

Original Research Article

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Farmers Suicides in Marathwada Region of India: A Causative Analysis

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ABSTRACT

The present investigation was undertaken in eight districts of the Marathwada region of Maharashtra State (India) to study the socio-economic, psychological and situational causes of farmers' suicide. Data was collected from the family members of the victims with the help of a specially designed interview schedule. Statistical tools like mean, standard deviation, percentage and frequency were used. Results revealed that majority of the victims were in middle age, educated up to high school, annual income between Rs. 50001 /- to 150000 /-, and marginal to small land holders. Only 4.06 per cent of the victims had subsidiary occupation. Majority of the victims are rainfed farmers with no access to irrigation. Majority of victims had substantial outstanding of the loans from banks and money lenders. Crop failure due to drought / lack of access to irrigation was the primary cause, followed by high indebtedness. Drop in socio-economic status, addiction and huge expenses on marriages of daughter were other social causes. Remedial measures received from family members included remunerative prices for farm produce, simplification of procedure for crop insurance and timely crop loan at minimum interest. Support for digging wells, subsidised seed and fertilizer supply to poor farmers, technical back stopping and subsidy to take up subsidiary occupation were other major suggestions received from family members of the victims.

Keywords

Farmers suicide,
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Introduction

Farmer suicides have become a major concern in India with profound socio-economic implications. The United Nations Commission on Sustainable Development (UNCSD) reported that in India about one farmer ended his life every 32 minutes between 1997 and 2005. According to National Crime Records Bureau (NCRB), the

tendency of states like Maharashtra, Telangana, Madhya Pradesh, Chhattisgarh and Karnataka have recorded alarming rates of farmer suicides during 2014. These five states together account for 90 per cent of farmer suicides (5056) in India. This was further increased by 42 per cent in 2015. Fifteen farmers committed suicide every day in the country during 2014 and which went up to 21 in 2015.

Farmers' suicides in Maharashtra and Marathwada

Maharashtra recorded 51837 farmer suicides during 1995-2014, which represents 22.50 per cent of total suicides in the states. The number of farmers' suicide has increased sharply in Maharashtra than other states. Considering the base year 1995, farmers' suicides have increased by 284 per cent during the first decade (1995-2004) and 270 per cent during second decade (2005-2014). Data also show that majority of the farmer suicides were in the Vidharbha and Marathwada.

Data on the total farmers' suicides in the Marathwada along with district wise breakup is presented in Table 1. It is observed that 1133, 1053 and 991 farmers committed suicides in the year 2015, 2016 and 2017 respectively from the region. The present investigation therefore was undertaken in the eight districts of the Marathwada region with followings objectives;

To study the personal, socio-economical, psychological and situational characteristics of the victims family who commit suicides.

To assess the socio-economic, psychological and situational causes which compelled the victims to commit suicide.

Materials and Methods

The study was conducted in all eight districts of the Marathwada region *viz.*, Parbhani (PBN), Hingoli (HGL), Nanded (NND), Beed, Jalna (JLN), Osmanabad (O'BAD), Latur (LTR) and Aurangabad (A'BAD). From these eight districts, 320 households were selected in which a farmer committed suicide during last three years (i.e. 2014, 2015 and 2016). The data was collected from the family members of victims, relatives, neighbours and key informants *etc.* of the village by

personally interviewing them with the help of a specially designed interview schedule. Secondary data on number of farmers' suicides was collected from National Crime Records Bureau (NCRB). Statistical tools like mean, standard deviation, percentage and frequency were used.

Results and Discussion

Personal, socio-economical, psychological and situational characteristics of the victims families who committed suicides

It is observed from Table 2 that 39.68 per cent of the victims were middle age (36 to 50 years), while 31.56 per cent of them were young age (upto 35 years), followed by 28.76 per cent were old age group. It means that most of victims were below the age of 50 years.

Table 3 indicated that 21.87 per cent victim were educated upto high school level, followed by 21.25 per cent having primary school level education; whereas 20.62 per cent were illiterate and 18.13 per cent were having the higher school. Whereas, 5.32 and 0.63 per cent were educated upto graduation and post graduate level education, respectively. Majority of the victims were educated upto middle school level.

Table 4 shows that the information of land holding of the victims, the data revealed that 39.68 and 31.57 per cent victims were having small (1.01 ha to 2.00) and marginal (upto 1.00 ha) land holding, respectively and 21.25 per cent victims was from semi-medium (2.01 to 4.00 ha.) type of land holding. Whereas, 6.56 and 00.94 per cent of victims were from medium (4.01 to 10.00 ha.) and large holdings (above 10.00 ha.), respectively. It shows that majority of the victims were marginal and small farmers. Subsidiary occupation is one of the important components for farming community in addition to agriculture

enterprise. It is seen from Table 5 that more than half of the victims were having the occupation i.e. Agriculture + Labour (61.25%), followed by 21.88 per cent were having sole farming as their main occupation, whereas 10.31 per cent, 4.06 per cent and 2.50 per cent victims were having Agriculture + Business, Agriculture + Allied occupation and Agriculture + Service as the occupation, respectively. It is inferred that very small per cent of victims were having allied occupations along with agriculture.

Table 6 data revealed that nearly half of the victims (49.07%) were having annual income between Rs. 50,001 /- to Rs. 1,50,000 /- while 21.87 per cent of victim's income was between Rs. 27,001 /- to Rs. 50,000 /-, followed by 14.37 per cent, 7.50 per cent and 5.94 per cent of victims having income in between Rs. 1,50,001 /- to Rs. 2,50,000 /-, Rs.2,50,001 /- to Rs. 6,00,000/- and upto Rs 27,000, respectively. Whereas 1.25 per cent of the victims were having the annual income of above Rs. 6,00,000/-. It means that more than three fourth of the victims were having annual income only upto Rs. 1,50,000/-.

Sources of irrigation data in Table 7 shows that 53.74 per cent of victims were not having any source of irrigation, followed by 31.56 per cent victims were having well and tube well as source of irrigation, while 10.00 per cent victims were having canal as source of irrigation.

It is observed from Table 8 that 82.18 per cent of the victims had adopted sole cropping system whereas only 17.82 per cent adopted intercropping. While as per Table 9, it is depicted that average productivity of major *kharif* crops viz., soybean, cotton, and pigeonpea of the victims were 9.56 qt/ha, 11.20 qt/ha and 7.34 q/ha, respectively. Among *rabi* crops, productivity of bengal gram, *rabi* sorghum and wheat were 7.20

qt/ha, 9.65 qt/ha and 11.99 qt/ha, respectively.

With regard to credit and indebtedness of the victims, it is observed (Table 10) that 54.06 per cent of victims had taken the loan from nationalised banks, followed by 26.56 per cent from Co-operative banks and 11.56 per cent from rural banks as institutional credit source. While 36.25 per cent of the victims had taken loans from private money lenders, followed by 28.43 per cent from friends and relatives as non-institutional credit source.

Livelihood pattern of victims are depicted in Table 11. Nearly all victims had agriculture as a sole source of income with an average annual income of Rs. 74,576 /- per victim, followed by 61.25 per cent of victims had wages as a source of income with an average annual income of Rs. 30988 /- per victim. Whereas only 4.06 per cent of them had allied occupation as a source of income with an average annual income of Rs. 21,176 /- per victim. It means that main source of income of victims was only from agriculture.

Compelling socio-economic, psychological and situational causes of farmers suicides

Table 12 shows various farm related causes driving victims for suicide. It is seen that cause for 87.18 per cent of victims was failure of crop due to drought / lack of irrigation, followed by 5.62, 3.12 and 2.81 per cent were crop failure due to hailstorm, failure of open well or tube wells and crop failure due to unseasonal rains. Few percentage of the victims cause for suicide was crop failure due to infestation of insect / disease (0.93%) and due to poor seed germination (0.62%). Indebtedness causes of farmers suicide is given in Table 13, it was indicated that 76.56 per cents cause for suicide was increased indebtedness, followed by recovery pressure from money lenders (25.62 %), torturing by money lender for repayment of loan (21.56

%), humiliation in public by money lender (9.06%), availment of loan from non-institutional sources (7.18%) and auction of assets / livestock and other household stocks (6.87%), respectively.

Social and other causes related to farmer suicides are presented in Table 14. Data revealed that 53.12 per cent of victims cause for suicide was drop in socio-economic status, followed by addiction of victims (40.00%),

chronic health problem of victims or family members (33.75%), marriageable age of daughters / sisters (30.31%) and suicide of family members or any peers (20.31%). While dispute with the family member or neighbour or others was the cause for suicide of 9.69 per cent victims and death of the family member prior to suicide also the cause in 3.12 per cent cases. Only 1.87 per cent of the victims cause for suicide was dowry system.

Table.1 Number of farmers suicides in Marathwada region

Year	Aurangabad	Latur	Beed	Parbhani	Jalna	Hingoli	Osmanabad	Nanded	Total
2010	02	04	79	22	04	02	23	55	191
2011	00	04	73	23	06	05	25	33	169
2012	02	00	91	35	06	03	22	39	198
2013	04	03	98	17	08	02	29	46	207
2014	56	44	152	70	32	31	71	118	574
2015	144	106	301	104	83	41	164	190	1133
2016	151	116	222	98	76	49	161	180	1053
2017	139	94	207	125	91	56	126	153	991
Total	498	371	1223	494	306	189	621	814	4516

(Source: Divisional Commission rate Office, Aurangabad)

Table.2 Distribution of the victims according to their age

Sr. No	Districts	Age		
		Young (Up to 35)	Middle (36 to 50)	Old (Above 51)
1	Parbhani	16 (40.00)	12 (30.00)	12 (30.00)
2	Hingoli	09 (22.50)	16 (40.00)	15 (37.50)
3	Nanded	13 (32.50)	16 (40.00)	11 (27.50)
4	Beed	16 (40.00)	15 (37.50)	09 (22.50)
5	Jalna	10 (25.00)	22 (55.00)	08 (20.00)
6	Osmanabad	14 (35.00)	14 (35.00)	12 (30.00)
7	Latur	07 (17.50)	17 (42.50)	16 (40.00)
8	Aurangabad	16 (40.00)	15 (37.50)	09 (22.50)
	Marathwada (N=320)	101 (31.56)	127 (39.68)	92 (28.76)

* Figures in the parenthesis indicates the percentage

Table.3 Distribution of the victims according to their educational level

Sr. No.	Districts	Education						
		Illiterate	Primary school	Middle school	High school	Higher school	Graduation	Post Graduation
1	Parbhani	12 (30.00)	11 (27.50)	06 (15.00)	06 (15.00)	04 (10.00)	01 (2.50)	-
2	Hingoli	15 (37.50)	10 (25.00)	02 (5.00)	06 (15.00)	04 (10.00)	03 (7.50)	-
3	Nanded	06 (15.00)	11 (27.50)	02 (5.00)	11 (27.50)	07 (17.50)	03 (7.50)	-
4	Beed	13 (32.50)	04 (10.00)	02 (5.00)	08 (20.00)	09 (22.50)	04 (10.00)	-
5	Jalna	09 (22.50)	10 (25.00)	04 (10.00)	12 (30.00)	04 (10.00)	00 (00.00)	01 (02.50)
6	Osmanabad	08 (20.00)	07 (17.50)	01 (2.50)	12 (30.00)	08 (20.00)	03 (07.50)	01 (02.50)
7	Latur	-	07 (17.50)	10 (25.00)	09 (22.50)	12 (30.00)	02 (05.00)	-
8	Aurangabad	03 (07.50)	08 (20.00)	12 (30.00)	06 (15.00)	10 (25.00)	01 (02.50)	-
	Marathwada (N=320)	66 (20.62)	68 (21.25)	39 (12.18)	70 (21.87)	58 (18.13)	17 (5.32)	02 (0.63)

* Figures in the parenthesis indicates the percentage

Table.4 Distribution of the victims according to their land holding

Sr. No	District	Land holding				
		Marginal (Up to1.00)	Small (1.01 to2.00)	Semi-medium (2.01 to 4.00)	Medium (4.01 to10.0)	Large (Above 10.00)
1	Parbhani	15 (37.50)	16 (40.00)	07 (17.50)	02 (05.00)	-
2	Hingoli	15 (37.50)	16 (40.00)	06 (15.00)	02 (05.00)	01 (2.50)
3	Nanded	13 (32.50)	19 (47.50)	05 (12.50)	03 (07.50)	-
4	Beed	15 (37.50)	12 (30.00)	09 (22.50)	04 (10.00)	-
5	Jalna	14 (35.00)	15 (37.50)	05 (12.50)	04 (10.00)	02 (5.00)
6	Osmanabad	13 (32.50)	14 (35.00)	10 (25.00)	03 (07.50)	-
7	Latur	06 (15.00)	18 (45.00)	14 (35.00)	02 (05.00)	-
8	Aurangabad	10 (25.00)	17 (42.50)	12 (30.00)	01 (02.50)	-
	Marathwada (N=320)	101 (31.57)	127 (39.68)	68 (21.25)	21 (6.56)	03 (0.94)

* Figures in the parenthesis indicates the percentage

Table.5 Distribution of the victims according to their subsidiary occupations

Sr. No	Districts	Subsidiary occupation				
		Agriculture+ Labour	Agriculture (farming)	Agriculture+ allied occupation	Agriculture + Business	Agriculture + service
1	Parbhani	32 (80.00)	07 (17.50)	-	-	01 (02.50)
2	Hingoli	26 (65.00)	09 (22.50)	-	05 (12.50)	-
3	Nanded	24 (60.00)	05 (12.50)	01 (02.50)	06 (15.00)	04 (10.00)
4	Beed	21 (52.50)	09 (22.50)	01 (02.50)	08 (20.00)	01 (02.50)
5	Jalna	34 (85.00)	05 (12.50)	-	01 (02.50)	-
6	Osmanabad	22 (55.00)	14 (35.00)	-	04 (10.00)	-
7	Latur	17 (42.50)	08 (20.00)	09 (22.50)	04 (10.00)	02 (05.00)
8	Aurangabad	20 (50.00)	13 (32.50)	02 (05.00)	05 (12.50)	-
	Marathwada (N=320)	196 (61.25)	70 (21.88)	13 (04.06)	33 (10.31)	08 (02.50)

* Figures in the parenthesis indicates the percentage

Table.6 Distribution of the victims according to their annual income

Sr. No.	District	Annual Income (Rs.)					
		Rs. 27,000 /- (i.e. BPL)	27,001/- to 50,000/-	50,001 /- to 1,50,000/-	1,50,001 /- to 2,50,000/-	2,50,001 /- to 6,00,000/-	Above 6,00,000/- (i.e. above EBC)
1	Parbhani	03 (07.50)	06 (15.00)	20 (50.00)	08 (20.00)	03 (07.50)	-
2	Hingoli	02 (05.50)	11 (27.50)	17 (42.50)	06 (15.00)	04 (10.00)	-
3	Nanded	01 (02.50)	12 (30.00)	21 (52.50)	04 (10.00)	02 (05.00)	-
4	Beed	02 (05.00)	04 (10.00)	14 (35.00)	10 (25.00)	07 (17.50)	03 (07.50)
5	Jalna	06 (15.00)	09 (22.50)	21 (52.50)	03 (07.50)	01 (02.50)	-
6	Osmanabad	04 (10.00)	08 (20.00)	23 (57.50)	02 (05.00)	02 (05.00)	01 (02.50)
7	Latur	01 (02.50)	11 (27.50)	26 (72.50)	-	-	-
8	Aurangabad	00 (00.00)	09 (22.50)	15 (37.50)	11 (27.50)	05 (12.50)	-
	Marathwada (N=320)	19 (5.94)	70 (21.87)	157 (49.07)	46 (14.37)	24 (7.50)	04 (01.25)

* Figures in the parenthesis indicates the percentage

Table.7 Distribution of the victims according to their irrigation facility

Sr. No	District	Irrigation facilities						
		No source	Dam/K.T Embankment	Canal	Farm Pond	Well/Tube Well	Lake	River
1	Parbhani	19 (47.50)	-	06 (15.00)	-	11 (27.50)	-	04 (10.00)
2	Hingoli	19 (47.50)	-	06 (15.00)	-	14 (35.00)	-	01 (2.50)
3	Nanded	32 (80.00)	-	01 (2.50)	-	04 (10.00)	-	03 (7.50)
4	Beed	16 (40.00)	02 (5.00)	04 (10.00)	-	16 (40.00)	01 (2.50)	01 (2.50)
5	Jalna	34 (85.00)	01 (2.50)	04 (10.00)	01 (2.50)	-	-	-
6	Osmanabad	24 (60.00)	01 (2.50)	-	-	15 (37.50)	-	-
7	Latur	11 (27.50)	-	02 (5.00)	-	27 (67.50)	-	-
8	Aurangabad	17 (42.50)	-	09 (22.50)	-	14 (35.00)	-	-
	Marathwada (N=320)	172 (53.74)	04 (1.25)	32 (10.00)	01 (0.32)	101 (31.56)	01 (0.32)	09 (2.81)

* Figures in the parenthesis indicates the percentage

Table.8 Types of cropping system adopted by victims farmers (Overall Marathwada)

Sr. No.	Types cropping system	No. of victims	% of the victims (N=320)
1	Sole cropping	263	82.18
2	Intercropping	57	17.82

Table.9 Average productivity of the victims farmers (Overall Marathwada)

Sr. No.	Season	No. of victims	Average productivity of victims farmers (Qt/ha)
A	<i>Kharif</i>		
1	Soybean	198 (61.78)	9.56
2	Cotton	183 (57.18)	11.20
3	Pigeonpea	107 (33.43)	7.34
B	<i>Rabi</i>		
1	Bengal gram	90 (28.12)	7.20
2	R. Sorghum	99 (30.93)	9.65
3	Wheat	52(16.25)	11.99

Table.10 Distribution of the victims according to their credit sources and indebtedness

(Marathwada, N=320)

Sr. No.	Source	Over all Marathwada region			
		No of victim taken credit	Amount in rupees per borrowing	Outstanding amount per victim	% of outstanding to total credit availed
1.	Institutional				
a)	Co-operative bank	85 (26.56%)	64560	84804	131
b)	Nationalize	173 (54.06%)	120132	149032	124
c)	Rural bank	37 (11.56%)	89167	112057	126
d)	Self-help group	26 (08.12%)	45934	68451	149
2)	Non-institutional				
a)	Private moneylenders	116 (36.25%)	221703	324031	146
b)	Friends and relatives	91 (28.43%)	221814	270181	125

Table.11 Distribution of the victims according to overall livelihood pattern

(Marathwada, N=320)

Sr. No.	Source	Overall Marathwada Region	
		No. of victims families	Rs. per house hold
	Income pattern		
1	Agriculture	332 (100.00%)	74576 /-
2	Allied occupation	13 (4.06%)	21176 /-
3	Wages earning	196 (61.25%)	30988 /-
4	Non profession business	41 (12.81%)	38080 /-
	Total income (A)		152321 /-
	Expenditure pattern		
1	Expense incurred on food		26812 /-
2	Expense incurred on total non-food		117353 /-
	Total expenditure (B)		144165 /-
	Surplus/deficit (+/-) (A-B)		8156 /-

Table.12 Distribution of victims according to their farming related causes of suicides

Sr. No	Farming related causes	PBN (N=40)	HGL (N=40)	NND (N=40)	BEED (N=40)	JLN (N=40)	O'BAD (N=40)	LTR (N=40)	A'BAD (N=40)	Marathwada (N=320)
1	Crop failure due to drought / lack of irrigation	34 (85.00)	38 (95.00)	38 (95.00)	37 (92.50)	40 (100.00)	39 (97.50)	23 (57.50)	30 (75.00)	279 (87.18)
2	Crop failure due to hailstorm	-	01 (2.50)	-	-	10 (25.00)	-	06 (15.00)	01 (2.50)	18 (5.62)
3	Crop failure due to insect / disease infestation	-	01 (2.50)	-	02 (5.00)	-	-	-	-	03 (0.93)
4	Crop failure due to poor seed germination	-	-	-	-	-	-	-	02 (2.50)	02 (0.62)
5	Crop failure due to unseasonal rains	-	-	-	-	-	-	09 (22.05)	-	09 (2.81)
6	Failure of open well or tube well	-	-	-	05 (12.50)	-	-	02 (5.00)	03 (7.50)	10 (3.12)

Table.13 Distribution of victims according to their indebtedness related causes of suicides

Sr. No.	Indebtedness related causes	PNB (N=40)	HGL (N=40)	NND (N=40)	BEED (N=40)	JLN (N=40)	O'BA D (N=40)	LTR (N=40)	A'BAD (N=40)	Marathwada (N=320)
1	Increased indebtedness	32 (80.00)	29 (72.50)	34 (85.00)	37 (92.50)	40 (100)	32 (80.00)	01 (2.50)	40 (100)	245 (76.56)
2	Torturing by money lender for repayment of loan	03 (7.50)	04 (10.00)	15 (37.50)	14 (35.00)	10 (25.00)	04 (10.00)	01 (2.50)	18 (45.00)	69 (21.56)
3	Recovery pressure from money lender	04 (10.00)	05 (12.50)	09 (22.50)	10 (25.00)	19 (47.50)	16 (40.00)	-	19 (47.50)	82 (25.62)
4	Humiliation at public place by money lender	04 (10.00)	02 (2.50)	06 (15.00)	05 (12.50)	05 (12.50)	02 (5.00)	02 (2.50)	03 (7.50)	29 (09.06)
5	Auction of assets/ livestock / other household stocks	-	-	01 (2.50)	04 (10.00)	-	-	17 (42.50)	-	22 (06.87)
6	Availment of loan from non-institutional sources	07 (17.50)	10 (25.00)	-	-	-	-	-	06 (15.00)	23 (07.18)

Table.14 Distribution of victims according to social and other causes related to the suicides

Sr. No	Social & other causes	PNB (N=40)	HGL (N=40)	NND (N=40)	BEED (N=40)	JLN (N=40)	O'BAD (N=40)	LTR (N=40)	A'BAD (N=40)	Marathwada (N=320)
1	Dowry system	-	-	-	02 (5.00)	-	-	-	04 (10.00)	06 (1.87)
2	Drop in socio-economic status	18 (45.00)	18 (45.00)	12 (30.00)	18 (45.00)	16 (40.00)	27 (67.50)	37 (92.50)	24 (60.00)	170 (53.12)
3	Marriageable age of daughters / sisters	10 (25.00)	13 (32.50)	15 (37.50)	09 (22.50)	22 (55.00)	01 (2.50)	-	27 (67.50)	97 (30.31)
4	Suicide of family member or any peers	08 (20.00)	14 (35.00)	09 (22.50)	08 (20.00)	14 (35.00)	09 (22.50)	-	03 (7.50)	65 (20.31)
5	Dispute with the family member / neighbour /others	05 (12.50)	02 (5.00)	06 (15.00)	06 (15.00)	01 (2.50)	03 (7.50)	01 (2.50)	07 (17.50)	31 (9.69)
6	Death of the family member prior to suicide	-	-	01 (2.50)	01 (2.50)	03 (7.50)	-	05 (12.50)	-	10 (3.12)
7	Chronic health problem of their own or family members	20 (50.00)	20 (50.00)	11 (27.50)	15 (37.50)	12 (30.00)	16 (40.00)	04 (10.00)	10 (25.00)	108 (33.75)
8	Addictions of victim	11 (27.50)	23 (57.50)	22 (55.00)	20 (50.00)	12 (30.00)	15 (37.50)	01 (2.50)	24 (60.00)	128 (40.00)

Table.15 Suggestions of the family members of the deceased farmers to prevent farmers' suicide

Sr. No	Suggestions	PNB (N=40)	HGL (N=40)	NND (N=40)	BEED (N=40)	JLN (N=40)	O'BAD (N=40)	LTR (N=40)	A'BAD (N=40)	Marathwada (N=320)
1	Remunerative support prices for farm produce	24 (60.00)	30 (75.00)	26 (65.00)	28 (70.00)	27 (67.50)	20 (50.00)	37 (92.50)	35 (87.50)	227 (70.93)
2	Loan waiving during failure of major crops	27 (67.50)	23 (57.50)	15 (37.50)	17 (42.50)	28 (70.00)	18 (45.00)	17 (42.50)	18 (45.00)	163 (50.93)
3	Creation of irrigation facilities	28 (70.00)	22 (55.00)	20 (50.00)	19 (47.50)	30 (75.00)	11 (27.50)	16 (40.00)	19 (47.50)	165 (51.56)
4	Simplification of complicated crop insurance claims	26 (65.00)	23 (57.50)	19 (47.50)	23 (57.50)	30 (75.00)	29 (72.50)	31 (77.50)	25 (62.50)	206 (64.37)
5	Technical support & subsidy by government to start the subsidiary occupation	20 (50.00)	19 (47.50)	22 (55.00)	24 (60.00)	26 (65.00)	22 (55.00)	18 (45.00)	27 (67.50)	178 (55.62)
6	Special scholarship by government to the student of poor farmers	22 (55.00)	24 (60.00)	19 (47.50)	30 (75.00)	17 (42.50)	15 (37.50)	23 (57.50)	26 (65.00)	176 (55.00)
7	Subsidised supply of seed, fertilizer & other agricultural inputs to poor farmers.	28 (55.00)	24 (60.00)	19 (47.50)	30 (75.00)	17 (42.50)	15 (37.50)	23 (57.50)	26 (65.50)	183 (57.18)
8	Timely crop loan with lowest interest rate.	26 (65.00)	19 (47.50)	23 (57.50)	31 (77.50)	30 (70.00)	26 (65.00)	23 (57.50)	27 (67.50)	205 (64.06)
9	Health insurance scheme by government for farmers	27 (67.50)	22 (55.00)	16 (40.00)	16 (40.00)	27 (67.50)	19 (47.50)	21 (52.50)	20 (50.00)	168 (52.50)
10	Small and marginal farmers should also be benefited from Gharkul Yojana	22 (55.00)	16 (40.00)	12 (30.00)	18 (45.00)	08 (20.00)	21 (52.50)	22 (55.00)	19 (47.50)	138 (43.12)
11	Group marriage ceremony should be organized on large scale by NGOs.	08 (20.00)	15 (37.50)	21 (52.50)	18 (45.00)	21 (52.50)	19 (47.50)	22 (55.00)	21 (52.50)	145 (45.31)
12	Information of diff. govt. schemes related to agri. & rural area should be reached to the needy farmers	21 (52.50)	16 (40.00)	12 (30.00)	24 (60.00)	18 (45.00)	26 (20.00)	22 (55.00)	26 (65.00)	165 (51.56)
13	Sanction of more irrigation wells under various government schemes	26 (65.00)	24 (60.00)	20 (50.00)	18 (45.00)	27 (67.50)	30 (75.00)	25 (62.50)	23 (57.50)	193 (60.31)
14	Alcohol should be banned in every village	18 (45.00)	22 (55.00)	18 (45.00)	05 (12.50)	12 (30.00)	14 (35.00)	11 (27.50)	09 (22.50)	109 (34.06)

Feedback from family members

Table 15 depicts the suggestions given by victims' family members to prevent farmers' suicide. Data indicated that 70.93 per cent suggested for providing remunerative prices for farm produce, followed by simplification of crop insurance claims (64.37%), timely crop loan with minimal interest rate (64.06%), sanction of more irrigation wells under various government schemes (60.31%), subsidised seed, fertilizer and other agricultural inputs to poor farmers (57.18 %), technical support and subsidy to start any subsidiary occupation (55.62%), special educational scholarship by government to the students of poor farmers (55.00%), health insurance scheme for farmers by the government (52.50%), information of different government schemes related to agriculture and rural development should be reached to the needy farmers (51.56%), irrigation facilities should be created (51.56%) and loan waiving during failure of major crops (50.93%).

Similar results were obtained by Dandekar *et al.*, (2005), Kale (2008) and Manjunatha and Ramappa (2017)

From a detailed study of farmer's suicides in Marathwada, it is concluded that crop failure due to drought / lack of irrigation was principal cause followed by high indebtedness.

Feedback from family members on how to prevent distress in the family leading to suicide revealed that provision of remunerative prices for farm produce, simplification of crop insurance claim, crop loans at lower interest rates, government support for digging wells and financial and technical support for taking up allied occupations emerged as the main suggestions.

Implications

Sole cropping is prominent in all the districts of Marathwada region with soyabean and cotton based cropping system under rainfed situation. On other hand very few of them were having subsidiary occupations. Therefore, it is implicated to initiate Integrated Farming System (IFS) which will diversify the income sources of marginal and small farmers.

Main cause of farmers' suicide was crop failure due to drought situation. Hence, it is recommended to create awareness and increase the participation of the farmers by various extension agencies to construct the farm ponds, recharge of wells / bores, water conservation techniques (*Jal Ukat Shivar* – a flagship programme of the Govt. of Maharashtra) and judicious use of available water through drip and sprinkler irrigation.

It is also recommended to provide psychological counselling facilities for severely distressed farmers to change their mindset.

The present study revealed that social issues such as marriageable age of the daughters / children also contribute farmers' distress. Therefore, it is recommended to create awareness about discontinuation of dowry system and organization of group marriages in rural areas through NGOs and social workers.

Skill training to poor farmers to take up subsidiary occupations.

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References

Dandekar, A., Narawada, S., Rathod, R., Ingle, R., Kulkarni, V. and Sateppa, V.D. 2005. Causes of Farmer Suicides in Maharashtra: An Enquiry. Final Report submitted to the Mumbai High Court, Tata Institute of Social Sciences, Tuljapur, Osamanabad.

Kale, N.M. 2008. Socio-economic, Psychological and Situational Causes of Suicides of Farmers in Vidarbha Region. Ph.D. (Thesis) submitted to Dr.

Panjabrao Deshmukh Krishi Vidyapeeth, Akola.

Manjunatha, A.V. and K.B. Ramappa 2017. Farmer Suicide: An All India Study. Agriculture Development and Rural Transformation Centre Report, Institute for Social and Economic Change, Karnataka.

National Crime Records Bureau 2017. Accidental Deaths and Suicides Reports of Various Years. Retrieved from <http://ncrb.nic.in>

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