

Vegetable Entrepreneurship in W.B: The Farmers Perception and Socialization

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Abstract—Vegetable enterprise is driving the rural economy of Bengal in a swash buckling manner. The study area, Chakdaha block of W.B, has been bestowing the rate and direction of changes in vegetable entrepreneurship, both in economic and ecological terms. Nevertheless, there are some limiting factors, enough to invite scholars' attention. It is interesting to note that even with the fragmented and marginal holding, the farmers have been able to generate to yield, sizable marketed surplus to offer a unique vegetable based rural entrepreneurship for a transforming and transcending social ecology with its direction and dicta. The present study has included chili (*Capsicum annum L*) as a marker vegetable to estimate its multidirectional eventualities and implication to the respective economy and ecology. The variables, in the form of productivity, home consumption, marketable surplus, marketed surplus, amount consumed and not return/unit area. Both the qualitative and quantitative variables have been selected to estimate the level, degree and direction of interactive relationship between the scale of criteria variables and plethora of exogenous variables. Sixty respondents that are chili grower have been interviewed to generate their cardinal, scalable as to examine the level of entrepreneurship in this important vegetable crop. The study certainly has got ample technological market and social ecological implication that can be further accommodated in micro level policy and plan of action.

Keywords: ENTREPRENEURSHIP, MARGINAL HOLDING, MARKETABLE SURPLUS, PRODUCTIVITY, RURAL ECONOMY.

1. INTRODUCTION

From biological production to value added marketable product and exactly this is the phase, Indian agriculture is passing through. The present level of entrepreneurship in Indian agriculture is much dominant in vegetable crops rather than field crops. The transformation process from subsistence farming into agri-preneurship, needs befitting farmers' perception, to be followed by comprehensive socialization, (Sah, P., Sujana, D. K. Kasyap, S. K.2009).. This socialization is essential because entrepreneurship is basically behavioral trait, not just adoption of some farm technology. It goes beyond adaptation as well. In technology adaptation, compliances and acclimatization are the essential ingredients, while socialization assimilates the portion of adaptation in the form of socialized behavioral pattern of the individual and social community. The perception implies analytical

knowledge earned by someone through empiricism that is practical application.

In the present study farmers' acquired knowledge and calibrated experiences have been accepted as the perceptual acumen over vegetable enterprise and its subsequent socialization Banerjee, G. D. (2011). This perception on vegetable enterprise has been calibrated through a set of variables both qualitative and quantitative in order to estimate the level of entrepreneurship from a score of agro-ecological and socio economic variables. Singh, B. B. , Sing, R. K. P. ,Yadav. R. N. (1994).

2. OBJECTIVE

1. To generate the basic concept on the status and perception of vegetable cultivation in India.
2. Estimation of level of entrepreneurship, resultant to interaction of seven sub layer predicted variables in terms of a score of agro ecological and socio economic variables.
3. To estimate the nature and direction of interactive relationship between criterion variables ($y_a, y_b, y_c, y_d, y_e, y_f, y_g$) and system variables ($x_1, x_2, x_3, x_4, x_5, x_6, \dots, x_{15a}, x_{15b}$).
4. To generate policy implication based on the empirical research impacting on the level of vegetable entrepreneurship and its socialization.

Material methods

In this chapter discussion on the methodology has been made to understand the concepts, methods and techniques, which are utilized to design the study, collect the information, analyze the data and interpret the findings For revelation of truth and formulation of theories. The entire discussion for easy understanding, has been made the following sub-heads.

- A. Locale of research
- B. Sampling design
- C. Pilot Study
- D. Variables and their measurements
- E. Methods of data collection
- F. Statistical tools used for analysis of data analysis.

Locale of Research

The present study was conducted in districts Chakdaha. The village Rautari of Chakdahablock in Nadia district of the state West Bengal were selected for the study.

Sampling design

Purposive as well as simple random sampling techniques were adopted for the study. For selection of state,district, block and gram panchayat purposive sampling techniques was adopted because the area was ideal for entrepreneurship study, convenient searcher to access and having the infrastructural facilities and in case of selection of villages and respondents simple random sampling technique was taken up.

C. Pilot Study

Before taking up fieldwork a pilot study, was conducted to understand the area, its people, institution, communication and extension system and the knowledge perception and attitude of the people towards farm entrepreneurship concept.

Sampling technique and Sampling Design

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Step	Items	Level	Approach
1	State	West Bengal	Purposive
2	District	Nadia	Purposive
3	Subdivision	Kalyani	Purposive
4	Block	Chakdaha	Purposive
5	Gram Panchayat	Rautari	Purposive
6	Village	Rautari	Random
7	Respondents	60	Random
Total No. of Respondents: 60			

Table-2. Coefficient of correlation between Amount Disposable To Market(Yc) and 19 exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.173	
Education(x2)	-0.088	
Family Size(x3)	-0.135	
Income/FAMILY SIZE (x4)	-0.174	
Size Of Holding(x5)	.663	**
Economical Land (x6)	.184	
Electricity Consumption (x7)	-0.235	
Fuel Consumption (x8)	.199	
Market Interaction (x9)	.042	
Group Interaction (x10)	.156	
Distance Matrix (x11)	-0.128	
Orientation towards competition (x12)	.137	
Market orientation (x13)	-0.128	
Decision matrix Purchase(x14a)	.101	
Decision matrix Bank (x14b)	-0.013	
Decision matrix Enterprise(x14c)	.018	
Idea exchange index Enterprise(x15a)	.090	
Idea exchange index Health(x15b)	.001	
Idea exchange index Education(x15c)	-0.123	

Revelation : Size of holding offers the resource endowment, the land which extends the scope for multiple cropping in multiple topographical locations. So farmers with higher Disposable to market(Yc) has rightly contributed to the generation of disposability of market. .

*=.05 per cent level of significance

**=.01 per cent level of significance

Coefficient of correlation between Amount Disposable To Market(Yc) and 19 exogenous variable(X1-X15c)

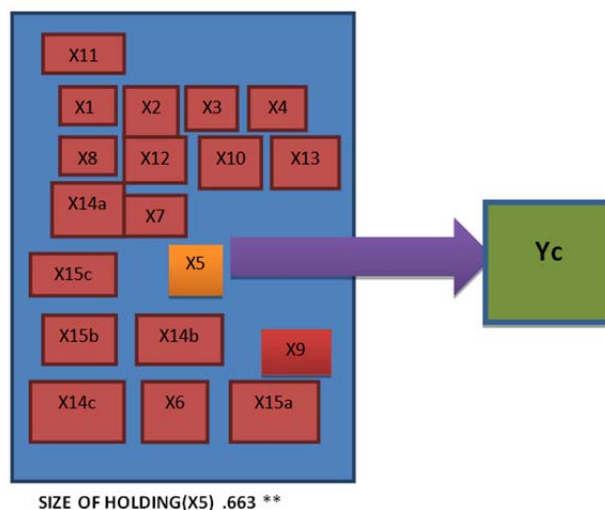


Table 3: Coefficient of correlation between Total volume yield(Ya) and 19 exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.060	
Education(x2)	-0.050	
Family Size(x3)	-0.103	
Income/FAMILY SIZE(x4)	.092	
Size Of Holding(x5)	.084	
Economical Land (x6)	.022	
Electricity Consumption (x7)	-0.071	
Fuel Consumption (x8)	.013	
Market Interaction (x9)	.079	
Group Interaction (x10)	-0.191	
Distance Matrix (x11)	.236	
Orientation towards competition (x12)	-0.024	
Market orientation (x13)	-0.196	
Decision matrix Purchase(x14a)	-0.060	
Decision matrix Bank (x14b)	.058	
Decision matrix Enterprise(x14c)	-0.001	
Idea exchange index Enterprise(x15a)	.013	
Idea exchange index Health(x15b)	.270	*
Idea exchange index Education(x15c)	.182	

Revelation : With the increasing of the total volume of yield ,the farmers get the scope to exchange their ideas with others. So farmers with higher volume of yield(Ya)has rightly contributed to the generation of Idea exchange of education.

Table 4: Coefficient of correlation between Amount Consumed(Yb) and 19exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.149	
Education(x2)	-0.158	
Family Size(x3)	-0.241	*
Income/FAMILY SIZE (x4)	-0.154	
Size Of Holding(x5)	.765	**
Economical Land (x6)	.200	
Electricity Consumption (x7)	-0.189	
Fuel Consumption (x8)	.216	
Market Interaction (x9)	.027	
Group Interaction (x10)	.093	
Distance Matrix (x11)	.000	
Orientation towards competition (x12)	.112	
Market orientation (x13)	-0.125	
Decision matrix Purchase(x14a)	.023	
Decision matrix Bank (x14b)	.003	
Decision matrix Enterprise(x14c)	-0.031	
Idea exchange index Enterprise(x15a)	.106	

Idea exchange index Health(x15b)	.074	
Idea exchange index Education(x15c)	-0.084	

Revelation : It is absolutely right that with the amount consumed (Yb) will depend on the on the family size and size of holding.

Table 5 : Coefficient of correlation between Amount disposed of(marked surplus)(Yd) and 19 exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.126	
Education(x2)	-0.032	
Family Size(x3)	-0.125	
Income/FAMILY SIZE (x4)	-0.094	
Size Of Holding(x5)	.917	**
Economical Land (x6)	.287	*
Electricity Consumption (x7)	-0.085	
Fuel Consumption (x8)	.282	*
Market Interaction (x9)	.134	
Group Interaction (x10)	.044	
Distance Matrix (x11)	-0.049	
Orientation towards competition (x12)	.135	
Market orientation (x13)	-0.110	
Decision matrix Purchase(x14a)	.158	
Decision matrix Bank (x14b)	-0.047	
Decision matrix Enterprise(x14c)	.109	
Idea exchange index Enterprise(x15a)	.034	
Idea exchange index Health(x15b)	-0.064	
Idea exchange index Education(x15c)	-0.195	

Revelation : Size of holding Economical land and fuel consumption effect the disposed amount of yield. So farmers with higher size of holding, economical land and fuel consumption have rightly contributed to the generation of Amount disposed of.

Table 6: Coefficient of correlation between Cost incurred (Ye) and 19exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.038	
Education(x2)	.021	
Family Size(x3)	-0.020	
Income/FAMILY SIZE (x4)	-0.066	
Size Of Holding(x5)	.446	**
Economical Land (x6)	.819	**
Electricity Consumption (x7)	.124	
Fuel Consumption (x8)	.844	**
Market Interaction (x9)	.061	
Group Interaction (x10)	.037	
Distance Matrix (x11)	.050	

Orientation towards competition (x12)	-0.009	
Market orientation (x13)	.097	
Decision matrix Purchase(x14a)	.006	
Decision matrix Bank (x14b)	-0.141	
Decision matrix Enterprise(x14c)	-0.016	
Idea exchange index Enterprise(x15a)	.051	
Idea exchange index Health(x15b)	-0.129	
Idea exchange index Education(x15c)	-0.071	

Revelation : Size of holding, economical land and fuel consumption offers the resource endowment. So farmers with higher these variables have rightly contributed to the generation of Cost Incurred.

Table 7 : Coefficient of correlation between Market price gained(Yf) and 19 exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.056	
Education(x2)	-0.011	
Family Size(x3)	-0.072	
Income/FAMILY SIZE (x4)	-0.003	
Size Of Holding(x5)	.477	**
Economical Land (x6)	.742	**
Electricity Consumption (x7)	.149	
Fuel Consumption (x8)	.767	**
Market Interaction (x9)	.117	
Group Interaction (x10)	.070	
Distance Matrix (x11)	.083	
Orientation towards competition (x12)	.017	
Market orientation (x13)	.085	
Decision matrix Purchase(x14a)	.046	
Decision matrix Bank (x14b)	-0.084	
Decision matrix Enterprise(x14c)	-0.045	
Idea exchange index Enterprise(x15a)	.076	
Idea exchange index Health(x15b)	-0.088	
Idea exchange index Education(x15c)	-0.026	

Revelation: Size of holding, economical land and fuel consumption offers the resource endowment. Which extends the scope for multiple cropping in multiple topographical locations. So with higher Size of holding, economical land and fuel consumption enables a farmer to gain more market prices.

Table 8 :Coefficient of correlation between Net Return(Yg) and 19 exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	-0.051	
Education(x2)	.102	
Family Size(x3)	-0.047	
Income/FAMILY SIZE (x4)	.402	**

Size Of Holding(x5)	.113	
Economical Land (x6)	-0.046	
Electricity Consumption (x7)	.171	
Fuel Consumption (x8)	-0.043	
Market Interaction (x9)	-0.026	
Group Interaction (x10)	.184	
Distance Matrix (x11)	-0.063	
Orientation towards competition (x12)	.137	
Market orientation (x13)	-0.217	
Decision matrix Purchase(x14a)	.192	
Decision matrix Bank (x14b)	.167	
Decision matrix Enterprise(x14c)	-0.126	
Idea exchange index Enterprise(x15a)	-0.156	
Idea exchange index Health(x15b)	-0.021	
Idea exchange index Education(x15c)	.048	

If the farmers’ net return will be more, the his income/family size will be more. Vegetales as enterprise has got intrinsic potential to augment the family income.

FACTOR ANALYSIS

FACTO R	VARIABLE S	%OF VARIAN CE	CUMULATI VE %	RENAME
1	X6,X8	13.583	13.583	Fuel-economy
2	X14a	21.311	34.894	
3	X7	8.347	43.242	
4	X5	14.141	57.382	
5	X2	6.156	63.538	
6	X11 ,X14b	6.065	69.603	Geo Decision
7	X14c,x15b	5.055	74.658	Concluding Innovation
8	X12, x15c	4.025	78.682	Entreprene urial Communic ation
9	X3 ,x10	3.793	82.476	Family Group Cohesion
10	X1,X4,X9,X 13	6.571	89.047	Market Proficiency

RESULT AND DISCUSSION

Table -1. Coefficient of correlation between Amount Disposable To Market(Yc) and 19 exogenous variable(X1-X15c)

Independent Variable	r Value	REMARKS
Age(x1)	.173	
Education(x2)	-0.088	
Family Size(x3)	-0.135	
Income/FAMILY SIZE (x4)	-0.174	
Size Of Holding(x5)	.663	**
Economical Land (x6)	.184	
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Market orientation (x13)	-0.128	
Decision matrix Purchase(x14a)	.101	
Decision matrix Bank (x14b)	-0.013	
Decision matrix Enterprise(x14c)	.018	
Idea exchange index Enterprise(x15a)	.090	
Idea exchange index Health(x15b)	.001	
Idea exchange index	-0.123	

Conclusion It has been found that FACTOR 1 has accommodated x6(economical land) and x8(fuel economy) variables having 15.583 per cent of variance and the can be renamed as FUEL ECONOMY.

LIKE WISE X11(DISTANCE MATRIX)AND x14b(DECISION MATRIX BANK)CAN BE RENAMED AS GEO DECISION.

X14c(DECISION MATRIX ENTERPRISE) ,x15b(IDEA EXCHANGE INDEX HEALTH) CAN BE RENAMED AS CONCLUDING INNOVATION.

X12(ORIENTATION TOWARDS COMPETITION), x15c (IDEA EXCHANGE INDEX EDUCATION) CAN BE RENAMED AS ENTREPRENEURIAL COMMUNICATION.

X₃(family size),X₁₀ (group interaction)can be renamed as family group cohesion.

X1(age),x4(income/family size),x9(market interaction),x13(market orientation) can be renamed as market proficiency.

3. CONCLUSION

India is one of the highest producer of vegetable in the world. But so far as value addition to vegetable crops it is occupying of bleak position. The new age vegetable enterprise in India are focusing are focusing on value addition ,high value vegetable production,organicvegetable production,marketable vegetable enterprise,promotional vegetable consumption. The National Food Security Mission is ushering the programme on increasing the infrastructure on vegetable storage subsequent marketability and its down the line consumption. The present study has nicely analysed the the inter action of two sets of variables through Canonical Correlation Analysis in order to formulate a micro level strategy. It is found that Cost Incurred(Ye), Market Price Gained (Yf)and Net Return(Yg) are moving together. This is good enough to gene rate a micro level policy implication cost incurred (Yc) and market price gained accrued to by accessing better market price. The other sub grouping of predicted characteristics show that total yield(Ya), amount consumed (Yb), disposable to market(Yc), amount disposed of (Yd) are moving together. This will focus that the total volume of vegetable should be augmented and at the same time disposability of the consignment may be increase by packaging , value addition. The entire level of vegetable entrepreneurship has been reticulated with the 19 exogenous variables. It is reasonable enough to conclude that both the aspects of production and disposability of vegetable can only be predicted through a score of well selected institutional, managerial, ecological, and personal characteristics of the respondents thriving with the operating social ecology.

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