IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Socio-Economic Impact Of Vegetable Based Soil For Progressive Farmer.

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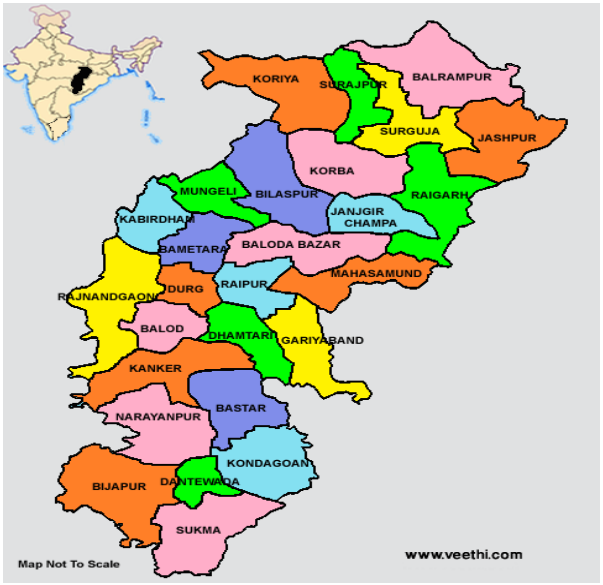
Abstract- The present paper attempts to examine the socio-economic impact of progressive farmers. The study was conducted in 10 villages located in Bilaspur, Mungeli, and Janjgir- Champa districts. Data for the study was collected from a sample of 220 vegetable farmers. The socio-economic approach is mainly concerned with the social, economic, and political aspects of individuals or social groups in society. The socio-economic approach focused on identifying their internal characteristics such as, education, gender, wealth, health status, access to credit, access to information and technology, formal and informal (social) capital, political power, and so on. Variations of these factors are responsible for the variations in socioeconomic characteristics of farmers. This study reveals that majority of the respondents were middle-aged farmer, were having Upper primary level of education with nuclear family, mixed housing pattern, and following agriculture as the main occupation. The socioeconomic characteristics of farmers are important for better policy options. On the basis of the finding it is suggested that socio-economic status of the farmers can be improved by imparting technical knowledge/ training to vegetable farmers, increasing their education level and increasing their social participation.

Keyword- Education, income, media utilization, socioeconomic, vegetable farmer.

Introduction- All the vegetables crops are grown in the Chhattisgarh state. The total area of vegetable crop in Chhattisgarh state is 4,89,271 Ha. Vegetables are grown in all the 33 District of Chhattisgarh. Cauliflower, cabbage, ladyfinger, brinjal, cabbage, tomatoes, potatoes, green peas, munga, torai, parwal, kochai, etc. are grown in Chhattisgarh state. Cabbage is grown on soils ranging from loam to clay. Soil pH requirement from 5.5 to 6.5 for higher production of cabbage. The brinjal plants grown in soil varying from light sandy to heavy clay and well-drained soil. Soil pH for brinjal plant is 6.5-7.5. Mineral soils are requirement for cultivation of tomato. The upper layer of soil should be porous with little sand and good clay in the subsoil. Soil pH 5.5-6.8 is required. The ideal soil pH for Okra should be 6.0- 6.5. Ideal soil for okra cultivation is sandy loam to clay loam with rich organic matter and better drainage. Okra is not Cultivated in alkaline, saline soils also in poor drainage capacity soils. Soils required for the growth of bottle gourd is sandy loam soils and soil pH should be from 6.5- 7.5. Rich organic matter in the soil is required for beans farming. Sandy loam soil with good organic matter is required for pumpkin farming. Soil with the pH range 6-7 and good drainage is ideal for pumpkin cultivation. . Sandy loam soil is basic requirement of Karela crop, but it is also grown in poorer soils. Loam and sandy soil is basis requirement of Beetroot cultivation. Soil pH range between 6.3-7.5 is most appropriate for cultivation of beetroot Cowpeas grows in warm season. Sandy and sandy loam soils are basic requirement for the cultivation of cowpeas.

Map of Chhattisgarh



Methodology- The study was conducted in Bilaspur, Mungeli, and Janjgir-Champa districts of Chhattisgarh state of India. A sample of 220 vegetable farmers were selected randomly form 11 villages from the selected blocks. The pre-tested interview schedule was used for collection of data and the data was analysed by using appropriate statistical methods such as percentage (%), mean and standard deviation.

Result and Discussion- Socioeconomic status (SES) is a combined measurement of a person's or group's economic and social position in society. It plays a significant role in determining one's access to common resources, livelihood pattern, household food & nutritional security, and so on. (Roy et al., 2013; Behera et al. 2020) [11,3]. In this present study, the various variables representing socio- economic profile of the vegetable Growers of Bilaspur, Mungeli, and Janjgir-Champa districts. The data pertaining to age of respondents has been analysed and categorized into three categories (Table 1). Table 1 clearly indicated that the majority of the respondents of the Bilaspur (65.45%), Mungeli (55.45%) and Janjgir- Champa (64.54%) fit into middle-aged category. As a result, it could be stated that decisions regarding farming practises in the study area were expected to be heavily influenced by middle and elderly farmers.

Table:1 Distribution of respondents according to their age (n=220).

Age	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir- Champa (n=220) Frequency/ Percentages	
Young (≤ 30)years	34	15.45%	32	14.54%	40	18.18%
Middle aged (30 to 50) years	144	65.45%	122	55.45%	142	64.54%
Old aged (≥50) years	42	19.09%	66	30%	38	17.27%
	Mean-	73.33	Mean-	73.33	Mean-	73.33
	SD-	61.3297	SD-	45.445	SD-	59.475

Education- Table 2 clearly indicated that majority of the respondents (40.4%) of the respondents Bilaspur, district were having Upper primary school education and majority of the respondents (44.5%) in Mungeli district, and (38.6%) in Janjgir-Champa district were having high school education.

Table 2: Distribution of respondents according to their education.

Study area	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Illiterate (no schooling)	04	1.8%	08	3.6%	02	0.9%
Lower primary (up to 4th)	08	3.6%	12	5.4%	13	5.9%
Upper primary (5th to 7th)	89	40.4%	65	29.5%	74	33.6%
High school (8th to 10th)	82	37.2%	98	44.5%	85	38.6%
Higher education (10th to 12th)	24	10.9%	22	10%	26	11.8%
Graduate	13	5.9%	15	6.8%	20	9%
	Mean= 36.66	SD=38.47	Mean= 36.66	SD=36.54	Mean= 36.66	SD=34.30

Housing Pattern- The data presented in table3 presented housing pattern of respondents. It indicated that majority of the respondents (65.45 %) of Bilaspur district were having Mixed type of Housing pattern, followed by Pucca type (23.6 %), and Kutchha type (10.9 %). Similarly, majority of the respondents (63.33 %) of Mungeli district having mixed type of housing pattern followed by the respondents (32.72 %), Pucca type housing pattern and Kutcha type (3%). Majority of the respondents (48.18%) of Janjgir-Champa district having mixed type of housing pattern followed by the respondents (41.81 %), Pucca type housing pattern and Kutcha type (10%). **Table 3: Distribution of respondents according to their housing pattern. (n=220)**

Housing pattern	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Kutcha house	24	10.9%	8	3%	22	10%
Pucca House	52	23.6%	72	32.72%	92	41.81%
Mixed house	144	65.45%	140	63.63%	106	48.18%
	Mean=73.3	SD=62.7	Mean=73.33	SD=66.01	Mean=73.33	SD=45.003

Family Type- As depicted in table 4, majority of the respondents of Bilaspur (63.63 %) having joint family, Mungeli (52.72%) having nuclear family, and in Janjgir- Champa (54.54 %) were having nuclear family residing in the village. The main reason respondents have nuclear families is likely due to their ability to make independent decisions and a smaller number of family members interfering in vegetable farming decision making, and the concept of joint family approach is slowly eroding in villages.

Table 4- Distribution of respondents according to their Family Type (n=220)

Category	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Joint Family	80	36.36%	104	47.27%	100	45.45%
Nuclear family	140	63.63%	116	52.72%	120	54.54%
	Mean=110	SD=30	Mean=110	SD=6	Mean=110	SD=10

Operational land holding- The respondents were classified into three Categories (Small, Medium, Large) according to their operational holdings as shown in table 5. Data clearly indicated that Majority of the respondents of Bilaspur (63.6%), Mungeli (76.3%), and in Janjgir- Champa (78.1%) had small land holding. In Bilaspur around 35.45% of respondents were in medium land holding category followed by 0.9% of respondents who were having large land holding. Likewise, In Mungeli district, around (22.7%) of respondents were in medium land holding category followed by 0.9% of respondents who were having large land holding. In Janjgir- Champa District, around 19.0% of respondents were in medium land holding category followed by 2.7% of respondents who were having large land holding. This landholding distribution corresponds to the general trends in the state and possible region.

Table 5: Distribution of respondents according to their Operational land holding. (n=220)

Land Holding	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Small (up to 2.5 acre)	140	63.6%	168	76.3%	172	78.1%
Middle (2.5- 5.0 acre)	78	35.45%	50	22.7%	42	19.0%
Large (5.0 acre and above)	2	0.9%	2	0.9%	6	2.7%
	Mean=73.33	SD=69.11	Mean=73.33	SD=85.42	Mean=73.33	SD=87.32

Occupation- An outlook from the table 6 inferred that, around half of the respondents (46.36%) from Bilaspur district were following agriculture as main Occupation followed by (21.8%) respondents who follows agriculture along with labour, 20% respondent who have Agriculture and Animal Husbandry as main occupation. Similarly, In Mungeli District, majority of the respondents (52.27%) have Agriculture as main occupation; followed by (23.6%) and (14.5%) respondents, who have main occupation agriculture with labour, and Agriculture with Animal Husbandry, respectively. In Janjgir-Champa district of Chhattisgarh, majority of the respondents (48.18%) have agriculture as the main occupation, followed by (26.36%) and (19.09%) respondents, who have main occupation agriculture with labour, and Agriculture with Animal Husbandry, respectively.

Table-6 Distribution of respondents according to their Occupation

Category	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Agriculture	102	46.36%	115	52.27%	106	48.18%
Agriculture + Labour	48	21.8%	52	23.6%	58	26.36%
Agriculture + Annual husbandry	44	20%	32	14.5%	42	19.09%
Agriculture +cast-based occupation	20	9%	12	5.4%	6	2.7%
Agriculture +Business	6	2.72%	9	4%	8	3.6%
	Mean=44	SD=36.74	Mean= 44	SD=43.29	Mean=44	SD=41.18

Sources of irrigation- Different sources of Irrigation for respondents in their vicinity for vegetable are being shown in result in table 7. The result shown in table 7 states that Majority of the respondents (83.6%) from Bilaspur district were having one source of Irrigation followed by two source of Irrigation (16.36%). Whereas, In Mungeli district majority of the respondents (87.2%) had one source of irrigation followed by two source (12.7%). In Janjgir-Champa, district, majority of the respondents (95.4%) had one source for irrigation for their vegetable followed by two source (4.5%).

Table 7: Distribution of respondents according to their sources of irrigation. (n=220).

Irrigation sources	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
One source	184	83.6%	192	87.2%	210	95.4%
Two source	36	16.36%	28	12.7%	10	4.5%
	Mean=110	SD=104.6	Mean=110	SD=115.9	Mean=110	SD=141.4

Vegetable Farming Experience- The data in table 8 revealed that majority (47.72 %) of the respondents of Bilaspur, district had medium level of vegetable farming experience followed by (33.18%) and (19.09%), who had lower and higher level of farming experience, respectively. Whereas majority (54.54%) of the vegetable growers of Mungeli, district had medium level of Vegetable farming experience followed by (30.90%) and (14.54%) of them had lower and higher level of farming experience, respectively. Majority (56.36 %) of the vegetable growers of Janjgir-Champa, district had medium level of Vegetable farming experience followed by (28.18%) and (15.45%) of them had lower and higher level of farming experience, respectively.

Table 8: Distribution of respondents according to the Vegetable farming experience.

Category	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Low (≤ 15)years	73	33.18%	68	30.90%	62	28.18%
Medium (15-25 years)	105	47.72%	120	54.54%	124	56.36%
High (25 and above)	42	19.09%	32	14.54%	34	15.45%
	Mean=73.33	SD=31.501	Mean=73.33	SD=44.24	Mean=73.33	SD=46.05

Exposure of Training- Table 9 shows respondent's exposure to training. Result shown in table 9 states that majority of respondents (95.4%), who were trained in Bilaspur district and (96%) respondents in Mungeli district and 98.1% of respondents in Janjgir- Champa district.

Table-9 Distribution of respondents according to their Exposure to training. (n=220)

Training duration	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Untrained	10	4.5%	8	3.6%	4	1.8%
trained	210	95.4%	212	96%	216	98.1%
	Mean=110	SD=141.4	Mean=110	SD=144.2	Mean=110	SD=149.9

Social Participation- Data portrayed in table-10 states that majority of the respondent (73.6%) from Bilaspur, (70.4%) from Mungeli district and (74.54 %) from Janjgir- Champa district had two organisation participation in different social institutions like SHGs, FPOs, Cooperative, Farmers Club.

Table-10 Distribution of respondents according to their Social Participation (n=220)

Organisations	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
One organisation	42	19.09%	38	17.27%	41	18.6%
Two organisations	162	73.6%	155	70.4%	164	74.54%
Two and more organisations	16	7.2%	27	12.2%	15	6.8%
	Mean=73.33	SD=77.8	Mean=73.33	SD=70.93	Mean=73.33	SD=79.5

Annual income- Data presented in Table 11 states that In Bilaspur, Mungeli, and Janjgir-Champa districts, majority of the respondents (73.6%, 81.8%, and 87.2%, respectively) had medium level of Annual Income.

Table-11 Distribution of respondents according to their Annual income (In rupees). (n=220).

category	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
Low (50,000 per year)	40	18.1%	28	12.72%	18	8.1%
Middle (50,000-1,50,000 per year)	162	73.6%	180	81.8%	192	87.2%
High (1,50,000-5,00000 per year)	18	8.1%	12	5.4%	10	4.5%
	Mean=73.33	SD=77.57	Mean=73.33	SD=92.72	Mean=73.33	SD=102.84

Cast- It was found that (73.6%) of vegetable farmers belonged to OBC caste category followed by SC (18.1%) and General (7.2%) and only (0.9%) respondent was found from ST category in Bilaspur district. In Mungeli district (69%) of vegetable farmers belong to OBC category Followed by SC (20.9%) and General (8%) and only (1.8%) respondent was found from ST category. In Janjgir-Champa district (68.1%) of vegetable farmers belong to OBC category Followed by SC (19%) and General (9%) and only (3.6%) respondent was found from ST category.

Table-12 Distribution of respondents according to their cast. (n=220)

Cast	Bilaspur (n=220) Frequency/Percentages		Mungeli (n=220) Frequency/Percentages		Janjgir-Champa (n=220) Frequency/Percentages	
ST	02	0.9%	04	1.8%	08	3.6%
SC	40	18.1%	46	20.9%	42	19%
OBC	162	73.6%	152	69%	150	68.1%
GENERAL	16	7.2%	18	8.1%	20	9%
	Mean-55	SD=73.03	Mean=55	SD=66.98	Mean=55	SD=64.87

Conclusion- This study reveals that majority of the respondents were middle-aged farmer, were having Upper primary level of education with nuclear family, mixed housing pattern, and following agriculture as the main occupation. It was found that most of the respondents were small Farmer. It was found that majority of the respondents were having medium level of annual income, Vegetable Farming Experience, Social Participation, Information seeking Behaviour, Farm Decision Making, Innovativeness, Risk orientation, etc. The policymakers should keep this socioeconomic status in mind while formulating any strategies to improve the socioeconomic condition of the vegetable growers of Chhattisgarh.

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