Original Research Article

~~**Scientific study on the farming practicesin ganjam district to comprehend the effects of the COVID-19 pandemic and to develop strategies for resistance.**~~

Effects of the COVID-19 pandemic and to develop strategies for resistance on the farming practicesinganjam district-An Analysis

Abstract

Aims: The present study entitled "Scientific study on the farming practices in ganjam district to comprehend the effects of the COVID-19 pandemic and to develop strategies for resistance" was undertaken with a view to evaluate COVID-19's effects on farmers of Ganjam District of Odisha and to suggest them how to overcome such pandemic situation.

Study design: The purposive and random sampling techniques were taken.

Place and Duration of Study: Department of Agricultural Extension and Communication, Institute of Agricultural Sciences (IAS), Siksha 'O' Anusandhan University Bhubaneswar, between December 2020 and August 2022.

Research Methodology: For selection of District, Blocks and Villages covering 120 respondents, information was collected through structured interview schedule and focus group discussion. Suitable tools and techniques ~~that is~~frequency, percentage, mean score, standard deviation, Person's coefficient Correlation, T- test, multiple regression was employed for analyzing collected data.

Results and Discussion: The study revealed that majority of the respondents (85%) belong to middle and older group, having the sex ratio of 3:2 male and female. The study revealed that the education of children adversely affected with mean score of 2.625, further it has been observed that the farmers couldn't ensure expenses on purchase of household materials. The study depicted that quality food consumption, expenditure habit and farming in general have been adversely affected. The banking activities as regard to getting loan, taking banking transactions have also been adversely affected. Farmers have faced physical, socio-economic, technological and production constraints. Particularly problem in sound sleep, depression, feeling of insecurity, slowdown of supply chain and non-availability of quality inputs for cultivation are the main focus constraints encountered by agriculture.

Conclusion: To mitigate such situation farmers had opined that the vaccine should be taken regularly and farmer should develop the saving habit for future use.

Keywords: *Covid, Pandemic, Socio-economic, technology, Vaccine, Suggestion, Cultivation.*

Introduction

The most ancient occupation in the history of mankind, cultivation serves as the primary source of life nourishment for theamount of humanity.TheagriculturalManufacturing remains the foundation of modern civilization's means of existence. In Odisha, the agriculture sector is the primary generator of the nation's economic growth. About 76% of the state's adult workforce is employed in the agricultural industry (Ali, N., & Islam, F. 2020). Development in agriculture is vital for many reasons than just supplying food& nutritional security but also for decrease of rural poverty.The entire globe is currently facing the biggest humanitarian crisis since the end of World War II: the COVID-19 pandemic. Due to the virus's widespread dissemination, the number of infections continued. India responded quickly to smooth the curve and use the opportunity to properly prepare and finance solutions by enacting an aggressive 21-day lockdown across the country (Beckman & Countryman2021). Around the world, India's efforts to combat the COVID-19 virus have been praised. But the lockdown had a financial penalty stress affecting all the sectors of the society including agriculture. The nation's lockdown caused by COVID-19 was a major financial blow. On March 24, 2020, it began nationwide and is still in effect today, albeit with some restrictions. The economy came to a standstill as businesses in every industry were forced to shut down. The agriculture value chain saw significant difficulties during the early stages of the lockdown, despite the exemption of specific operations (Cevher*et.al*2021). The Indian agricultural sector suffered greatly as a result of this. In many regions of the nation, the corona virus epidemic has also precipitated a significant reverse migration from urbanization to countryside.Impact of COVID-19 on agriculture is complex and laid down involves a number of obstacles. Without hesitation, the terrible effects of the statewide lockdown due to COVID-19 ingrained the economic system. Its waves have not spared any industry. Even among the different segments, its impact varies widely on different aspects such as Livelihood, Food security and Livestock (Fiorillo&Gorwood2020). The global epidemic COVID-19 not only does it negatively affect traditional living, but it also has a complex and wide-ranging effect on the various parts that make up the agricultural value chain. There are numerous issues facing the agriculture industrywhichincludesnon-availability of migrant laborers, adverse effect on socio-economic and psychological aspects of farming community. It also drastically affected the transport of harvested agricultural produce.Being a predominantly agricultural state, approximately 73% of Odisha's workforce is employed in farming, which accounts for 30% of the state's total GDP (Gopal&Malliasamy2022). Approximately 40% of the land area, or 87.46 lakh acres of land, is allocated to cultivation annually, with 18.79 lakh hectares of that cropped area being irrigated. As a result, rain is the primary source of water for a large area of farmland that supports crops. Additionally, the coastal districts of Odisha have a relatively higher area under cultivation i.e. Balasore, Bhadrak, Cuttack, Ganjam, Jajpur, Jagatasinghpur, Kendrapara, Khurda, Nayagarh, Puri etc.Adverse effect of COVID-19 affects agriculture of Odisha very badly. Presently, the unexpected corona virus outbreak not only makes farmers anxious, but because of the lockdown for an unknown amount of time, agricultural workers were stuck with their harvest. Ganjam is an agriculture-based district

(Khadka *et. al* 2021). More than 80% people depend on agriculture. Ganjam District's economy is bolstered by both industry and agriculture. This region is renowned for producing and exporting food grains. Roughly three-quarters of the Ganjam District's population is employed in agriculture.InOdishaCOVID-19affectedall30 districtsbutduetotheinfluxofmigrant'sworkersfromotherpartsofIndiato Ganjam district. It has become a hotspot with the highest no of cases within Odisha,virusnolongerlimitedtomigrantworkers (Liu *et. al* 2021).Itaffectedtheday-to-day living of farmers. To know how the COVID-19 pandemic had impacted farmers daily life, social interactions etc. The study on "A scientific research on ganjam district farmers' to understand the impact of COVID-19 pandemic and an investigation to suggest how to withstand such pandemic" has been conceptualized.

Material & Methods

About 80% of the population in the region of Ganjam depend on agriculture and related operations, which is the foundation of the local financial system. The district is well known for its fertile soil and agricultural productivity. Ganjam's gross cultivated area is expected to be 6.4 lakh hectares. For the Kharif and Rabi crops, the entire surface with irrigation measured to date is 293192 ha and 58730 ha, respectively. A The county has a wide range of crops, including horse gram, green gram, black gram, sugarcane, maize, oil seeds, and millets. Because of the Argo-climatic condition Ganjam is included as the agricultural District.The research problem, " Scientific research on livelihood of ganjam district farmers to understand the impact of COVID-19 pandemic and an investigation to suggest how to withstand such pandemic. " Was chosen with careful consideration of a number of factors that the impact on farmers' daily lives, and recommendations for solutions.The study was intended to be focused on farmers in order to obtain their experiences, challenges, suggestions, etc. to make the study more pragmatist and practical. The current study is a quasi-experimental examination of the effects of an independent variable that was present in the participants before to the investigationonadependentvariableandfallsundertheex-postfactodesign preview category. Within the parameters of the chosen outlines, this design was thought to be the best suitable for data collection. There are 23 community development blocks in the Ganjam District. Four of these blocks, Sheragada, Dharakot, Kabisuryanagar, and Sanakhemundi, were chosen because COVID-19 had a significant impact on them. Respondents were selected from the farming community. As much as 120 respondents were selected for the study villages and respondents were selected basing on the random sampling method. To make the finding consequential collected data were classified, tabulated andanalyzedon the foundation of the goals. Statistical approaches such as proportion, frequency, standard deviation, mean, as well as relationship matrix were used to evaluate the results and draw logical inferences. The goal of the current study is evidently to ascertain the impact of COVID-19 along with suggestive measures upon the farmers that are associated with it.

Sl. no	Effect	Strongly Agree (f)		Agree (f)		Disagree (f)		Mean	Rank
1	Affectsnormaldailylife	70	58.33%	33	27.50%	17	14.17%	2.442	VI
2	Changeinfoodhabit	75	62.50%	38	31.67%	7	5.83%	2.567	IV
3	Reductioninintakeofquality food	85	70.83%	20	16.67%	15	12.50%	2.583	III
4	Deterioratseducationof children	85	70.83%	25	20.83%	10	8.33%	2.625	I
5	Reductioninexpenditureon clothing's	60	50.00%	30	25.00%	30	25.00%	2.250	VIII
6	Reductionofexpenditurefor otheroccasions	80	66.67%	21	17.50%	19	15.83%	2.508	V
7	Affectnewconstructionof house	64	53.33%	32	26.67%	24	20.00%	2.333	VII
8	Reduction in household expenses	82	68.33%	28	23.33%	10	8.33%	2.600	II

Result and Discussion

Table no – 1: Impact of COVID-19 on Day – to – Day Life

Table 1. of the presentation illustrated that how the COVID-19 has affected farmers' daily living habit. Out of these identified effect of COVID-19 impacts, deterioration of children's education to be having mean score of (2.625) ranked 1st, followed by a decrease in household expenses with a mean score of (2.600) ranked 2nd, adecrease in the amountof quality food consumed (2.583) ranked 3rd, a change in eating behavior (2.567) ranked 4th, a decrease in spending on other occasions (2.508) had 5th position, and the influence on everyday life (2.442) ranked 6th. However, new home development was negatively placed 7th with a mean score of 2.333, and the covid-19 had less of an impact on the decline in clothes spending with a mean score of (2.250).

Table no – 2: Impact of COVID-19 on Agricultural Sector

Sl. no	Affected Area	Strongly Agree (f)		Agree (f)		Disagree (f)		Mean	Rank
1	Farmingin general	83	69.17%	21	17.50%	16	13.33%	2.558	I
2	Croppingpattern	62	51.67%	33	27.50%	25	20.83%	2.308	XI
3	Selection & use of quality seeds &varieties	68	56.67%	36	30.00%	16	13.33%	2.417	VII
4	Cultural operations	77	64.17%	31	25.83%	12	10.00%	2.542	II
5	Irrigation management	70	58.33%	33	27.50%	17	14.17%	2.442	V
6	No.of Availabilityof Laborer	60	50.00%	41	34.17%	19	15.83%	2.342	X

7	Availability of agrochemicals &fertilizer	73	60.83%	31	25.83%	16	13.33%	2.475	IV
8	Use &maintenance of farmmachinery	75	62.50%	32	26.67%	13	10.83%	2.517	III
9	Post-harvest care of farm produce	66	55.00%	33	27.50%	21	17.50%	2.375	IX
10	Impactonyield/ Unit area	70	58.33%	31	25.83%	19	15.83%	2.425	VI
11	Wastage of Produce	68	56.67%	31	25.83%	21	17.50%	2.392	VIII

Table 2. of the presentation illustrated that how the impact of COVID-19 on agriculture is complicated and characterized by a number of obstacles. The effect of COVID-19 on the agricultural sector is shown in table 2. The data showed that farming operations in general were most significantly affected, with a mean score of 2.558, followed by cultural operations (2.524) ranked 2nd, use & maintenance of farm machinery (2.517) ranked 3rd, availability of agrochemicals & fertilizers (2.475) ranked 4th, irrigation management (2.442) ranked 5th, impact on yield per unit area ranked 6th, selectionanduseofqualityseedsandvarieties (2.417)ranked7th,wastageof produce (2.392)ranked8th,post-harvestcareoffarm (2.375)ranked9th,no.of availabilityoflaborer (2.342)ranked10thwhilecroppingpatternwasleast affected by the COVID-19, with a mean score of 2.308.

Table no – 3: COVID-19's effects on agricultural advertising sector

Marketing of agricultural produce is crucial to the countryside population's ability to support itself because it provides availability of money for requirement proper, effective & timely marketing of farm produce plays a vital role in growth and development of farmers. Thus, the poll made an effort to document the effects of COVID-19 and the subsequent shutdown on marketing of agricultural produce (Loomba*et. al* 2021).

Sl. no	Affected Area	Strongly Agree (f)		Agree (f)		Disagree (f)		Mean	Rank
1	Affected the procurement of foodgrainbygovt. agency	75	62.50%	35	29.17%	10	8.33%	2.542	II
2	Affected the transporting of harvestedproduce to marketing society/mandi	77	64.17%	31	25.83%	12	10.00%	2.542	II
3	Affected the collection ofharvest produce by private agency	70	58.33%	31	25.83%	19	15.83%	2.425	V
4	Affectedthe purchase of agriculturalproduce	75	62.50%	32	26.67%	13	10.83%	2.517	III
5	Affectedthefarmer getting the minimum support price for their produce	72	60.00%	31	25.83%	17	14.17%	2.458	IV
6	Affecting localmarkets/hats	79	65.83%	29	24.17%	12	10.00%	2.558	I

The table 3. shows how COVID-19 affected the marketing of agricultural produce. On a national level, it was noted that the organization of local rural weekly markets and hats had suffered. Affecting of local markets/hats were rank first with a mean score of 2.558 because a significant part of rural weekly markets was closed because of ban on the opening of rural hats by govt. agencies. (Meuwissen2021)The government had exempted transportation of necessities out of the lockdown's constraints, lessening the negative effects on farmers' capacity to transport their gathered products to Mandis via roadways so transporting of harvested produce to marketing society or mandi and the detrimental effect on purchasing of food grain by govt. agencies ranked 2nd, the purchase of agricultural produce ranked third with a mean score of 2.517.Since the authorities had made significant efforts to increase obtaining cereal grains the negative impact on the farmer receiving the MSP (Minimum Support Price) for their produce was relatively lower and ranked fourth with a mean score of 2.458. Although the movement of necessities was exempt from the limitations put in place throughout the lockdown that restricted professional couriers might have encountered obstacles when travelling from urban to rural areas, which would have had the least impact on the harvesting crops and having private organizations take it (2.425), which was ranked sixth.

Table no – 4: Impact of COVID-19 on Banking activities

Sl. no	Affected Area	Strongly Agree (f)		Agree (f)		Disagree (f)		Mean	Rank
1	Affected the farmer'saccess to credit	75	62.50%	32	26.67%	13	10.83%	2.517	I
2	Affectedthe access to banking services	70	58.33%	31	25.83%	19	15.83%	2.425	II
3	Affectedthe requirement of loan	68	56.67%	31	25.83%	21	17.50%	2.392	III
4	Affected Banks' Recovery	57	47.50%	46	38.33%	17	14.17%	2.350	IV

The survey's primary findings are covered in Table 4 in regard to several banking-related topics. The restriction on people's movement and the concern that they will contract the corona virus through human contact and gathering, despite the fact that the provision of banking services was exempted from the lockdown's restrictions, may have a negative impact on KCC disbursement, so the farmer's access to credit (2.517) ranked first. Basic banking services may have been negatively impacted by the demand for social distance and the restrictions placed on people's travel as a result of these circumstances. Access to banking services (2.425) suffered as a result and fell to second place (Middendorf 2021). With a mean score of 2.392, the impact on loan requirements came in third place, and the implementation of a shutdown and limitations on vehicle movement seriously hampered the method for setting prices for the agriculture industry as a whole and for allied sectors including dairy, horticulture, aquaculture, and poultry

in specifically. Consequently, the bank's recovery was ranked fourth with a mean score of 2.350.

Table no – 5 Impact of covid-19 on availability of Agri-inputs

Sl. No.	Affected Area	Strongly Agree (f)		Agree (f)		Disagree (f)		Mean	Rank
1	Affected the availabilityof seeds	65	54.17%	33	27.50%	22	18.33%	2.358	III
2	Affectedthe availability of fertilizers	67	55.83%	39	32.50%	14	11.67%	2.442	II
3	Affectedthe availabilityof pesticides	59	49.17%	40	33.33%	21	17.50%	2.317	IV
4	Affectedthe availability ofRental Agri- machinery	72	60.00%	31	25.83%	17	14.17%	2.458	I
5	Affected the availabilityof fodder/cattle feed	68	56.67%	37	30.83%	15	12.50%	2.442	II

The above table revealed that the steepest drop was with the accessibility of farm equipment on rent (2.458). Availability of fodder/cattle feed and availability of fertilizers both have raked (2.442) 2nd followed by availability of seeds (2.358) and availability of pesticides (2.317). The decrease in resource accessibility was caused by supply-chain disruptions from automobile circulation limitations, trade and store closures, and other factors.

Table no – 6 Impact of covid-19 on change of production on various agricultural fields

Sl. No	Affected area	Strongly agree (f)		Agree (f)		Disagree (f)		Mean	Rank
1	AffectedAgriculture	78	65.00%	31	25.83%	11	9.17%	2.558	I
2	Affected Horticulture	65	54.17%	35	29.17%	20	16.67%	2.375	V
3	AffectedPoultry	72	60.00%	34	28.33%	14	11.67%	2.483	II
4	AffectedDairy	68	56.67%	35	29.17%	17	14.17%	2.425	III
5	Affectedfisheries	67	55.83%	36	30.00%	17	14.17%	2.417	IV
6	Affected pig/sheep/goat	59	49.17%	39	32.50%	22	18.33%	2.308	VI

Table 6 revealed that agriculture and allied industries have been seriously damaged by the pandemic's outbreak. The data showed that agricultural production had drastically decreased and ranked 1st. Considering there is an overall apprehension about the COVID-19 infection might propagate through poultry birds, the lower demand for poultry products directly contributed to a decline in poultry production levels, which resulted in the poultry industry being ranked second (Moghadas*et. al* 2020). Dairy sector placed third due to the highest reduction, which was mostly caused by a decrease higher demand for dairy goods because the majority of eateries and confections shops stayed closed. The entire spectrum of operations necessary the movement of seafood and its derivatives from the site where they are

harvested to the end user may be impacted by the global epidemic's indirect effects because of changes in customer preferences, market accessibility, or practical challenges related to immigration laws and logistics. The fishery sector was placed fourth as a result of the significant disruptions this has caused in the fisheries supply chain. Even though there were no restrictions on the selling of fruits and vegetables in the market and only a ban on the operation of rural hats, horticulture was negatively impacted by the lockdown due to its perishable nature and was placed fifth (Principato*et. al* 2022). The epidemic has also negatively affected the pig, sheep, and goat industries, though to a far lesser degree. Pig, sheep, and goat eating has increased in some areas due to perceptions that they are safer than chicken, which is one of the reasons it rated sixth.

Table no – 7 Correlations of socioeconomic variables with impact of covid - 19

IndependentVariables	IMPACT
Age	.058
Gender	.081
Caste	-.143
Education	.096
Religion	.080
Familytype	-.015
Familysize	-.039
Maritalstatus	-.095
Habitation	-.095
SizeofOperationalholding	-.198*
Noofearningmembersoffamily	.186*
Dependentmembers	-.075
Familystatus	.040
socialparticipation	.309**
occupation	.323**
Outsidecontact	.372**
Annualfarmingincome	-.340**
Incomefromothersources	-.214*

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the0.05 level(2-tailed).The above table revealed that there was a greater association of COVID19 with the size of number of earning members, social participation, occupation, outside contact. The occurrence of pandemic was determined to have an impact on these activities. It was also found that there was a negative association ship among the socio-economic attributes like operational holding, annual farming income and income from other sources with COVID19 and it was not hampered due to the pandemic.

During COVID-19 it was found that many people lost their job, so the number of earning members was found to be affected due to pandemic. Similarly, social participation and outside contact was hampered,

as the people were afraid of being socialized(Suppawittaya *et. al* 2020).

Table no – 8 Multiple Linear Regression of socioeconomic variables with impact of covid-19

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	105.117	38.359		2.740	.007
	Age	5.262	3.586	.185	1.467	.145
	Gender	5.397	4.094	.136	1.318	.190
	Caste	-4.313	2.964	-.147	-1.455	.149
	Education	5.621	3.293	.186	1.707	.091
	Religion	7.735	20.792	.036	.372	.711
	Familytype	3.759	8.351	.095	.450	.654
	Family size	-1.215	6.521	-.043	-.186	.853
	Maritalstatus	-4.988	4.621	-.123	-1.080	.283
	Habitation	-5.055	21.003	-.024	-.241	.810
	SizeofOperationalholding	3.168	1.003	0.024	5.154	.003**
	Noofearningmembers of family	-7.120	5.112	-.176	-1.393	.167
	Dependentmembers	-2.423	3.636	-.074	-.666	.507
	Familystatus	1.325	2.156	0.054	-6.025	0.004**
	social participation	-.129	2.565	-.005	-.050	.960
	occupation	-.592	2.488	-.024	-6.238	.008**
	Outsidecontact	-4.143	2.851	-.145	-5.453	.049*
	Annualfarmingincome	1.625	3.093	.052	3.525	.003**
	Incomefromother sources	-1.427	3.663	-.049	-4.389	.023*
a.DependentVariable: IMPACT						
R=.769[a] RSquare=.591 AdjustedRSquare=.012						

The best fitted regression equation could explain 59% of the total variance influencing the impact of COVID-19. Among 18 attributes size of operational holding, family status, occupation, outside contact, annual farming income and income from other sources could show significant influence on cause of COVID-19.

Table no 9 – Suggestions of farmers to overcome the situation

Sl. No	Suggestion	Strongly agree (f)	Agree (f)	Disagree (f)	Mean	Rank

1	Don'twastefood	71	59.17%	34	28.33%	15	12.50%	2.42	VI
2	Restriction on exploitation of natural Resources	66	55.00%	36	30.00%	18	15.00%	2.4	VIII
3	provision of afforestation in village	55	45.83%	36	30.00%	29	24.17%	2.21	XII
4	useorganic products for farming	69	57.50%	40	33.33%	11	9.17%	2.48	II
5	Storage of inputs for agricultural practices	67	55.83%	35	29.17%	18	15.00%	2.41	VII
6	Change in family practice (on sustainable mode)	72	60.00%	31	25.83%	17	14.17%	2.46	IV
7	Creation of awareness programon cleanliness &sanitation	64	53.33%	45	37.50%	11	9.17%	2.44	V
8	Improvement of immunityby consuming natural available foodmaterials	59	49.17%	40	33.33%	21	17.50%	2.41	VII
9	Development of savingshabit	74	61.67%	30	25.00%	16	13.33%	2.48	II
10	Regularfood habit	70	58.33%	36	30.00%	14	11.67%	2.47	III
11	growingof medicinalplants	66	55.00%	31	25.83%	23	19.17%	2.36	IX
12	supportlocal farmers &farm initiatives	67	55.83%	35	29.17%	18	15.00%	2.41	VII
13	creating faith in God/religion	56	46.67%	39	32.50%	25	20.83%	2.26	XI
14	Wearing facemask when meeting other People	69	57.50%	33	27.50%	18	15.00%	2.42	VI
15	Wearingmask while living with family members	67	55.83%	29	24.17%	24	20.00%	2.3	X
16	Keeping socially distancefrom others	72	60.00%	31	25.83%	17	14.17%	2.46	IV
17	Frequencyof cleaning hands with alcohol	69	57.50%	31	25.83%	20	16.67%	2.41	VII
18	Frequencyof taking vaccine	82	68.33%	20	16.67%	18	15.00%	2.53	I

According to the table 9, for overcoming the adverse effect of COVID-19 as much as 18 suggestions were identified for the study. The respondents expressed their view which showed very interesting information for overcoming such situation. Among different views following vaccination schedule ranked 1st with mean score 2.53. the 2nd response was development of saving habit for use in stress situations with mean score of 2.48. the respondent expressed that the regular food habit should be followed with 3rd rank (2.47). the respondent prefers the suggestion of provision of afforestation in village that ranked last with mean score of 2.21.

Conclusion

The study on the aspect that affect the day-to-day living revealed that there has been drastic adverse effect on the educational aspect of children. Expenditure for the purchase of household expenses drastically reduced because of lockdown and complete shutdown during acute infestation period. It has also revealed that there has been decreased in consumption of quality food by the households. There has been drastic change in spending habit during different occasions and affecting normal daily life. ThepeoplefeltthatbesidestheimpactofCOVID-19inday-to-dayliving, it instigated some specialpathogens like mental disturbances, theft, groupism etc. As regard to impact of COVID-19 on agricultural sector; farming in general had been adversely affected. It has also been expressed that affecting the cultural operations, non- use and maintenance of farm machinery, non-availability of agro- chemicals &fertilizers were experienced during the COVID-19 which adversely affected the agricultural sector in the district. It has also been opined by the respondents that the yield of different crop has been affected. AsregardtotheresponsetothefarmersonimpactofCOVID-19onthe marketing of agricultural produce. It has been drastically affected the local markets/hats. Further it has been opined by the respondents that Government agencies couldn't procure the food grains for which the farmers had to sustain the great loss. The transportation of farm produce has also been affected because of COVID- 19. The banking activities has also been affected as regards to access of the farmers to credit, availing the loan and also bank recovery. As regards to availability of inputs used by the farmers there was drastically non-availability of rental agricultural machinery for agricultural use. The seeds, fertilizer and cattle feeds were the major areas that has been affected because of COVID-19. FromthecorrelationstudyitwasobservedthatduringCOVID-19many peoplelosttheirjob,sothenumberofearningmemberswas found to be affected due to pandemic. Similarly, social participation and outside contact was hampered, as the people were afraid of being socialized. From the Multiple Linear Regression, it was observed that the best fitted regression equation could explain 59% of the total variance influencing the impact of COVID-19. Among 18 attributes size of operational holding, family status, occupation, outside contact, annual farmingincomeandincomefromothersourcescouldshowsignificant influence on cause of COVID-19. Suggestions of farmer to overcome such pandemic situation was collected through structured schedule and focus group discussion. Among18suggestions,frequencyoftakingvaccineswassupportedby the respondents with mean score of 2.53which ranked 1st followedby development of saving habit with mean score of 2.48 ranked 2nd andin order of importance following regular food habit ranked 3rd with mean score of 2.47. For the growth and development of Indian economy agricultural sector plays an important role. Many a times different calamities and adverse situation affects agricultural sector reducing the production. Efficient functioning of any society depends on the socio-economic situation of the individuals. The havoc created by COVID-19 also effected agricultural sector to a great extent. Looking at the situation the study was conducted to find out the effect of COVID-19 on farming community. The study

revealed that the farming sector have been affected very adversely as regards to the socio- economic and technological aspects. The cause and occurrence of COVID-19 was perceived because of unhygienic condition, change in food habit, exploitation of natural resources and excessive use of Agri-inputs. Looking at the study some initiatives should be taken by the government to get read of the situations through awareness campaigns organizing health camps and other associated improvement activities. Mechanisms need to be developed to bring up confidence among farming community during such type of adverse condition. This study will help the planners, policy makers technocrats in agricultural sector and the bankers. In developing future strategies for reducing the incidence of socio-economic and technological loss during such type of adverse situation.

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