



Research Paper

Correlates of adoption of vegetable by tribal farmers of Keonjhar District of Odisha

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Abstract: The present study was undertaken with a view to find out the socio-economic profile of tribal vegetable farmers; to find out the relationship between the socio-economic characteristics of the respondents with the vegetable adoption and rejection. Further an attempt was made to identify the constraints that hinder the vegetable adoption by the tribal farmers. Accordingly Suggestions were collected from field level & formulation of suitable strategies for comprehensive study in near future.

Keywords: Adoption, Discontinuance, Rejection, Constraints, Strategy, Socio-Economic status,

INDROCTUCTION

Vegetable cultivation is a part of Horticultural science. In scientific word it is termed as "Olericulture". In global context India placed second position after china in vegetable cultivation (in area and production). But we are proud to know that our country placed first position in cauliflower, second in onion, third in cabbage and fourth in potato respectively in

the world. As per the recommendation made by Indian Council for Medical Research (ICMR), the use of vegetables per day is 280 gm. But now days we avail less than equal to 100 gm due to poor production and adoption pattern of vegetable production in India. After getting conscious on the vegetable demand now farming people giving more emphasis on vegetable crops in order to meet the need of consumers, Odisha placed a respectable position in vegetable cultivation (Chadha, 2009). But due to some irreparable conditions like (lack of input supply in proper time, lack of idea on package of practices, lack of marketing and processing industry facilities and lack of financing lack of storage facility) Farming people have low adoption pattern for vegetable cultivation. In Odisha out of 30 districts Keonjhar is one of the progressing tribal districts to conquer over the rank in vegetable cultivation due to cool temperate condition and vegetable forcing areas in the bank of the Baitarani River. Apart from these Kudumi, tribes (Mahanta families) have a greater effort on vegetable cultivation actively. In Keonjhar district Swampatana,

Saharpada, Anandapur, Ghatagaon, Hatadihi, Telkoi blocks have remarkable vegetable production due to “Gola” and “Chasa” families. In this district mainly cabbage, cauliflower, pumpkin, cucumber, pointed gourd, bitter gourd, parwal, onion and potato are cultivated. Here the researcher wants to study the details of adoption pattern of vegetable growers and compare them for further study and improvement with justified suggestions for their livelihood prosperity.

OBJECTIVES OF STUDY

1. To study the socio-economic characters of tribal vegetable farmers.
2. To identify the vegetable innovations adopted by the tribal vegetable farmers and reasons for adoption and diffusion.
3. To identify the vegetable innovations rejected /discontinued by the tribal vegetable farmers and the reasons for rejection or discontinuance.
4. To list out the opinion of tribal vegetable farmers on social, economic, and management constraints and their suggestions.
5. To suggest suitable strategies for the effective adoption of vegetable technology by the tribal vegetable farmers of Keonjhar district of Odisha.

Expected Outcomes:

1. Vegetable Cultivation by tribal's in terms of negative behavior: Discontinuance; Rejection; Disagreement; Conflict; Dissonance; Confusion and reason for reinvention can be explained under the process of Technology Socialization.
2. The status of predictors of tribal vegetable farming can be rationalized and can be attuned to expedite the Process of technology socialization.
3. Some models of tribal vegetable farming will be evolved, which will be helpful for policy maker to standardize the process of

Technology Socialization in the realm of rural development.

Limitation of the Study

The study suffers from the following limitations.

1. Though all possible precautions were taken to make the study precise, meaningful and reliable yet because of limited time and resources at the disposal of the investigator for which only limited respondents were included. This has been serious handicap in generalizing the findings. As it is a “Tribal Vegetable Cultivation” project and operated a long distance from the Headquarter the time and money did not permit this study of a large sample.
2. The findings of study are based on the ability of the recall and on the verbal opinion expressed by the respondents. Hence objectivity of the study is related to their ability to recall and also to their honesty in furnishing the required information.
3. The entire investigation is based on individuals perception and expressed opinion of the respondent under study.
4. Though utmost efforts were made to make best use of standardized tools and techniques of data collection, yet accuracy may not be guaranteed.

MATERIALS AND METHODS

Selection of problems

Selection, delineation and conceptualization of the research problem are the most important consideration in behavioral research. Good investigation gives priority on the formation of clear, realistic and unambiguous problem. Therefore delineation of problem is more important and essential than finding out solutions. Therefore, the present situation calls for an analysis of facts for the affinity of the farmers towards vegetable cultivation as it is

one of the vegetable growing districts with less irrigation facilities. Hence the research study entitled “Correlates of Adoption of vegetables by Tribal farmers of Keonjhar District of Odisha” has been selected for the purpose of investigation.

Research design

The present research project was formulated on the basis of ex-post facto. Accordingly, specific objects were set to provide the basis of inquiry. In the light of objectives, the scope of study was oriented and due techniques of investigation were followed; tools used and pattern of statistical analysis decided. Then the study was outlined from observation levels up to interpretation of observation, giving correct operational definitions of concept used. The study was then carried out in the light of objectives set and within the frame work of selected outlines.

Plan of work

The researcher has made all attempts to make a detail survey of all related aspects of the study before actual investigation. A good number of interaction sessions were organized through seminars, focused group discussion workshops, meetings at the institutional level as well visit to the proposal areas of investigation in the depth discussion with the farmers and field level functionaries. In spite of time constraints as being a part course curriculum, all adequate attention was made to make the study as realistic as possible.

Location of the study

The study was under taken in Keonjhar district of Odisha. The district comprises of blocks spread over sub-divisions. The district was selected purposively because of its potentialities in vegetable cultivation in Tribal Areas. Number of vegetables including off season vegetables like tomato, cauliflower, cabbage in Kharif season as

well as exotic vegetables broccoli, celery etc. It can be presumed that better response could be obtained for arriving at conclusion for recommending to the state Govt. for intensive vegetable cultivation in the district. Therefore, Keonjhar district was selected purposively in the due course of investigation.

Sampling Procedures

The districts as well as blocks were selected purposively where as random sampling technique was followed for selection of Gram Panchayats, villages and respondents. The sampling procedure includes selection of district, block, villages and respondents' which are detailed herewith.

Selection of District

Keonjhar district was purposively selected for the investigation. The district comes under north central plate ingrossimatic zone comprising of farming situations. The district is dominated by the tribal people. Horticulture is one of the important enterprises for the livelihood of the people of the people. Vegetable cultivation is the ages of old practice of farmers. The farmers have also affinity to grow vegetables for commercial people. The district Keonjhar was there has been selected purposively for getting better response for the purpose of investigation.

RESULT AND DISCUSSION

Socio-economic variable and adoption behavior of any technology is a function of multiple factors of economic, socio-psychological and communication variables. The variables directly or indirectly influence the individual with regarding to their adoption behavior. Attempt was made in the study to assess the relationships of some selected variables in the knowledge level of the respondents on various on various aspect of vegetable cultivation under study. The

responses obtained on these aspects were analyzed by assigning score to individual respondents on each variable following the developed by (Elenchezian and Kombairaju, 2004). Zero order co-efficient

of correlation analysis was made with the hypothesis. The results of the analysis are presented in the table.

Table: Correlation of socio-economic variable on adoption behaviour.

S. No.	Variables	Correlation co-efficient (r)		't' Value@0.05=1.976
1.	Age	0.138	NS	1.67
2.	Education	0.594	**	8.829
3.	Family Type	0.123	NS	1.487
4.	Family size	0.431	**	5.711
5.	Outward Orientation	0.489	**	6.709
6.	Housing Pattern	0.563	**	8.146
7.	Occupation	0.427	**	5.646
8.	Social participation	0.579	**	8.492
9.	Ownership Right	0.549	**	7.854
10.	Holding Size	0.519	**	7.260
11.	Average annual income	0.421	**	5.550
12.	Credit Status	0.131	NS	1.574
13.	Savings Status	0.493	**	6.776

**Significant at 5 percent level of significance. NS: Non-significant

The findings present in the table revealed that education, land holding size, family size, outward orientation, Housing Pattern, occupation, social participation, ownership right, holding size, savings status and annual income are significantly correlated with adoption behavior at 5 percent level of significance but age, family type, credit status have not significantly correlated with adoption behavior (Abdul, 1993). For 145 respondents, at (n-2) degree of freedom "t" value is 1.976. From the table we may find that calculated "t" values were higher than 1.976. It proved that a high order co-relation exists and significant values were occurs due to 5 percent level of significance.

Conclusion: The study although concludes that these are good practices of vegetable cultivation in Keonjhar district. They require community organizations, team work, and leader to lead them and enable them to take decision with risk learning capacity. They also required sufficient training and demonstrations to develop their knowledge and skill competency, credit facilities, incentives and minimum support price easy disposal of produce needs due consideration. If all these things are provided to the vegetable growers then there will be definitely increases in area, production and productivity of vegetables in Keonjhar district. The district can contribute significantly for the vegetable requirement of the state as well as increase the economic status of tribal dominated farmers.

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