

CHAPTER-7

Summary

Farming system is a resource management strategy to achieve economic and sustained agricultural production to meet diverse requirements of farm livelihood while preserving resource base and maintaining a high level of environment quality (Lal and Miller 1990). Fanning system is a set of agro economic activities that are interrelated and interact with themselves in a particular agrarian setting. It is a mix of farm enterprises to which farm families allocate its resources in order to efficiently utilize the existing enterprises for increasing the productivity and profitability of the farm. These farm enterprises are crop, livestock, aquaculture, agro forestry and agri-horticulture (Sharma et al 1979).

The word 'enterprise' is, at present, much used in a variety of contexts and with a wide range of meanings. Within this range there are narrow meanings of the word specially related to business, and there are wider

meanings indicating a way of behaving that can apply in a variety of contexts, including business.

“An entrepreneur is the one who always searches for change, responds to it and exploits it as an opportunity. innovation is the specific tool of entrepreneurs, the means by which they exploit changes as an opportunity for a different business or different service” (Peter Drucker, 2006).

With appropriate training, farmers can become good entrepreneur. Crop diversification by selecting crops targeted for the designated markets shall earn good revenue for the farmers. The profit can further be raised by resorting to organic farming, integrated nutrient management (INM), integrated pest management (IPM) etc.

A strategy must be designed to follow up with farmers after the sale to give them their money's worth. Providing registered farmers with add-on services, such as crop advisories, advance weather forecasts, output price information, direct-to-cell phone communication tools, would certainly help maintain customer loyalty.

Vegetables are the most important factor in maintaining a healthy body. Vegetables are rich in minerals, vitamins and many other important nutrients. You can not only keep your body healthy but also escape lot of diseases by consuming vegetables. Vegetables like garlic, carrot, leeks, onions, bell peppers, asparagus, tomatoes, potatoes, sweet potatoes, squash and all other green and leafy vegetables are healthy for heart.

India is the second producer, consumer and exporter of vegetables in the world. During 1997-98 to 2010-11, the estimated production of vegetables

is 14, 72,119 tonnes from an area of 95,898 ha with productivity of 15.35 t ha-1. In West Bengal State, the area of vegetables also increased from 5.6-8.5 '000 tonnes during the period of 1997-98 to 2010-11. The Fruits and Vegetables (F&V) sector has been a driving force in stimulating a healthy growth trend in Indian agriculture. Given the rising share of high value commodities in the total value of agricultural output and their growth potential, this segment is likely to drive agricultural growth in the years to come (ASSOCHAM, 2013). It plays a unique role in India's economy by improving the income of the rural people.

RESEARCH SETTING

Research setting refers to the detailed information of an area where the study was conducted. The study area generally comprises of a particular geographical area viz. a state, district, block, or gram panchayat area selected according to the convenience of the investigator who possess adequate knowledge regarding the location, communication facility etc. of the locality so that he can easily approach each and every corner of the area for data collection. Besides the investigators must also have the basic knowledge about the socio-demographic background of the people so as to have an easy understanding of their knowledge, attitude and behavior. Thus, a study on Pulse Cultivation and Enterprise certainly demands a baseline information on the status of pulse cultivation, demography, crop ecology, environmental impact and enterprise character.

The present study was taken up at Rautari villages of Rautari gram panchayat in Chakdah block in West Bengal. A brief description of the state and district in general and the block and village in particular is given below. 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 and ecological background which influence the living standard and behavioral patterns of the people in many ways. The area of investigation belong to the Chakdaha block in Nadia district. The area of the study in village Mahersorpur under Rautari gram panchayat.

West Bengal was created as a one of the constituent state of the Indian union among the 29th states in India on 15th August, 1947 as the result of partition of the undivided British Indian province of Bengal into West Bengal. West Bengal is situated in the north eastern part of India and lies between 21°37'-27°10' north latitude and 85°51'-89°53' east longitude.

In terms of the standard climate types, tropical climate viz. humid, sub humid, semi arid and arid occurs in different regions of the state. Its climate is very much influenced by monsoon rains which, in turn are of two types (1) South-West monsoon during the rainy season and (II) North-East monsoon during the winter season. Rainfall in West Bengal averages about 1200 to 1800 mm, ranging from 2500 to 3500 mm in Dooars and Tarai regions to 500 to 1000 mm in the plains. The maximum and minimum temperatures recorded during March to October are 30-40°C and 16-26°C respectively in the plains while in the hills these are 15-20°C.

The district of Nadia is situated in the heart of the Bengal delta held within the arms of the Ganga, namely, the Bhagirathi on the West and Mathabhanga on the North. The entire district lies in the alluvial plain of the Ganga and its tributaries. Most districts in West Bengal take their name from the headquarters station of the district, but Nadia district takes its name not from Krishnagar, the headquarter but from Nadia or Nabadwip hallowed by the memory of Lord ShriChaitanyaMahaprabhu who was born here on 18th February, 1486. The British district of Nadia was formed in 1787. The present district of Nadia after partition was formed by Notification No.545-GA dated 23rd February, 1948.

Chakdaha is a community development block that forms an administrative division in Kalyani subdivision of Nadia district in the Indian state of West Bengal. Chakdaha and Kalyani police stations serve this block. Headquarters of this block is at Chakdaha. It is located 42 km from Krishnanagar, the district headquarters.

Nadia district is mostly alluvial plains lying to the east of Hooghly River, locally known as Bhagirathi. The alluvial plains are cut across by such distributaries as Jalangi, Churni and Ichhamati. With these rivers getting silted up, floods are a recurring feature.

As per 2011 Census of India Chakdaha CD Block had a total population of 405,719, of which 314,383 were rural and 91,336 were urban. There were 209,513 (52%) males and 196,206 (48%) females. Population below 6 years was 38,434. Scheduled Castes numbered 185,933 and Scheduled Tribes numbered 21,609.

RESEARCH METHODOLOGY

- 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.

Statistical tools used for analysis of data

- a) Mean
- b) Standard deviation
- c) Correlation of coefficient
- d) Stepwise multiple regression
- e) Factor Analysis
- f) Canonical covariate analysis

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 (Y_c) has rightly contributed to the generation of disposability of market.

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 (Y_a)has rightly contributed to the generation of Idea exchange of education. It is absolutely right that with the amount consumed(Y_b) will depend on the on the family size and size of holding.

Summary

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.

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.

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 price.

IF THE FARMERS' NET RETURN WILL BE MORE THE HIS INCOME/FAMILY SIZE WILL BE MORE.

1. Coefficient of correlation between Total volume yield(Y_a) and 19 exogenous variable(X_1-X_{15c}), Idea exchange index Health(x_{15b})=.270*

2. Coefficient of correlation between Amount Consumed(Y_b) and 19 exogenous variable(X_1-X_{15c}), Family Size(x_3)=-0.241*, Size Of Holding(x_5)=.765**

3. Coefficient of correlation between Amount disposed of (marketed surplus)(Y_d) and 19 exogenous variable(X_1-X_{15c}), Size Of Holding(x_5)=.917**, Economical Land (x_6)=.217*, Fuel Consumption (x_8)=.282*

4. Coefficient of correlation between Cost incurred(Y_e) and 19 exogenous variable(X_1 - X_{15c}), Size Of Holding(x_5)=.446**, Economical Land (x_6)=.819**, Fuel Consumption (x_8)=.884**

5. Coefficient of correlation between Market price gained(Y_f) and 19 exogenous variable(X_1 - X_{15c}), Size Of Holding(x_5)=.447**, Economical Land (x_6)=.742**, Fuel Consumption (x_8)=.767**

6. Coefficient of correlation between Net Return(Y_g) and 19 exogenous variable(X_1 - X_{15c}), Income/FAMILY SIZE (x_4)=.402**

Conclusion It has been found that FACTOR 1 accommodated x_6 (economical land) and x_8 (fuel economy) variables having 15.583 per cent of variance and the can be renamed as FUEL ECONOMY.

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LIKE WISE X_{11} (DISTANCE MATRIX)AND X_{14b} (DECISION MATRIX BANK)CAN BE RENAMED AS GEO DECISION.

X_{14c} (DECISION MATRIX ENTERPRISE) , X_{15b} (IDEA EXCHANGE INDEX HEALTH) CAN BE RENAMED AS CONCLUDING INNOVATION.

X_{12} (ORIENTATION TOWARDS COMPETITION), X_{15c} (IDEA EXCHANGE INDEX EDUCATION) CAN BE RENAMED AS ENTREPRENEURIAL COMMUNICATION.

X_3 (FAMILY SIZE), X_{10} (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.

Through step wise regression , it has been found that only two variables have been retained in the last stage (X11 , X15b). So the level of idea exchange index health for accessing innovations and the distance far from the critical utility centre together has contributed 12.9per cent of variance in yield, while 19 causal variables together contributed 28.1per cent of variance.

Through step wise regression, it has been found that only two variables have been retained in the last stage (X5 , X15b). So the level of idea exchange index health for accessing innovations and the SIZE OF HOLDING far from the critical utility centre together has contributed 61per cent of variance in yield, while 19 causal variables together contributed 74per cent of variance.

⋮ Through step wise regression, it has been found that only two variables have been retained in the last stage (X5 , X7). So the level of ELECTRICITY CONSUMPTION and the SIZE OF HOLDING far from the critical utility centre together has contributed 47.7per cent of variance in yield,while 19 causal variables together contributed 62.5per cent of variance.

⋮ Through step wise regression , it has been found that only two variables have been retained in the last stage (X11 , X14b). So the level of DECISION MATRIX BANKfor accessing innovations and the DISTANCE

far from the critical utility centre together has contributed 85.4per cent of variance in yield, while 19 causal variables together contributed 89.1per cent of variance.

Through step wise regression, it has been found that only two variables have been retained in the last stage (X5 , X4,X8). So the level of FAMILY INCOME/FAMILYSIZE for accessing innovations and FUEL CONSUMPTION and the SIZE OF HOLDING far from the critical utility centre together has contributed 76.7per cent of variance in yield,while 19 causal variables together contributed 81.8per cent of variance.

Through step wise regression , it has been found that only two variables have been retained in the last stage (X5 , X4,X8). So the level of FAMILY INCOME/FAMILYSIZEfor accessing innovations and FUEL CONSUMPTION and the SIZE OF HOLDING far from the critical utility centre together has contributed 68.2per cent of variance in yield, while 19 causal variables together contributed 76.3per cent of variance.

∴ Through step wise regression, it has been found that only two variables have been retained in the last stage (X7 , X4,X14a). So the level of FAMILY INCOME/FAMILYSIZEfor accessing innovations and ELECTRICITY CONSUMPTION and the DECISION MATRIX PURCHASE far from the critical utility centre together has contributed 25.5per cent of variance in yield, while 19 causal variables together contributed 35.9per cent of variance.

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.

CONCLUSION

Marketable Surplus is the most important determinant in elucidating an enterprise from the economic and marketability. The study revealed that the exogenous variables like education, size of holding , economic land, electricity and fuel consumption, market interaction , group interaction and so on are important predictors for surplus generating behavior of a farmer.

Apparently trivial variables like Economic Land can be an important indicator for measuring marketable surplus and marketed surplus. The other side of this reveals that the pace and character of modernization process in Indian agriculture has well been enrooted into its social and investment character.

So, the importance of having a transformation from non profitable monolithic agriculture to profitable surplus generating agriculture stands immensely.