Technical Article

Farmers' Suicide: A Ground Level Study

C. Satapathy¹ and B. Mishra²

1. Retired Professor Extension. 2. Senior Scientist Extension, OUAT, Bhubeneshwar, India.

 $Corresponding \ author \ e\text{-mail}: satapathy_c@yahoo.co.in$

"The State Government on Tuesday claimed that none of the 2,632 farmer suicide during last ten years in Orissa was triggered by agricultural activities". Whatever the debate may be, the farm suicide has taken place in India and Odisha. The farm Suicide (FS) is not only confined to Odisha but also taking place in many states. From national point of view, farmer suicide is a serious problem.

All India total farm suicides 1995-2010

Year	Total per year
1995	10,720
1996	13,729
1997	13,622
1998	16,015
1999	16,082
2000	16,603
2001	16,415
2002	17,971
2003	17,164
2004	18,241
2005	17,131
2006	17,060
2007	16,632
2008	16,196
2009	17,368
2010	15,964
Total	256,913
1995-2010	

(Source: NCRB Data, 2010)

India's Human Right Commission has sought reports from three states on spate of Farm Suicides All India Totals 1995-2010 suicide by farmers that have been reported in local media. Some 800 farmers committed suicide in Maharashtra, Andhra Pradesh and Kerala last year (Dec.21, 2011). Most of the Farmer suicide has been linked to poverty, debt, rise in price and failure of crops. Since 1997, the 200,000 farmers have committed suicide in India. BBC reports that many farmers in India are forced to take out loan to buy necessary supplies but these have left them heavily on debt for which Govt. of India announced 1.5bn waiver of farm loan in 2008(BBC@2012).

India is an agrarian country. Most of the people directly or indirectly depend on agriculture. Indian agriculture is attributed as gambling of monsoon. There is much debate on figures of suicide cases. More than 17,500 farmers committed suicide between 2002 to 2006, according to the experts on government statistics. Most of these suicide occurred in the states of Andhra Pradesh and Maharashtra

In 2006, the state Maharashtra with 4,453 farmers suicide accounted for over a quarter of all India

totals of 17,060 according to National Crime Record Bureau (NCRB)., Karnataka, Kerala and Punjab. NCRB reports that at least 16,196 farmer suicides took place in 2008 bringing to total since 1997 to 199,123. According to Govt. of India over 5000 farmers committed suicide since 2005-09 in Maharashtra, while 1,313 in Andhra Pradesh between 2005-07. In Karnataka the number was 1,003 since 2005-06 to 2009.

According to data base of NCRB, number of farmers suicide during 2003-05 was in Gujarat 387, Kerala 905, Punjab 75, and Tamil Nadu 26. In 2009, Chhattisgarh reported 1,500 farmers suicides due to debt and crop failure. At least 17,368 farmers killed themselves in 2009, the worst year for farm suicide in six years according to data base of NCRB.

According to Sainath (2009) of Hindu, although NCRB data confirms appalling 1.5 lakh farmer suicide between 1997 to 2005, the figure is probably much more. The farmer suicide rate (FSR) i.e., number of suicides per, 100,000 farmers is also likely to be much higher than disturbing 12.9 thrown up in the 2001 census.

Data in Table 1, explains the relation between general suicide rate and farm suicide. The figure in Odisha the ratio between GSR and FSR is 0.6. The state is not free from the problem of farmer suicide. The 31st All India Conference of the All India Kisan Sabha expressed its.

Anguish at the unprecedented wave of distress induced suicides among the farmers of different parts of India. More perhaps than any other social phenomenon, suicide has liberalization and imperialist-led globalization in the country side. Figures compiled by Home Ministry reveals that pushed to brink by mounting debts, more than one lakh of 1998 and 2003. This suicide has occurred mostly in prosperous regions of India namely, Andhra Pradesh, Punjab, Karnataka and Maharashtra.

It is reported that more than 60 farmers in Western Odisha have committed suicide. It is also reported that 43 farmers killed themselves towards the end of 2009.

It is an established fact that farmers are committing suicide. In Odisha farmers suicide is greatly found in Western part. Many times it takes political color and emotion is created at different levels. Keeping these facts in view, a study was conducted to ascertain the ground reality in general and the

Table 1. General suicide rate and farm suicide rate in India

Group of States	State	General suicide rate(per 100,000 population(GSR)	Farmer suicide rate(per 100,000 farmers (FSR)	Ratio of FSR to GSR
Group 1	1. Kerala	30.1	142.9	4.7
State with high GSR	2. Tamil Nadu	18.1	19.3	1.1
	3. Pondicherry	54.3	834.9	15.4
	4. West Bengal	17.1	22.0	1.3
	5. Tripura	26.7	13.1	0.5
	(Group 1 states)	20.1	28.8	1.4
Group 2	1. Karnatak	27.5	36.4	1.6
States with high	2. Maharastra	15.1	29.9	2.0
GSR and large	3. Goa	19.0	35.7	1.9
numbers of farmer	4. M.P.	13.4	18.4	1.4
suicide	5. Andhra Pradesh	13.8	19.2	1.4
	(Group II states)	15.6	25.8	1.7
Group 3	1. Assam	9.9	4.5	0.5
States with moderate	2. Gujarat	9.5	10.2	1.1
GSR and FSR	3. Haryana	9.5	4.8	0.5
	4. Orissa	11.0	6.9	0.5
	(Group III states)	10.0	8.9	0.7
Group 4 States with low	Bihar including Jharkhand	0.8	0.7	0.9
GSR and FSR	2. Himachal	5.1	1.1	0.2
	3. Jammu & Kashmir	1.5	0.9	0.6
	4. Punjab	2.7	2.2	0.8
	5. Rajsthan	5.7	3.8	0.7
	6. U.P	2.2	3.0	1.4
	(Group IV states)	2.3	2.6	1.1
	All India	10.6	12.9	1.2

(Source: http://indiatigether.org/2007/nov/psa-mids2htm)

following specific objectives in particular.

- 1. To determine the reaction of farm scientists as well as farmers about the reasons of farmer suicide.
- 2. To know the different factors in leading farmers to end their lives.
- To find out reasons of crop failure problems in farm credit, economic reasons, social factors, market problem, soundness of farm technology, government policy of protecting farmers and psychological variables that contribute to farmers suicide
- 4. To understand whether farmer suicide is in reality or product of political reasons.

METHODOLOGY

The study was conducted with two small categories of sample, i.e., farmers and farm scientists as both groups work in hand to hand. Each group consisted of 25 respondents. The sample were selected on the basis of their experience and deep thought about present farming scenario of the state. On a structured schedule the data were collected and scoring method of three point scale was adopted to analyze the data

RESULTS AND DISCUSSION

The findings of the study have been presented

objective wise.

1. Reasons of suicide.

People commit suicide for multiple reasons. But when a farmer who produces food for the nation commits suicide it draws attention of all concerned. Ours being a agricultural state and farmers commit suicide for the cause of failure in farming, there must be some valid reasons. The study attempted to compare the opinion of scientists as well as farmers to know the ground reality. The reasons ascribed by both the sample are contained in Table 2.

The scientists expressed the causes of suicides are, pressure of credit agency for repayment, poor marketing system, inherited poverty of farm families, weak psychology, crop failure, and lack of Govt. protection for farmers in order. The farmers opined that continued loss in farming, pressure of credit agencies, poor marketing, crop failure and lack of Govt. protection to farmers in order as the causes of farmers suicide in the state. Response of total sample as a whole indicates pressure of credit agency, poor marketing and crop failure are three major reasons leading farmers to end their lives. Farmers and scientists differ significantly in case of factors of inherited poverty and continued loss in farming, while then agreed for other variables. It could be concluded that pressure of credit

Agency, poor marketing, and crop failure are three major reasons of farmer suicide. These two factors, inherited poverty and continued loss in farming show difference between scientists and farmers leading to

understanding of the farmers view as farmers commit suicide only in acute poverty to which is inherited and failure of present farming system to fill up the gap.

Table 2. Reasons of suicide (Average score)

Sr.	Reasons	Scientists	Farmer	Pooled	Difference
No.		(A)	(B)		(%)(A-B)
1.	Crop failure	2.08	2.28	4.36	8.77
2.	Pressure of credit agency	2.32	2.52	4.84	7.93
3.	Inherited poverty	2.20	1.88	4.08	14.54
4.	Social stigma for loan burden	1.96	1.96	3.92	0.00
5.	Poor marketing	2.28	2.44	4.72	5.55
6.	Lack of Govt. protection	2.04	2.08	4.12	1.92
7.	Continued loss in farming	1.80	2.64	4.44	31.81
8.	Weak psychology	2.12	1.96	2.08	7.54

2. Crop failure:

Agriculture heavily depends on monsoon. The success of crop production and availability of water are inseparable components. But in western Odisha from where farmer suicides are reported is well irrigated area and is said to be rice bowl of the state. The crop is assured from irrigation point of view. The occurrence of farmer suicide in such prosperous area is a matter of concern. To compare the views of both scientists and farmers, the data so collected have been analyzed as given in Table 3 below.

Results indicated that scientists rank high cost of labour, poor farm management, lack of irrigation, high cost of inputs and climatic hazards have shaken the

strength of farmers leading to their suicides. On other hand, farmers feel that climatic hazards, high cost of inputs, high cost of labor lack of irrigation, poor farm management and non availability of farm inputs are in order leading to stressful living of farmers, which ultimately lead to farmer's suicide. Both groups have significant differences in views with regard to high cost of inputs, poor farm management and climatic hazards. Cost of inputs has gone high and frequently change in climate was very common in the state which bright be attributed for miserable deaths of poor farmers. Lack of irrigation as per need, non availability of required inputs in time and high labour cost are equally viewed by both the groups.

Table 3. Reasons of crop failure

Sr.	Reasons	Scientists	Farmers	Pooled	Difference
No.		A	В	average	(%) (A-B)
1.	Lack of irrigation	2.20	2.20	1.89	0.00
2.	Non availability of inputs in time	1.84	1.72	1.78	1.78
3.	High labor cost	2.52	2.36	2.44	6.34
4.	High cost of inputs	2.16	2.56	2.36	15.62
5.	Poor Farm Management	2.28	1.96	2.12	14.03
6.	Climatic hazards	2.12	2.64	2.38	19.69
	Average	2.18	2.24	2.16	-

3. Agriculture credit:

This is the key input for farmers to operate farm at any place. Poor farmers depend on credit to raise crops specifically rice. Credit as a factor of farmer suicide was analyzed taking responses of the sample as presented below.

Insufficient time for repayment, increased pressure to repay loan, high rate of interest and refusal for 2nd loan because of 1st loan was not cleared and diversion of farm credit for other purposes are the main reasons for the harassment of farmers. In view of the scientists, less time for repayment and high rate of

interest were the important factors leading to depression of the farmers. On other hand farmers cite refusal for 2nd loan because of default and increased pressure for repayment were the major reasons for harassment of farmers. Both groups differ significantly in the matter of giving of 2nd loan and increased pressure for repayment. As the farmers are directly facing the problems for credit, their views have more weight than the scientists. Loan burden is definitely a strong factor behind farmer suicide. The problem in agril. credit is the non repayment of loan and that too before starting another crop.

	· ·	•			
Sr.	Reasons	Scientists	Farmers	Pooled	Difference
No.		A	В		(%) A-B
1.	Credit not available in time	1.88	1.72	1.80	4.52
2.	High rate of Interest	2.20	2.08	2.14	5.45
3.	Less period for repayment	2.28	2.12	2.20	7.01
4.	Increased pressure for repayment	1.84	2.44	2.14	24.59
5.	2 nd Loan denied	1.64	2.52	2.08	34.92
6.	Diversion of farm credit	2.04	1.92	1.98	5.88
	Average	1.98	2.13	1.89	

Table 4. Agricultural credit as perceived by scientists and farmers

4. Economic condition

Economic condition has been the major cause for general suicide rate in our country. When farmers fail to harvest cop, loan burden is at increasing trend and the possibility of coming out the grip is not possible, the farmers end their lives. To understand the economic causes of farmer suicides the collected data have been analyzed as shown in Table 5 below.

Economic causes are the increasing cost of living to which farmers are not able to adjust. Insufficient farm income and increasing cost of living followed by mounted pressure on limited income without having alternate ways of earning except farming lead to farmers to end their lives. These reasons are genuine as with increase cost of living the limited income families bear intolerable sufferings

Table 5. Economic condition as cause of suicide

Sr. No.	Reasons	Scientists	Farmers	Pooled	Rank
1.	Inherited Poverty	1.84	2.20	2.02	III
2.	Insufficient farm income	1.88	2.56	2.22	II
3.	Mounted pressure on limited income	2.12	2.60	1.36	V
4.	Only dependent on farm income	1.04	2.32	1.68	IV
5.	Increased cost of living.	2.04	2.76	2.40	I
	Average	2.16	2.48	1.94	

5. Social factors

Scholars of social research argue that for suicide, social factors count much than many other factors. The society and social factors have enough influence on psychology of individuals. In case of farmer suicide, the social factors are thought to be contributing significantly to a considerable extent. The views of scientists and farmers in this regard are given in Table 6.

Both scientists and farmers are in one line so far as social factors are concerned in influencing farmers to end their lives as average score is same. Loan as social stigma, increased family burden within limited income, expansion of aspiration family members, on-cooperation of family members to share burden and increased family pressure to meet the requirement put farmers in distress stage for which they opt for suicides. Scientists feel that increased family burden and social stigma of being loaner put the farmers in wrong way to end their lives. Against this, the farmers feel increased family pressure to meet expenditure and family burden when become too heavy, the farmers do not see ways and means to escape other than suicide. On the whole it can be inferred that social factors contribute for tragic death of the farmers.

Table 6. Social factors as cause of farmers' suicide

Sr. No.	Reasons	Scientists	Farmers	Pooled	Rank
1.	Loan as social stigma	2.12	1.72	1.92	IV
2.	Incresed family burden	2.36	2.20	2.28	I
3.	Expansion of aspiration	2.20	1.88	2.04	II
4.	Non-coperation of family members	1.88	2.16	2.02	III
5.	Increaed family pressure	1.84	2.44	1.64	V
	Average	2.08	2.08	1.98	

6. Market

Agriculture and market are intervenient. Once market is favourable farmers derive good income to live. But in rural areas the poor farmers are left at the mersey of market which is never in favor of producers. The market also plays a very significant role in sustainability of farm families. The views of scientists and farmers have been analyzed.

Both categories of respondents ranked lack of guarantee to procure farm produce as the biggest bottle neck in farming followed by low market price, nondisposal of farm produce, distress sale and exploitation by business people in order. The scientists expressed no guarantee for procurement, non-disposal of farm produce and distress sale as major three reasons against low market price, non—guarantee to procure and non-disposal of farm produce of farmers. Thus it can be inferred that existing market is not farmer's friendly nor there is no safe guard against low price of produce in the face of high cost of production. The situation as such provides sufficient ground for depression of the farmers leading to suicide.

Table 7. Market as cause of farmer's suicide

Sr. No.		Scientists	Farmers	Polled	Rank
1.	Low market price	1.48	2.68	2.08	II
2.	Non-disposal of farm produce	1.76	2.12	1.94	III
3.	Exploitation by business people	1.56	1.68	1.62	V
4.	Distress sale	1.72	2.00	1.86	IV
5.	No guarantee of procurement	1.96	2.28	2.12	I
	Average	1.41	2.15	3.84	-

7. Policy protection

In a welfare country like ours the interest of the farmers is to be safe guarded. The safe guarding interest of the farmers comes from Govt. The reaction of the sample with regard to policy protection is given below.

Pooled scores revealed that lack of production incentives, lack of protection to producer, lack of crop insurance, not treated as per industries in case of heavy loss lead farmers to feel that present policy of the govt. was not farmers friendly. In face of subsidies, financial help for draught and flood, the farmers feet govt.'s aid

was quite insufficient for survival for which farmers suicide take place. Compared to the scientists, farmers were more vocal about policy of govt. which does not protect them. In the views of scientists, lack of production incentives and crop insurance were two major factors which brought depression in the mind of farmers against lack of protection to distress farmers and lack of friendly farm policy of farmers. In short, present policy of govt. for farmers is not much helpful to the farmers for which farmers do not find alternative and forced to commit suicide.

Table 8. Helpfulness of Govt. policy in preventing farmers' suicide

Sr. No.	Reasons	Scientists	Farmers	Pooled	Rank
1.	No insurance of crop	1.80	2.12	1.96	III
2.	No Protection to producer	1.56	2.64	2.10	II
3.	No Production incentives	1.80	2.80	2.30	I
4.	Not treated at par industries	1.52	2.40	1.96	II
5.	No farmer friendly policy	1.52	2.68	1.94	IV
	Average	1.64	2.52	2.05	-

8. Technology

Now many farmers raise question that farm technology advocated to them is not that much remunerative to meet minimum requirements of living. Many farmers argue that farming is becoming loss concern year after year and the farmers have no strength to adjust any more. The question regarding that how much profit a technology can bring in event of high cost of production is a matter of debate. The views of both scientists and farmers were examined which yielded the following results.

The results revealed that present technology advocated to the farmers was not profit oriented, not suiting to small and marginal farmers, not

remunerative and not market driven. He farmers had more negative views about technology on profit point of views than the scientists. The scientists felt that technology not suiting to small and marginal farmers and being not remunerative might be the major cause of farmer's dissatisfaction while farmers realized technology not profit oriented in the present neither market nor is of much remunerative for which farmers felt helpless to maintain the family. When situation becomes grave, the farmers end their life imaging a dark future.

	O.				
Sr. No.	Reasons	Scientists	Farmers	Pooled	Rank
1.	Technology not remunerative	1.20	2.52	1.86	III
2.	Technology not market driven	1.08	2.32	1.70	IV
3.	Technology not profit oriented	1.48	2.64	2.06	I
	Technology not suiting small	1.40	2.40	1.90	II
	and marginal farmers				
	Average	1.29	2.47	1.88	

Table 9. Role of technology in farmers' suicide

9. Weak psychology

Some scholars attribute that weak psychology of farmers; particularly small and marginal groups do not have risk bearing capacity and feel distress in event of any deviation from normal situation. When crop fails those with weak psychology take early decision to end their lives. The same principle holds good for general suicide also. The reaction of the sample on this account was examined which provided the following results.

Analysis of data provide an interesting result. Practically there were no difference in opinion at total level whereas significant difference was observed in case of frequently depressed mind of the farmers. Scientists felt that mind of the farmers remain depressed without much cause, afraid of future is the major concern for them as pointed out by the farmers.. Afraid of future, low risk bearing capacity, feeling of isolation in family were the major causes of weak psychology of the farmers as said by the scientists. The farmers next to afraid of future, cite feeling of insecurity, low risk bearing capacity and isolation in family were the major causes of depressed psychology. Prolonged depressed mind lead them to commit suicide.

Table 10. Causes of weak psychology of the farmers

Sr. No.	Reasons	Scientists A	Farmer B	Pooled Average	Difference (%) A-B
1.	Frequently depressed mind	2.44	1.88	2.16	22.95
	Low risk bearing capacity	2.32	2.20	2.36	5.17
3.	Afraid of future	2.40	2.52	2.46	4.76
4.	Feeling of isolation in crop failure	2.12	2.08	2.10	1.88
5.	Feeling of insecurity	1.84	2.32	2.08	20.68
	Average	2.22	2.20	2.23	0.90

10. Overall difference between scientists and farmers on factors of suicide.

About eight important factors of suicide have been included in the study. To have a view on overall difference of the two samples, the data are presented in following Table 11.

The analysis showsed that scientists and

farmers were unanimous on factors like crop failure, pressure of credit agencies, social factors, and weak psychology as factors leading to farmer suicide but had difference in views about the factors of economic reason, market, policy protection and technology. But in general these eight factors more or less influence farmers to take extreme step like suicide.

Table 11. Difference in view about factors of suicide

Sr. No.	Factors	Scientists	Farmers	Difference (%)
1.	Crop failure	2.18	2.24	2.67
2.	Pressure of credit agencies	1.98	2.13	7.04
3.	Economic reasons	2.16	2.48	12.90
4.	Social reasons	2.08	2.08	0.00
5.	Market	1.41	2.15	34.42
6.	Policy protection	1.64	2.82	41.84
7.	Technology	1.29	2.47	47.77
8.	Weak Psychology	2.22	2.20	0.90

11. Relative contribution of factors to suicide

The study analyzed factors of suicide under eight major headings. While drawing a conclusion as which factor contributes how much to such unfortunate event, the results were obtained as contained in Table 12. Relative contribution, market and crop of different factors of suicides are given in table above. The maximum contribution is observed in case of weak psychology followed by crop failure, market, failure of policy protection and social reasons. The other contributing factors in order were economic reasons, pressure of credit agency, and non-remunerative technology.

Table 12. Contribution of factors to suicide.

Sr. No.	Factors	Score	% of
110.		Average	contribution
1.	Crop failure	2.16	13.27
2.	Pressure of credit agencies	1.89	11.61
3.	Economic reasons	1.94	11.92
4.	Social reasons	1.98	12.16
5.	Market	2.15	13.21
6.	Policy protection	2.05	12.59
7.	Technology	1.88	11.54
8.	Weak Psychology	2.23	13.70
	Total	16.28	100.00

CONCLUSIONS

The study on Farmer Suicide: A ground level study conducted in Odisha with a sample of 50 respondents consisting of agriculture scientists and farmers with equal proportion lead to arrive at the following conclusions.

- Farmers commit suicide because of multiple factors. These are crop failure, pressure of credit agencies, economic condition, social situation, poor market, non-remunerative technology and weak psychology.
- 2. Crop failure is attributed as major cause for farmers suicide. High cost of labor, climatic hazards and high cost of inputs are the major reasons of crop failure.

- 3. Pressure of credit agencies as cause of farmer suicide is well viewed by scientists as well as farmers. Less period for payment, increased pressure for repayment, high rate of interest are cited as the major components for which farmers feel frustrated and attempt to end their valuable -lives.
- 4. Poor economic condition and inherited poverty force the farmers to commit suicide. Increased cost of living, insufficient farm income and inherited poor economic condition are the major causes for poor economic condition which compel them to end their lives.
- 5. In social life, farmers feel frustrated because of unpaid loan for which they bear social stigma increased family burden expansion of aspiration of family members specifically children and non cooperation of family member to bear with poverty force the farmers to escape from world.
- 6. Poor market structure has been the cause of acute poverty of the farmers. Non guarantee for procurement by Govt., low market price of farm produce and non —disposal of produce push farmers into depressed situation leading to suicide.
- 7. Present farm policy is not much helpful to farming communities. No production incentives, no protection to produce at the time of problem, and absence of crop insurance push the farmers into darkness of un-certainty, where he finds ending of life is the only solution.
- 8. Present farm technology is not that much remunerative to allow small and marginal farmers to have at least a meaningful living. The technology is not profit oriented, not suiting to small and marginal land holding, nor market driven. It is evident that being whole life in farming, the condition of farmers has not changed much compared to other walks of life.
- 9. Weak psychology of rural famers constituted by elements like, afraid of future, low risk bearing capacity, frequently depression lead farmers to end their precious lives.

Paper received on : October 4, 2012 Accepted on : October 29, 2012