for seed

Results and Discussion

Table1: Disposal pattern of Chakhao farmers (Qt/Ha)

Sl. No.	Size of farms	Total production	Family consumption	Stored for seed purposes	Kept for rent payment	Total retained	Losses at farm level	Marketable surplus	Marketed surplus
1.	Marginal	32.95 (100.00)	0.12 (0.37)	0.54 (1.64)	0.31 (0.95)	0.97 (2.95)	3.58 (10.86)	31.98 (97.05)	28.40 (86.19)
2.	Small	36.76 (100.00)	0.52 (1.42)	0.55 (1.50)	0.00 (0.00)	1.07 (2.91)	3.65 (9.93)	35.69 (97.09)	32.04 (87.16)
3.	Medium	38.68 (100.00)	0.40 (1.04)	0.56 (1.45)	0.00 (0.00)	0.96 (2.48)	5.06 (13.08)	37.72 (97.52)	32.66 (84.44)
4.	Overall	34.28 (100.00)	0.23 (0.68)	0.54 (1.58)	0.21 (0.62)	0.98 (2.86)	3.72 (10.85)	33.30 (97.15)	29.58 (86.29)

Note: Figures in parenthesis are the percentage to the total.

Per farm pattern of Chakhao disposal

Table 1 gives an account on the disposal pattern of Chakhao followed by the farmers in the study area. Moreover, it gives an idea of how much of a difference was accumulated of what farmers actually marketed after its family needs were taken. The overall total production of Chakhao was 34.28 qt per hectare. While on an average, farmer retained a total of 2.86 per cent (0.98 qt per hectare) of total production in needs of family consumption along with other requirements. Of this percentage, the amount stored for seed purposes occupied the highest spot accounting 1.58 per cent (0.54 qt per hectare). The overall marketable surplus which was the total amount marketable was calculated to be 33.30 qt per hectare which makes up 97.15 per cent to the total production. Moreover, the average losses engaged by the farmer measured up a percentage of 10.85 to the total production. The average marketed surplus of a farmer, the amount actually sold which was worked out by deducting the losses, accounted for 86.29 per cent (29.58 qt per hectare) of the total production.

The estimated total production of marginal farmers was 32.95 qt per hectare. Family consumption takes up only 0.37(0.12 qt per hectare) per cent to the total production which was the least amount retained by the farmers. This was done in favour of gaining a higher net return as the production was low compared to other farm sizes. So, farmers in this category try to maximize the marketed surplus as much as possible by minimizing their consumption and spending only the required necessities. The marketable surplus calculated was 31.98 (97.05 %) qt per hectare and apparently marketed surplus thus obtain makes up 86.19 (28.40 qt per hectare) per cent to the total production.

Small farmers observed a total production of 36.76 qt per hectare. The family intake by small farmers was the highest of all farm category. Reason being no spare quantity for rent payment as it was their owned land and thus a total quantity of 1.07 (2.91 %) qt per hectare was retained being the highest out of all the farm category. Henceforth, 87.16 (32.04 qt per hectare) per cent was marketed with a farm level loss of 3.65 (9.93 %) qt per hectare. And lastly, the estimated marketable surplus measures up 97.09 (35.69 qt per hectare) per cent to the total production.

The same pattern was also being followed by the medium farmers where the total production estimated was 38.68 qt per hectare. The marketable surplus thus obtained was 37.72 (97.52 %) qt per hectare and in addition the losses encountered by the farmer takes up 13.08 per cent (5.06 qt per hectare) to its total production thus being the highest loss incurred against the other farm categories. Thereby, the estimated marketed surplus was 32.66 qt per hectare responsible for 84.44 per cent to its total production respectively.

Conclusion

It can be summarized that there was no distress sale in the study area as the marketable surplus was larger than the marketed surplus. Both the marketable and marketed surplus varies directly with the farm size which was evident by the increasing quantity of both the

surpluses as farm size increases. The finding aligns with the results of Anandaraj 2015 in paddy cultivation in Tamil Nadu and Sahu *et al.* 2021 on marketing of black rice in Kurud district of Dhamtari. Both the marketable and marketed surplus was observed to be highest on medium farm category thus relating to the smallest quantity of retained by the farmer and in same manner the small farmer established the second highest and the least by the marginal farmer.

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