



What Motivates Farmers To Join Marketing Cooperative Society?

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ABSTRACT: Marketing cooperatives are gaining popularity in the agricultural economies by providing farmers with collective access to markets, and various support services. However, the motivations driving farmers to join such cooperatives remain an area of ongoing research and debate. The main purpose of this study is to explore the factors influencing farmers' decisions to participate in marketing cooperative societies, utilizing a combination of quantitative and qualitative tools. The prefecture of Nilgiris, in Tamil Nadu, was chosen because it is characterized by a high involvement of cooperatives, wholesalers and retailers in agricultural crops such as Potatoes, Carrots and Garlic etc., A structured questionnaire was answered by 120 producers of Nilgiris using purposive convenience random sampling method. The findings suggest that farmers acknowledge their consent to cultivate potatoes as a cash crop, ensuring secure financial transactions and the direct distribution of their fresh agricultural produce through marketing cooperatives. Moreover, the study showed that there is a statistically significant difference in the motives of participation in a marketing cooperative that has direct distribution of fresh agricultural produce.

Keywords: Marketing Cooperatives, Agricultural Produce, Farmers' motivations, Fresh produce distribution

I. INTRODUCTION

An agricultural marketing cooperative is an association of farmers who voluntarily cooperate to pool their production for sale. That pooled production is marketed and distributed through the cooperative which is owned and controlled by the farmers themselves. Around the world, farmers are increasingly encouraged to join marketing cooperatives, and cooperatives hold a significant market share in agricultural product distribution

from farms to final consumers marketing cooperatives comprise about all cooperatives and product distribution represents the net business volume of cooperatives.

The co-operative institutions are expected to function as competitors of private traders in the market. These organizations pool the produce of the small farmers having a small surplus to market and improve their bargaining power. They have also helped government agencies.

The execution of the policy decisions bearing on the procurement and distribution of food grains and other essential commodities. Meaning A co-operative sales association is a voluntary business organization established by its member patrons to market farm products collectively for their direct benefit. It is governed by democratic principles, and savings are apportioned to the members on the basis of their patronage. The members are the owners, operators and contributors of the commodities and are the direct beneficiaries of the savings that accrue to the society. No intermediary stands to profit or loss at the expense of the other members.

In a co-operative marketing society, the control of the organization is in the hands of the farmers, and each member has one vote irrespective of the number of shares purchased by him. The profit earned by the society is distributed among the members on the basis of the quantity of the produce marketed by him. In other words, co-operative marketing societies are established for the purpose of collectively marketing the products of the member farmers.

II. OBJECTIVE OF THE STUDY

- To study the factors influencing farmers to join marketing cooperatives.
- To evaluate the efforts of a cooperative society towards improving rural livelihood of crop farmers.



- To find out the problems in cultivating and marketing the agriculture crops by farmers.
- To give some recommendations to overcome the problems of the farmers.

III. LIMITATIONS OF THE STUDY

- Every research study has its limitations, and it's important to acknowledge them to provide a clear understanding of the scope and potential constraints of the research. Here are potential limitations for a study on the production and marketing practices in agriculture farming:
 - The study may focus on a specific region or country due to logistical constraints, limiting the generalizability of findings to a broader global context.
 - Limited resources or time constraints might restrict the sample size or the representativeness of the selected sample, potentially affecting the external validity of the study.
 - To analyse the production and marketing practices of agriculture farmers, a combination of quantitative and qualitative tools can be employed.

IV. STATEMENT OF THE PROBLEM

The problem analysis the statement expresses that how the farmers motivate into the marketing practices by cooperative society and also involve the problem how they solve to the agriculture or cultivation.

Farmers are illiterate and poor for that reason they do not have capacity to run farming activities effectively and efficiently. As farmers, do not have educational qualifications and financial ability to store their products and the transport them to the market place for better price. As a result, they are bound to sell their products to the middlemen at lower price which is below their production cost in maximum cases. Under these circumstances, cooperative marketing strategy can solve this problem.

V. RESEARCH METHODOLOGY

PERIOD OF THE STUDY

When setting the period of study for research on the production and marketing practices in agriculture farming from 2023-2024.

RESEARCH DESIGN:

The research design for studying the production and marketing practices of agriculture farmers should be carefully crafted to ensure the collection of relevant and reliable data.

POPULATION

The aggregate elementary units in the survey are referred to as the population. Here it covers the entire 120 potato farmers.

SAMPLING UNIT:

Sampling unit is in The Nilgiris Cooperative Marketing Society Ltd at Ooty.

SOURCE OF DATA:

The primary sources of data for this study include annual reports, financial statements and disclosures provided by the selected companies Collecting primary data is crucial for understanding the specific context and nuances of production and marketing practices in agriculture farming. Primary data is original information gathered directly from the source.

STATISTICAL TOOLS USED

1. Simple Percentage analysis
2. Chi-square Analysis
3. Correlation
4. Anova

SIMPLE PERCENTAGE ANALYSIS

This method is used to compare two or more series of data, to describe the relationship or the distribution of two or more series of data. Percentage analysis test is done to find out the percentage of the response of the respondent. In this tool various percentage are identified in the analysis and they are presented by the way of Bar Diagrams in order to have better understanding of the analysis.

$$\text{Simple percentage} = \frac{\text{No. of respondents}}{\text{Total No. of respondents}} \times 100$$

CHI- SQUARE ANALYSIS

Chi-square was done to find out one way analysis between socio demographic variable and various dimensions of the program

$$\chi^2 = \frac{(O - E)^2}{E}$$

where

O – Observed value, E – Expected value

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In general, the expected frequency for any call can be calculated from the following equation.

$$E = RT \times CT / N$$

The calculated value of chi-square is compared with the table value of χ^2 given degrees of freedom of a certain specified level of significance. It at the stated



level of the calculated value of χ^2 the difference between theory and observation is considered to be significant. Otherwise, it is in significant.

CORRELATION

Correlation is computed into what is known as the correlation efficient, which ranges between -1 to +1. Perfect positive correlation (a correlation co-efficient of +1) implies that as one security moves, either up or down, the other security will move in lockstep, in the same direction.

$$r = \frac{\sum XY}{\sqrt{(\sum X^2) (\sum Y^2)}}$$

ANOVA

Appraisal of progress, or ANOVA, is a solid certified method that is utilized to show capability between at any rate two systems or parts through importance tests. It likewise shows us an approach to manage make various appraisals a few groups induce. The Anova test is performed by seeing two sorts of grouping, the variety between the model derives, comparatively as the combination inside the entirety of the models. Under alluded to equation watches out for one-way Anova test encounter

$$F = \frac{MST}{MSE}$$

VI. DATA ANALYSIS AND INTERPRETATION

ANALYSIS OF DATA

The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through coding, tabulation and then drawing inferences. The unwieldy data should necessarily condense into a manageable groups and tables for further analysis.

Thus, researcher should classify the raw data into some purposeful and usable categories. Analysis work after tabulation is generally based on the computation of various percentages, coefficients, etc., by applying various well defined statistical formulae.

INTERPRETATION OF DATA

The real value of research lies in its ability to arrive at certain generalizations. If the researcher had no hypothesis to start with, he might seek to explain his findings on the basis of some theory. It

is known as interpretation. The process of interpretation may quite often trigger off new questions which in turn may lead further researches.



SIMPLE PERCENTAGE ANALYSIS

SEX OF THE RESPONDENTS

SEX	NO. OF RESPONDENTS	PERCENTAGE
Male	65	54.2%
Female	55	45.8%
Total	120	100.0%

INTERPRETATION

The above table shows that, 54.2% of the respondents are male and remaining 45.8% of the respondents are female.

Majority 54.2% of the respondents are male.

AGE GROUP OF THE RESPONDENTS

AGE	NO. OF RESPONDENTS	PERCENTAGE
15-30 years	32	26.7%
31-45 years	42	35.0%
46-60 years	29	24.2%
Above 60 years	17	14.2%
Total	120	100.0%

INTERPRETATION

The above table shows that, 35.0% of the respondents are age group 31-45 years, 26.7% of the respondents are age group between 15-30 years, 24.2% of the respondents are age group of 46-60 years, and remaining 14.2% of the respondents are age group of Above 60 years.

Mostly 35.0% of the respondents are age group 31-45 years.

EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

QUALIFICATION	NO. OF RESPONDENTS	PERCENTAGE
Upto SSLC	38	31.7%
Diploma	36	30.0%
Under Graduate	24	20.0%
Post Graduate	22	18.3%
Total	120	100.0%

INTERPRETATION

The above table shows that, 31.7% of the respondents are qualified upto SSLC, 30.0% of the respondents are qualified under Diploma, 20.0% of the respondents are qualified under graduate and remaining 18.3% of the respondents are qualified under post graduate qualification.

Mostly 31.7% of the respondents are qualified upto SSLC.



MARITAL STATUS OF THE RESPONDENTS

MARITAL STATUS	NO. OF RESPONDENTS	PERCENTAGE
Married	51	42.5%
Unmarried	47	39.2%
others	22	18.3%
Total	120	100.0%

INTERPRETATION

The above table shows that, 42.5% of the respondents are married, 39.2% of the respondents are unmarried and remaining 18.3% of the respondents are others. Mostly 42.5% of the respondents are married.

EXPERIENCE

EXPERIENCE	NO. OF RESPONDENTS	PERCENTAGE
1-5 years	23	19.2%
6 - 10 years	53	44.2%
11 – 15 years	28	23.3%
16- 20 years	9	7.5%
Above 20 years	7	5.8%
Total	120	100.0%

INTERPRETATION

The above table shows that, 44.2% of the respondents are experienced in 6 - 10 years, 23.3% of the respondents are experienced in 11 – 15 years, 19.2% of the respondents are experienced in 1-5 years, 7.5% of the respondents are experienced in 16- 20 years and remaining 5.8% of the respondents are experienced in Above 20 years.

Mostly 44.2% of the respondents are experienced in 6 - 10 years.

FAMILY MEMBERS

FAMILY MEMBERS	NO. OF RESPONDENTS	PERCENTAGE
Joint	53	44.2%
Nuclear	67	55.8%
Total	120	100.0%

INTERPRETATION

The above table shows that, 55.8% of the respondents are having joint Nuclear family and remaining 44.2% of the respondents are having joint family.

Majority 55.8% of the respondents are having joint Nuclear family.

SOURCE OF INCOME OF THE RESPONDENTS

SOURCE OF INCOME	NO. OF RESPONDENTS	PERCENTAGE
Potato and other agricultural produce	37	30.8%
Income from potato alone	46	38.3%
Tea estate	18	15.0%
Non-agricultural source	11	9.2%



PM Kisan Samman Nidhi	8	6.7%
Total	120	100.0%

INTERPRETATION

The above table shows that, 38.3% of the respondents are earning from Income from potato alone, 30.8% of the respondents are earning from Potato and other agricultural produce, 15.0% of the respondents are earning from Tea estate, 9.2% of the respondents are earning from Non-agricultural source and remaining 6.7% of the respondents are earning from PM Kisan Samman Nidhi.

Mostly 38.3% of the respondents are earning form Income from potato alone.

SOURCE OF IRRIGATION

SOURCE OF IRRIGATION	NO. OF RESPONDENTS	PERCENTAGE
River	44	36.7%
Well irrigation	47	39.2%
Dry land	29	24.2%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 39.2% of respondents are belong to Well irrigation, 36.7% of the respondents are belong to river and remaining 24.2% of the respondents are belong to Dry land.

Mostly 39.2% of respondents are belonging to well irrigation for source of irrigation.

PLACE OF BUY THE SEED

PLACE OF BUY THE SEED	NO. OF RESPONDENTS	PERCENTAGE
Friends / Relatives	22	18.3%
Village traders	41	34.2%
Co- operative Society	23	19.2%
Agriculture University	20	16.7%
Brokers	14	11.7%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 34.2% of respondents are buying the seed from Village traders, 19.2% of the respondents are buying the seed from co- operative Society, 18.3% of the respondents are buying the seed from friends / relatives, 16.7% of the respondents are buying the seed from agriculture university and 11.7% of the respondents are buying the seed from brokers.

Mostly 34.2% of respondents are buying the seed from Village traders.

SELLING THE ENTIRE PRODUCE

SELLING THE ENTIRE PRODUCE	NO. OF RESPONDENTS	PERCENTAGE
Yes	66	54.9%
No	54	45.0%
Total	120	100.0%



INTERPRETATION

From the above table it is inferred that, 54.9% of the respondents are selling the entire produce to the marketing cooperative societies and remaining 45.0% of the respondents are not selling the entire produce to the marketing cooperative societies.

Majority 54.9% of the respondents are selling the entire produce to the marketing cooperative societies.

SOURCE OF FINANCE

SOURCE OF FINANCE	NO. OF RESPONDENTS	PERCENTAGE
Co-operative banks	34	28.3%
Intermediaries	33	27.5%
Commercial banks	15	12.5%
Own fund	22	18.3%
Friends / Relatives	16	13.3%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 28.3% of the respondents are belong to Co-operative banks, 27.5% of the respondents are belong to Intermediaries, 18.3% of the respondents are belong to Own fund, 13.3% of the respondents are belong to Friends / Relatives and remaining 12.5% of the respondents are belong to Commercial banks.

Mostly 28.3% of the respondents are belong to Co-operative banks about source of finance.

MARKET YOUR POTATO

MARKET YOUR POTATO	NO. OF RESPONDENTS	PERCENTAGE
Through village traders	33	27.5%
Through commission agents	34	28.3%
Directly to the consumers/Local shop	29	24.2%
Potato mandi	12	10.0%
Any other	12	10.0%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 28.3% of the respondents are suggest for through commission agents, 27.5% of the respondents are suggest for through village traders, 24.2% of the respondents are suggest for directly to the consumers/Local shop, 10.0% of the respondents are suggest for potato mandi and remaining 10.0% of the respondents are suggest for any other.

Mostly 28.3% of the respondents are suggest for through commission agents.

SELLING POTATO

SELLING POTATO	NO. OF RESPONDENTS	PERCENTAGE
Food Processing	57	47.5%
For seed Purpose	40	33.3%
Local Consumption	23	19.2%



Total	120	100.0%
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INTERPRETATION:

From the above table it is inferred that, 47.5% of the respondents are prefer food processing, 33.3% of respondents are prefer for seed Purpose and remaining 19.2% of the respondents are prefer Local Consumption. Mostly 47.5% of the respondents are prefer food processing for selling potato.

TRADITIONAL AGRICULTURAL MARKET SETUP TO SELL POTATOES

MARKET SETUP TO SELL POTATOES	NO. OF RESPONDENTS	PERCENTAGE
Village Trade	45	37.5%
Commission Agent	42	35.0%
Potato mandi	33	27.5%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 37.5 % of the respondents are selling the potatoes to Village Trade, 35.0% of respondents are selling the potatoes to Commission Agent and remaining 7.5% of the respondents are selling the potatoes to Potato mandi. Mostly 37.5 % of the respondents are selling the potatoes to Village Trade as traditional agricultural market setup.

CULTIVATED CROPS

CULTIVATED CROPS	NO. OF RESPONDENTS	PERCENTAGE
Potato and other vegetables	39	32.5%
Potato and Cereals	21	17.5%
Potato alone	44	36.7%
other agricultural crops	16	13.3%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 36.7% of the respondents are prefer potato alone, 32.5% of the respondents are prefer Potato and other vegetables, 17.5% of the respondents are prefer Potato and cereals and remaining 13.3% of the respondents are prefer other agricultural crops. Mostly 36.7% of the respondents are preferring potato alone about cultivated crops.

TYPES OF PROPERTY USED FOR FARMING

TYPES OF PROPERTY	NO. OF RESPONDENTS	PERCENTAGE
Own	30	25.0%
Leased in	36	30.0%
Leased out	38	31.7%
Net Operational Area	16	13.3%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 31.7% of the respondents are having leased out land, 30.0% of respondents are having leased in land, 25.0% of the respondents are having Own land and remaining 13.3% of the respondents are having Net Operational Area of land.



Mostly 31.7% of the respondents are having leased out land.

KINDS OF POTATO CULTIVATE

KINDS OF POTATO CULTIVATE	NO. OF RESPONDENTS	PERCENTAGE
Kufri Anand Potato	43	35.8%
Sweet Potato	7	5.8%
Karnataka potato	13	10.8%
Kufri Giriraj Potato	12	10.0%
Hybrid Potato	45	37.5%
Total	120	100.0%

INTERPRETATION:

From the above table it is inferred that, 37.5% of the respondents are belong to Hybrid Potato, 35.8% of respondents are belong to Kufri Anand Potato, 10.8% of the respondents are belong to Karnataka potato, 10.0% of the respondents are belong to Kufri Giriraj Potato and remaining 5.8% of the respondents are belong to Sweet Potato

Mostly 37.5% of the respondents are belong to Hybrid Potato for kinds of potato cultivate.

EXPENSES INCURRED FOR HARVESTING

FACTORS	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Res	Per	Res	Per	Res	Per	Res	Per	Res	Per
Dug Out	62	51.7%	21	17.5%	18	15.0%	12	10.0%	7	5.8%
Drying	35	29.2%	38	31.7%	23	19.2%	19	15.8%	5	4.2%
Packing	52	43.3%	23	19.2%	29	24.2%	7	5.8%	9	7.5%
Storage	33	27.5%	39	32.5%	31	25.8%	11	9.2%	6	5.0%
Transportation	30	25.0%	40	33.3%	32	26.7%	8	6.7%	10	8.3%
Commission	29	24.2%	51	42.5%	13	10.8%	21	17.5%	6	5.0%
Loading and unloading	44	36.7%	37	30.8%	18	15.0%	13	10.8%	8	6.7%

INTERPRETATION

The above table shows that, 51.7% of the respondents are belong to strongly agree with Dug Out, 43.3% of the respondents are belong to strongly agree with Packing, 42.5% of the respondents are belong to agree with Commission, 36.7% of the respondents are belong to strongly agree with Loading and unloading, 33.3% of the respondents are belong to agree with Transportation and remaining 31.7% of the respondents are belong to agree with Drying.

Majority 51.7% of the respondents are belonging to strongly agreed with Dug Out about expenses incurred for harvesting of potatoes.



MARKET FUNCTIONARIES IN MARKETING OF POTATOES

FACTORS	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Res	Per	Res	Per	Res	Per	Res	Per	Res	Per
Labor	52	43.3%	25	20.8%	28	23.3%	11	9.2%	4	3.3%
Rent and electricity	38	31.7%	46	38.3%	13	10.8%	14	11.7%	9	7.5%
Loading and unloading	28	23.3%	44	36.7%	28	23.3%	14	11.7%	6	5.0%
Service charge	63	52.5%	25	20.8%	16	13.3%	8	6.7%	8	6.7%
Weighing and other cost	36	30.0%	48	40.0%	19	15.8%	13	10.8%	4	3.3%
Intermediaries	51	42.5%	27	22.5%	28	23.3%	8	6.7%	6	5.0%

INTERPRETATION

The above table shows that, 52.5% of the respondents are strongly agree for Service charge, 43.3% of the respondents are strongly agree for Labor, 42.5% of the respondents are strongly agree for Intermediaries, 40.0% of the respondents are agree for Weighing and other cost, 38.3% of the respondents are agree for Rent and electricity and remaining 36.7% of the respondents are agree for Loading and unloading.

Majority 52.5% of the respondents are strongly agreeing for Service charge about market functionaries in marketing of potato.

EXISTING MARKETING SYSTEM

FACTORS	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Res	Per	Res	Per	Res	Per	Res	Per	Res	Per
Availability of credit facilities	40	33.3%	44	36.7%	19	15.8%	11	9.2%	6	5.0%
Interest charged and mode of collection by agents	30	25.0%	36	30.0%	30	25.0%	15	12.5%	9	7.5%
Payment system by intermediaries	52	43.3%	37	30.8%	10	8.3%	15	12.5%	6	5.0%
Government intervention through minimum support price	35	29.2%	39	32.5%	30	25.0%	12	10.0%	4	3.3%
Functioning of regulated market and Co- operative market	45	37.5%	33	27.5%	17	14.2%	14	11.7%	11	9.2%
Existing marketing system	37	30.8%	42	35.0%	20	16.7%	14	11.7%	7	5.8%

INTERPRETATION

The above table shows that, 43.3% of the respondents are prefer strongly agree for Payment system by intermediaries, 37.5% of the respondents are prefer strongly agree for Functioning of regulated market and Co- operative market, 36.7% of the respondents are prefer agree for Availability of credit facilities, 35.0% of the respondents are prefer agree for Existing marketing system, 32.5% of the respondents are prefer agree for



Government intervention through minimum support price and remaining 30.0% of the respondents are prefer agree for Interest charged and mode of collection by agents.

Mostly 43.3% of the respondents are prefer strongly agree for Payment system by intermediaries.

RANK THE PROBLEM IN CULTIVATION OF POTATOES

FACTORS	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Rank
	Res	Per	Res	Per	Res	Per	Res	Per	Res	Per	
High wage rate	44	36.7%	48	40.0%	4	3.3%	14	11.7%	10	8.3%	5
High cost of Input	52	43.3%	36	30.0%	14	11.7%	11	9.2%	7	5.8%	3
Natural disasters	31	25.8%	66	55.0%	9	7.5%	10	8.3%	4	3.3%	1
Severity of pest and diseases	46	38.3%	44	36.7%	12	10.0%	11	9.2%	7	5.8%	6
Labor shortage	35	29.2%	51	42.5%	19	15.8%	11	9.2%	4	3.3%	4
Irregular supply of electricity	57	47.5%	33	27.5%	18	15.0%	6	5.0%	6	5.0%	2
Lack of finance	33	27.5%	42	35.0%	28	23.3%	9	7.5%	8	6.7%	7

INTERPRETATION

The above table shows that, 55.0% of the respondents are feels agree for Natural disasters, 47.5% of the respondents are feels strongly agree for Irregular supply of electricity, 43.3% of the respondents are feels strongly agree for High cost of input, 42.5% of the respondents are agree for Labor shortage, 40.0% of the respondents are feels agree for High wage rate, 38.3% of the respondents are feels strongly agree for Severity of pest and diseases, 35.0% of the respondents are feels agree for Lack of finance.

Majority 55.0% of the respondents are feels agree for Natural disasters about problem in cultivation of potato.

RANK THE CULTIVATE THE POTATOES

Factors	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree		Rank
	Res	Per	Res	Per	Res	Per	Res	Per	Res	Per	
Suitability	53	44.2%	31	25.8%	20	16.7%	9	7.5%	7	5.8%	2
Short term crop	46	38.3%	31	25.8%	24	20.0%	14	11.7%	5	4.2%	5
Cash crop	35	29.2%	59	49.2%	11	9.2%	8	6.7%	7	5.8%	1
Suitable for rain-fed cultivation	51	42.5%	37	30.8%	15	12.5%	10	8.3%	7	5.8%	3
Less input cost	40	33.3%	38	31.7%	29	24.2%	8	6.7%	5	4.2%	6
Availability of Land	50	41.7%	33	27.5%	21	17.5%	7	5.8%	9	7.5%	4

INTERPRETATION

The above table shows that, 49.2% of the respondents are suggesting to Agree for Cash crop, 44.2% of the respondents are suggesting to Strongly agree for Suitability, 42.5% of the respondents are suggesting to strongly agree for Suitable for rain-fed cultivation, 41.7% of the respondents are suggesting to strongly agree for Availability of land, 38.3% of the respondents are suggesting to strongly agree for Short term crop and remaining 33.3% of the respondents are suggesting to Agree for Less input cost.

Mostly 49.2% of the respondents are suggesting to Agree for Cash crop about cultivate the potato.



RANK THE PROBLEM FOR MARKETING THE POTATOES

FACTORS	Strongly agree		Agree		Neutral		Disagree		Strongly disagree		Rank
	Res	Per	Res	Per	Res	Per	Res	Per	Res	Per	
Forced sales	40	33.3%	49	40.8%	14	11.7%	11	9.2%	6	5.0%	3
Price Fluctuation	60	50.0%	24	20.0%	18	15.0%	9	7.5%	9	7.5%	1
Malpractices in weighing	35	29.2%	45	37.5%	18	15.0%	16	13.3%	6	5.0%	4
Labor shortage	53	44.2%	28	23.3%	22	18.3%	9	7.5%	8	6.7%	2
Lack of regulated market	43	35.8%	44	36.7%	19	15.8%	8	6.7%	6	5.0%	5

INTERPRETATION

The above table shows that agree level, 50.0% of the respondents are belong to Strongly agree about Price Fluctuation, 44.2% of the respondents are belong to strongly agree about Labour shortage, 40.8% of the respondents are belong to Agree about Forced sales, 37.5% of the respondents are belong to Agree about Malpractices in weighing and remaining 36.7% of the respondents are belong to Agree about Lack of regulated market.

Majority 50.0% of the respondents are belonged to strongly agree about Price Fluctuation for the problem of marketing the potatoes.

CHI-SQUARE

NULL HYPOTHESIS

HO: There is no significance between Experience and Market your potato

ALTERNATIVE HYPOTHESIS

H1: There is significance between the between Experience and Market your potato

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Experience* Market your potato	120	100.0%	0	.0%	120	100.0%

Experience * Market your potato Cross tabulation							
Count		Market your potato					Total
		Through village traders	Through commission agents	Directly to the consumers/ Local shop	Potato Mandi	Any other	
Experience	1-5 years	23	0	0	0	0	23



	6 - 10 years	10	34	9	0	0	53
	11 – 15 years	0	0	20	8	0	28
	16- 20 years	0	0	0	4	5	9
	Above 20 years	0	0	0	0	7	7
Total		33	34	29	12	12	120

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.513E2 ^a	16	.000
Likelihood Ratio	222.532	16	.000
Linear-by-Linear Association	100.754	1	.000
N of Valid Cases	120		

a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .70.

Symmetric Measures					
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal	Gamma	1.000	.000	23.149	.000
Measure of Agreement	Kappa	.646	.052	13.119	.000
N of Valid Cases		120			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

INTERPRETATION

Since the calculated value is less than 0.05. So, we accept the alternative hypothesis. There is a relationship between the Experience and Market your potato.

CORRELATION

Correlations			
		Source of income.	Cultivated crops
Source of income.	Pearson Correlation	1	.887**
	Sig. (2-tailed)		.000
	N	120	120
Cultivated crops	Pearson Correlation	.887**	1
	Sig. (2-tailed)	.000	
	N	120	120

* Correlation is significant at the 0.01 level (2-tailed).



NONPARAMETRIC CORRELATIONS

Correlations				
			Source of income.	Cultivated crops
Kendall's tau_b	Source of income.	Correlation Coefficient	1.000	.877**
		Sig. (2-tailed)	.	.000
		N	120	120
	Cultivated crops	Correlation Coefficient	.877**	1.000
		Sig. (2-tailed)	.000	.
		N	120	120
Spearman's rho	Source of income.	Correlation Coefficient	1.000	.921**
		Sig. (2-tailed)	.	.000
		N	120	120
	Cultivated crops	Correlation Coefficient	.921**	1.000
		Sig. (2-tailed)	.000	.
		N	120	120

*Correlation is significant at the 0.01 level (2-tailed).

INTERPRETATION

This is a positive correlation 0.01 level. There are relationships between Source of income and Cultivated crops.

ANOVA

NULL HYPOTHESIS

Ho: There is no significant relationship between No of years in working service and source of finance.

ALTERNATIVE HYPOTHESIS

H1: There is a significant relationship between No of years in working service and source of finance.

Descriptives									
Experience	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
					Lower Bound	Upper Bound			
Co-operative banks	34	1.32	.475	.081	1.16	1.49	1	2	
Intermediaries	33	2.00	.000	.000	2.00	2.00	2	2	
Commercial banks	15	2.40	.507	.131	2.12	2.68	2	3	
Own savings	22	3.00	.000	.000	3.00	3.00	3	3	
Friends / Relatives	16	4.44	.512	.128	4.16	4.71	4	5	
Total	120	2.37	1.061	.097	2.17	2.56	1	5	
Model	Fixed Effects		.361	.033	2.30	2.43			
	Random Effects			.533	.89	3.85			1.269

Test of Homogeneity of Variances			
Experience			
Levene Statistic	df1	df2	Sig.
161.655	4	115	.000



ANOVA							
Experience		Sum of Squares	Df	Mean Square	F	Sig.	
Between Groups	(Combined)	118.888	4	29.722	228.193	.000	
	Linear Term	Unweighted	117.823	1	117.823	904.593	.000
		Weighted	112.621	1	112.621	864.655	.000
		Deviation	6.267	3	2.089	16.039	.000
Within Groups		14.979	115	.130			
Total		133.867	119				

HOMOGENEOUS

Experience							
Source of finance		N	Subset for alpha = 0.05				
			1	2	3	4	5
Student-Newman-Keuls ^a	Co-operative banks	34	1.32				
	Intermediaries	33		2.00			
	Commercial banks	15			2.40		
	Own savings	22				3.00	
	Friends / Relatives	16					4.44
	Sig.			1.000	1.000	1.000	1.000
Tukey B ^a	Co-operative banks	34	1.32				
	Intermediaries	33		2.00			
	Commercial banks	15			2.40		
	Own savings	22				3.00	
	Friends / Relatives	16					4.44

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 21.337

INTERPRETATION

From the above analysis, we find that calculated value of the F-value is a positive 228.193 value, so H1 accept. Since the P value 0.000 is less than < 0.05 regarding there is a significant relationship between experiences of the respondents and source of finance.

VII. SUGGESTIONS

- Production constraints include factors that have impeded the production of potato in the fields. Almost all sample respondents found that the main problem was the non - availability of water for irrigation in the study area. Thus, sample farmers need technical guidance on techniques of water harvesting and farmers can use water efficiency only by providing lifesaving irrigation. Owing to the prolonged dry spell of the last two years, the delay in the onset of the monsoon.
- High wage rates labour was one of the fundamental factors without which it was

impossible to produce at all. Agriculture labours, small and marginal farmers migrating to nearby cities to meet their basic requirements for other works such as carpentry and factory, trained youth have a negative attitude towards agriculture creating scarcity of labour in agriculture and increasing wage rates.

- Non-availability of labour as the farmers faced the issue of labour scarcity. The majority of farmers also faced a high incidence of pests and diseases due to the lack of quality setts and safety chemicals in time. In order to ensure better potato recovery and at the same time to minimize losses to



farmers, harvested potato should be transported to mandi on time. Various marketing problems encountered by the growers were identified and presented.

- One of the major constraints faced by farmers in the study area was low prices in the local market. The main reason for this low price in the local market may be the regulations imposed on farmers that do not allow them to sell their product in any other market.

VIII. CONCLUSION

The prices of agricultural commodities, agricultural crops inclusive, have increased sharply. More farmers have entered into the “contract grower” system of the food industry due to better prices of potatoes. Increased number of contract growers of agricultural has greatly contributed to the observed increase in production of processed agricultural crops.

Despite the observed increase in potato production, the commodity will remain out of reach of the majority of the population with very low income, particularly the rural farmers. It is recommended that the price of ex-factory potato price be reviewed by an authorized body to reduce consumer prices where possible until such a time that increased supply would favourably regulate the price of the commodity.

Indeed, sustainable potato production in the country will depend on improved production technology, marketing and storage infrastructures at factories and regional centres. The current marketing infrastructure is laden with exorbitant storage overheads which have to be paid by the end-consumers. Similarly, there is a need to strengthen research in the food industry to ensure availability of high-yielding, disease-and-pest resistant clones which are adapted to the red loam soil and climate condition

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