

Aromatic Rice Enterprise: The Level of Marketability, Exportability and Socialization

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Abstract—Aromatic rice occupies a prime position in Bengali society and culture due to their unique quality features. The botanical diversity of such premium rice belongs to non-basmati group and includes small and medium grain varieties, which evolved over hundreds or thousands of years. Among them, Gobindabhog is very popular which is cultivated in its native area i.e. Gangetic basin of West Bengal. This indigenous variety has got not only economic and ecological value but also spiritual value because rice of this variety is offered to Lord Krishna during his worship. But due to myopic agricultural extension approach high yielding varieties of rice replaced, lost, eroded or reduced this variety to a very small geographical area. Now a re-socialization process is on through RKVY project on promotion of Bengal aromatic rice. Our work to socialize the scented rice enterprise. It is not only socialization; basically it's a re-socialization to bring this variety back. But any variety or any agricultural enterprise will be successful on why this is attempt to a re-visit having the following characters: economically viable, ecologically suitable and cultural compatibility the general objective of this study was to investigate, using literature review and field data collection, the level of socialization among the scented rice growers. The study depicts the status, constraints, technology socialization level and entrepreneurial perception of practicing farmers, 100 famers selected by multistage random sampling procedure of Nadia district, West Bengal, on the cultivation of aromatic rice.

Keywords: Aromatic rice, demography, diversity, RKVY, socialization.

Introduction

Rice is very ancient and traditional field crop in India. The Indian Civilization in many way to many direction are in the specific crop through this field crop it not only economically significant for Indian agriculture, this have got the other importance like festivals. It involve custom spiritual at the same time, it involve economic and ecological value. In the meribratra India is to produce a variety of scented rice but due to the impact of the organization and the myopic agricultural appropriate, selectional crop variety / indominent dependent on high-yielding variety this races are losted, erotate or reduce to a very small geographical area. Now a re-socialization process is on that is our work on socialization of scented rice enterprise. It is not only socialization; basically it's a re-

socialization to bring this variety back. But any variety or any agricultural enterprise will be successful on why this is attempted to a re visited having the following characters:

1. Economically viable, 2. Ecologically suitable and
3. Cultural compatibility.

Project RKVY on this scented rice making very innovative approach to make this selected scented rice have been socialized and possible-rise among the farmer and 90% of them are small and marginal farmers. For agriculture re-socialization process, it has got jerk, it has got confusion, it has got rejection, it has go adoption in agriculture. The study depicts the status background and general status of aromatic rice growers, Bengal aromatic rice growers to mitigate the problems faced by them, the process of socialization in terms of two sets of variables (x, & y) operations in complex & polyhedral socialization process, inter and intra relationship between the sets of interacting variables and to study marketing and supply chain Management of aromatic rice.

Materials and method

The area of investigation of this study is situated in the state of West Bengal located in the eastern part of India. The State of West Bengal in eastern India has a unique social, cultural and ecological background, which influence the living standard and behavioral patterns of the people in many ways. The area of investigation belongs to the Chakdaha block and Haringhata block in Nadia district.

Education (X_1), family size (X_2), total Land holding (x_3), area under Gobinda Bhog (x_4), ag-income (x_5), annual-income off farm (X_6), annual income (X_7), annual expenses (X_8), loan amount (X_9), save amount (X_{10}), economic status (X_{11}), Plant hill% (x_{12}), seedling age (X_{13}), nitrogen Dose (X_{14}), phosphate Dose (X_{15}), M.O.P total (X_{16}), expense wage (X_{17}) are use as independent variable and marketing Surplus(y_1) is use as dependent variable.

The main statistical tools and techniques used in the present study were-Frequency and percentage analysis, Mean scores, Standard deviation, Co-efficient of Variance, Correlation Co-efficient, Multiple, regression analysis, Path analysis.

Result and Discussion

Table No1: Correlation of coefficient (r) with Marketing Surplus(y1) and 17 independent variables (x1-x17).

Sl. No.	Variables	r value	Remarks
1	Education (x1)	0.231	*
2	Family size (x2)	-0.677	**
3	Total Land holding (x3)	-0.029	
4	Area under GB (x4)	0.008	
5	Ag-Income (x5)	0.015	
6	Incom-off Farm (x6)	-0.186	
7	Ann_Income (x7)	-0.110	
8	Ann_exp (x8)	-0.014	
9	loan_amt (x9)	0.012	
10	save_amt (x10)	-0.047	
11	Economic Status (x11)	-0.036	
12	Plant hill% (x12)	-0.072	
13	sdling_age_day (x13)	-0.117	
14	Nitozen Dose (x14)	-0.084	
15	Phosphate Dose (x15)	-0.144	
16	MOP total (x16)	-0.004	
17	expense_wage (x17)	0.002	

** Significant at 1% level of significance

* Significant at 5% level of significance

Table 1 presents the co-efficient of correlation between Marketing Surplus(y1) and 17 independent variables (x1-x17).

This table reveals that the variable Education (x1) of the respondents has been found positive and significant correlation with Marketing Surplus(y1).

This table also reveals that some variables such as Family size (x2), have shown significant but negatively correlated with Marketing Surplus(y1).

Table No 2: Regression analysis socialization Marketing Surplus (y1) vs 17 causal variables(x1-x17)

S.L. No.	Variables	Un standardized coefficient β	Std. Error	Standardized Coefficient β	t value
	Constant (y1)	129.403	29.83		4.338
1	Education (x1)	2.948	1.895	0.124	1.556
2	Family size (x2)	-11.752	1.259	-0.838	-9.335
3	Total Land-ha (x3)	-8.172	6.448	-0.18	-1.267
4	Area under GB (x4)	23.686	14.928	0.225	1.587
5	Ag-Income (x5)	0	0	0.282	3.041
6	Incom-off Farm (x6)	2.01E-05	0	0.024	0.245
9	loan_amt (x9)	7.97E-05	0	0.064	0.796
10	save_amt (x10)	2.73E-05	0	0.085	1.031
11	Economic Status (x11)	-0.672	0.468	-0.11	-1.436

12	Plant hill% (x12)	0.018	0.045	0.033	0.404
13	sdling_age_day (x13)	-0.345	0.757	-0.035	-0.456
14	Nitozen Dose (x14)	0.115	0.125	0.077	0.92
15	Phosphate Dose (x15)	-0.162	0.203	-0.067	-0.799
16	MOP total (x16)	-0.017	0.123	-0.011	-0.14
17	expense_wage (x17)	0	0.001	0.033	0.449

The table 2 presents the regression analysis to estimate that the respective causal contribution of 17 extregenous variables on the dependent variable, Marketing Surplus (y1).

It has been found that the variables Area under GB (x4) and Education (x1) have contributed to the extent of 0.225 percent and 0.124 percent of variance to the total R2 value .

So the socialization level of the selected technology has been well estimated to the variables Area under GB (x4) and Education (x1).

So this two variables can be indicator variables to measure the technology Marketing Surplus (y1).

R2 Value being 0.6089 it is to conclude that 60.89 Percent of the variability embedded with the consequent variable Marketing Surplus (y1) has been explain with the combination of the 17 causal variables.

Table No 3, Path Analysis: Direct, Indirect and Residual effect; Marketing Surplus(y1) Vs 17 Exogenous Variables (x1 to x17).

Sl no	Variables	Total Effect (r)	Direct Effect (DE)	Indirect Effect (IE)=r-DE	Highest Indirect Effect
1	Education (x1)	0.231	0.1237	0.1073	0.1623 (x2)
2	Family size (x2)	-0.677	-0.8393	0.1623	
3	Total Land-ha (x3)	-0.029	-0.1785	0.1495	
4	Area under GB (x4)	0.008	0.2224	-0.2144	
5	Ag-Income (x5)	0.015	0.2367	-0.2217	
6	Incom-off Farm (x6)	-0.186	-0.0279	-0.1581	
7	Ann_Income (x7)	-0.110	-0.0714	-0.0386	
8	Ann_exp (x8)	-0.014	0.3022	-0.3162	
9	loan_amt (x9)	0.012	-0.0034	0.0154	
10	save_amt (x10)	-0.047	0.3424	-0.3894	
11	Economic Status (x11)	-0.036	-0.1099	0.0739	
12	Plant hill% (x12)	-0.072	0.0331	-0.1051	
13	sdling_age_day (x13)	-0.117	-0.0347	-0.0823	
14	Nitozen Dose (x14)	-0.084	0.0774	-0.1614	
15	Phosphate Dose (x15)	-0.144	-0.0672	-0.0768	
16	MOP total (x16)	-0.004	-0.0112	0.0072	

17	expense_wage (x17)	0.002	0.0335	-0.0315	
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RESIDUAL EFFECT=0.6089

Table 3 It has been found that the variable Marketing Surplus (y1) has exerted the highest direct effect as well as highest total effect of socialization process. The residual effect being 0.6089, it is concluded that even with combination of all these 17 variables, 60.89 percent of the variance on the consequent variable.

Conclusion

To revolutionize Indian agriculture being branded as 2nd Green revolution needs a careful consideration of the adoption process and dictum. Adoption process is a complex, multifaceted and polymorphous while we keep on contemplating on its qualitative expansion through the domain of behavioural disposition, especially for the farming community.

The expression of affection discourses that is attitude and motivation have been attuned to a complex parametric disposition consisting of resources, institution, organization, market etc. The other non-parametric disposition has been the discrete psychological disposition and its acquisition to technology adoption the key content of the present study. variable Education (x1) of the respondents has been found positive and significant correlation with Marketing Surplus(y1).

That table 1 also reveals that some variables such as Family size (x2), have shown significant but negatively correlated with Marketing Surplus(y1). It has been found that the variable Marketing Surplus(y1) has exerted the highest direct effect as well as highest total effect of socialization process. The residual effect being 0.6089, it is concluded that even with combination of all these 17 variables, 60.89 percent of the variance on the consequent variable.

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