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Research Methodology

3.1 Introduction

Suicide has been one of the leading causes of unnecessary premature death. Edwin S Shneidman considers suicide as a multi dimensional malaise in needful individuals who perceive suicide as the solution to their problems. The changing social system in our society, e.g.- fragmentation of joint family, breaking up of social support system, disintegration of value system of life, ruthless and unhealthy life style in our culture are some social causes of suicide. Effects of consumerism and ruthless life style lead to debt traps and financial crisis that often ends up in suicide. Suicides are tragic and puzzling phenomenon. Moreover, it is very difficult to ascertain the reasons why individuals so callously end their own life. According to a global level study it is estimated that about one million people kill themselves every year. (Raju M.D, 2004) This study attempts to find out the psychosocial and economic factors that lead farmers to suicide. It also tests the degree of the stress of widow’s and the capacity to cope with stress in the following two groups, vis. test group and control group. The test group comprises of people who have received social work intervention from social work agencies and the control group belongs to those who have not received any assistance from social work interventions. However, both these groups are identical in respect of their behaviour towards the phenomenon considered.

3.2 Statement of the Problem

The widows are the victims of farmers’ suicide. The widows, already under their husband’s debts, have no access to any income source, no skills other than agricultural labour and no clear title right to the land. Besides, there are children who need to be clothed, fed and educated. These women are financially, emotionally and educationally ill equipped to cope with all these sudden responsibilities. The government has been making ex-gratia payments, but such dole outs will not help. The multiple forms of violence done against widows are known. Yet, it is astonishing that very little data is available. This is because of the persistence of the myths that widows are being taken care of by their families. They are always neglected in society. Their pains and problems are unique and unparalleled one with social shame and isolation since their husbands committed suicide. In this past decade one of the
worst disasters that happened in Kerala is suicide of farmers, specially in Wayanad and Idukki districts. Without understanding the reason behind suicide, one cannot adequately take remedial measures to combat the problem. The problem of suicide among farmers are widely discussed by people from various walks of life like politicians, journalists, social workers, philanthropists, psychologist, psychiatrist, center and state governments and many surveys and study reports are being published. Without adequate data it will be impossible to map the economic, social and political vulnerabilities of widows and ensure that justice is delivered to them. There is no system to understand the extend of their stress and their stress coping style. In this context it is necessary to study the pathetic situation of widows, the interventions that are carried out by various organizations of government and non government and how far they are effective, and the interventions that need to be done adequately. This has urged the researcher to have a focused study in the psychosocial factors leading farmers to suicide and social work intervention among their widows in Wayanad district.

3.3 Significance of the Study

The present study takes account of the problems that are widely experienced by the farmers in relation to social, economical, political and international involvement in marketing processes. These involvements are critically evaluated. The impact of these involvements on marginal farmers, the issue of suicide and problems of widows are also discussed.

3.3.1 In India

“The Indian farmers live in debt, die in debt and bequeath it to their children”. Indian agriculture is in a state of crisis on account of the following reasons. They are, farmers’ indebtedness and suicide, the stagnation of agricultural domestic product (GDP), the fall in per capita GDP in agriculture, the increased volatility of the output, greater susceptibility of Indian prices to international price movement, rising cost of production. The impact of economic reform in the field of agriculture in India and other such developing economics are liberalization, privatization and globalization. These are three pillars on which the edifice of the new economic policy has been created in India.
The reasons for agrarian distress in India lie in the conjunction of the changing nature of agriculture and democratic politics. With cultivation becoming an unrewarding occupation, the growing disparities of wealth between the rural and urban areas, the inability of farmers to unite and bring pressure on the governments and a disjuncture between the interests of the farmer and those of the political representatives have all led to the neglect of agriculture and deterioration in the conditions of farmers.

National sample survey organization has carried out a survey in 2003 to assess the situation of farmers in India. Half of the farmers are indebted and much of the indebtedness was due to agricultural expenses, inequality in income between the rural and urban households. The gulf between the cultivators and non-cultivators have been growing, the changed pattern of land holdings, changed cropping pattern due to a shift from light crops to cash crops, liberalization policies which prematurely pushed Indian agriculture into the global markets without a level-playing field, heavy dependence on high-cost paid out inputs, growing costs of cultivation, volatility of crop output, market vagaries, lack of remunerative prices, indebtedness, neglect of agriculture by the government, decline of public investment, break up of joint families, individualization of agricultural operations, etc., speak of the deteriorating nature of Indian agriculture.

It is to be noted that though India has witnessed worse agrarian distress in history than the present situation, farmers had not committed suicide. According to an official statistics there are nearly 2 lakhs farm suicides since 1997. According to the National Crime Bureau Record (NCRB), 199132 farmers have committed suicide in India between 1997-2008. This has been happening in droves and the frightening phenomenon continues to persist and recur year after year, without any sign of abatement. In as much as these suicides reveal the plight of the victim, they also tell us a great deal about the plight of the farmers who are alive but whose condition bears a close resemblance to that of the victim. The condition of our farmers constituting about 65 percent of the population (Census, 2001) is nothing but dignified slavery.

3.3.2 In Kerala

Kerala agricultural sector is unique in several ways; some of its special features are a highly fragmented and small size of holdings. In the plantation sector, homestead farming with mixed crops yielding high income, a large area under commercial crops, especially capital intensive perennial free crops, export orientation of crops, such as
spices, cashew, rubber, coffee, tea, vanilla etc., are happening. However, for farmers using credit and hired labor-intensive cultivation lead to a higher indebtedness. Some of these features are found to be the handicaps of the sector in the open trade environment that has emerged after the formation of the World Trade Organization (WTO). As a result of the trade liberalization, while exports of agricultural commodities from the state declined, there was a rise in imports which led to a fall in domestic prices of commodities and rise in its volatility. This intensified the problems already faced by the agricultural sector in the state due to the high cost of cultivation and stagnant productivity etc. (Joseph and Joseph, 2005 and Jerome, 2005).

During the last few years, the problem worsened due to deficiency in rain fall, sharp decline in prices, lower production and the consequent increase in debt burden of farmers. As a result, close to 2000 farmers committed suicide in the state (GoK 2006). Exports of commodities from the Kerala suffered a setback in recent years. There was a rise in the import of commodities which were in fact produced and exported from the state to decades together.

The agrarian crisis and farmer’s suicides in Kerala are closely linked to the neo liberal policy that the government implemented in the country in the recent past. The association between the two is more in the regions of the state that are heavily dependent on export-oriented crops such as coffee and pepper. The worst affected are the small farmers, as they are more vulnerable to crop losses and price declines. Unless the plight of farmers is addressed in terms of changing the macro-policies regulating taxes, prices and imports, the condition of farmers cannot be improved on a sustainable basis. It can be done either by increasing the availability of institutional credit or providing some alleviatory sops to the victim of suicide families.

3.3.3 In Wayanad District
Wayanad is basically agrarian, with plantation economy playing a major role. Of the total 2131 Sq.Km of land 78,787 hectares is forest, forming 37% of the total area. 1142 Sq.Km of the total area is used for agriculture which forms 54% of the total land area of the district. The average size of land holding is 0.68 hectares. Census of India 2001 reveals that 47.3% of the total work force of the district is involved with agriculture while the figure for state of Kerala is 22.8 percent. Coffee in the district shares 33.65 percent of the total cropped area in the district and it covers 80 percent of the total coffee plantations in the state of Kerala. Other major crops are pepper,
coconut, rubber, areca nut, cardamom, and ginger. During the last 10 years, Wayanad has earned Rs. 4192.48 Crore through the export of coffee alone. Since this district produces mainly cash crops and earns a good share of foreign exchange to the national exchequer, the state and central governments have a special responsibility to protect the agro eco system and economy of Wayanad. Much of the paddy field of the district is being converted for banana and ginger cultivation. Paddy fields are increasingly being converted for ginger/vegetable cultivation.

From the last decade the economy is suffering from severe devastation and the people in this district faces various problems. The total destruction in agricultural sector crushed the economic background of almost all families. The difficulties in meeting daily needs of one’s own as well as the dependents became enormous challenges to the family heads as they move through huge financial debts. The following are the major setbacks suffered by the farmers of the district: prize fall of agricultural produces, lack of proper marketing, crops failures due to crop diseases, wild animal’s attack and natural disasters, diminishing of fertility of land, high production cost and low income, increased use of chemical pesticides and fertilizers, indebtedness of farmers and lack of repayment capacity, lack of industries, lack of processing industries for agricultural products for value addition and lack of support price for agriculture products. Thus, the agriculture became unreliable means of living and the people of Wayanad became the victim of the entire crisis. These difficulties led the farmers into the trap of indebtedness and gradually to the clutches of suicide. The sudden demise of the responsible member of the family leads to social maladies or psychological distress. Often the huge responsibility or the family burdens, with the mounting debts are shifted to the shoulder of the spouse of the household. The widows of farmers who committed suicide are forcibly drawn into insurmountable tasks with huge social and economic implications. There are also some cases in which the children in their younger age are compelled to take up harder tasks beyond their tender age. For example, the responsibility to their ailing parents who are bent with old age and chronic illness.
3.4 Objectives of the Study

i). General Objective

The overall objective is to study the psycho-social factors leading farmers to suicide and social work intervention among their widows in Wayanad district. That includes the agrarian crisis, the trend of farmers’ suicide, stress and stress coping mechanism of widows. The study has a social work intervention perspective relating to the victims of farmers’ suicide.

ii). Specific Objectives

1. To identify the economic factors leading farmer’s to suicide.
2. To identify the psychological causes behind the suicide of farmers.
3. To assess various social factors behind farmer’s suicide.
4. To measure the stress level among the widows of the farmer’s committed suicide.
5. To examine the stress coping mechanism of the widows.
6. To examine the impact of social work interventions among the widows.
7. To compare the stress level and stress coping mechanism of widows with and without social work intervention.

3.5 Clarification of Concepts

1. Factors

Operational Definition: In this study factors mean the causative reasons for suicide of farmers.

2. Economic Factors

Operational Definition: by economic factors the researcher means the economic factors collected by the economic assessment schedule prepared by the investigator. The points of economic information are annual income, source of income, land holdings, lease land, crop disease, low prize, natural calamity and crop failure. Questions related to loans and its sources, use of loans, debt, family budgeting reasons for non repayment of loans are also discussed.

3. Debt

The state of owing money (Compact Oxford English Dictionary)
**Operational Definition:** In this study debt means the state of marginal farmers and farm laborers who have borrowed money either from banks or from any other sources which need to be paid back with interest.

4. Social Factors

**Operational Definition:** by social factors the researcher means the factors collected by the social assessment interview schedule prepared by the investigator.

This assessments includes questions related to social environment i.e. consumerist attitudes, family relationships, and family isolation. The problem of the family is not known by others which are conducive to suicide. The involvement of the person in society’s social organizations, his engagement in social activities, social contacts, and spiritual exercises are also include in social factors.

5. Psychological Factors

**Operational Definition:** by psychological factors, the researcher means the psychological factors collected by the psychological assessment interview schedule prepared by the investigator.

Psychological factors measure the behavior inclusive of the emotional aspects i.e. anger, fear and stress, of the farmers who have committed suicide. It also includes the person’s particular tendencies such as avoidance, violent behaviors, depression, alcohol dependency, lack of sleep, sexual behaviors, values, attitude towards life and belief system. This information is collected from the widows of farmers who have committed suicide.

6. Farmer

**Definition:** farmer is an agriculturist, cultivator, grower and someone concerned with the science or art or business of cultivating the soil. Farmers also mean the agricultural laborers. (According to Leonard, 1920-1999 American civil rights leader)

**Operational Definition:** by farmers the researcher means the farmers of Wayanad District, who have committed suicide between the years 2000 to 2008, and the people who have land below 5 acres, or leased land property for cultivation and agricultural laborers in other terms.
7. Suicide

*Definitions:* “Suicide is the death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result.”

(According to Emile Durkheim)

*Operational Definition:* by suicide the researcher means the behavior of farmers who takes one’s own life from the painful worldly existence and as certified by the police authorities.

8. Widows

A widow is a woman who has lost her husband by death and not married again.

*Operational Definition:* by this, the researcher means the widows of the farmers who committed suicide, between the age group of 25 to 55 years of age.

9. Stress

*Definition:* Stress is a term used mostly in physics to mean strain, pressure, or force on a system. When used in relation to the body cells, it describes the effects of the body reacting, that is, the building up of pressure, the strain of muscles tensing. Stress is taken to mean a fairly predictable arousal of psycho physiological (mind body) system which, if prolonged can cause fatigue or damage the system to the point of malfunction and disease.

*Operational Definition:* by stress the researcher means the stress of widows of the farmers committed suicide. Stress is created in a person in acceptance of a hard reality that they have lost their husband, leaving behind a big responsibility of bringing up the children, the burden of debt and other social isolation and shame, and a realization of no means to live, even their belongings are often mortgaged.

The tool on mental stress is a standardized scale adapted from R.S. Eliot-stress personality test, “From Stress to Strength –How To Lighten Your Load And Save Your Life (New York: Bantam, 1994).

10. Stress coping mechanism

*Definition:* Stress coping refers to the cognitive, behaviour and emotion based mechanism by which people manage the stressful situations (Moss- Morries and Petrice, 1977).

*Operational Definition:* by stress coping mechanism the researcher in her study means the motivating factor that gives a push in moving on with life. The motivating
factors like love for children, faith in God, loyalty to husband, respect for the people around, involvement in social activities of the community and participation in family functions are involuntarily used as a mechanism to cope with stress of life as a widow of the farmer committed suicide.

11. Social Work intervention

*Definition*: social work is carried out by trained personnel with the aim of alleviating the conditions of those people suffering from social deprivation. By intervention, the action or process of intervening, or interference by a state in another’s affairs. (Compact Oxford English Dictionary).

*Operational Definition*: by social work intervention the researcher means the interventions by various agencies and researcher, and its impact on widows on different levels such as, religion, age, qualification and occupation.

12. Impact

*Operational Definition*: The changes that comes on widows due to the different interventions given by various organizations.

3.6 Variables

1. **The independent variable:**

2. **The dependent Variable**
   - Farmer’s suicide, stress of widows and stress coping mechanism of widows are the dependent variables.

3.7 Hypothesis

1. Psychological factors and social factors of farmers committed suicide are positively correlated.
2. Higher the qualifications better the social factor of farmer committed suicide.
3. Higher the qualifications better the psychological factor of farmer committed suicide.
4. Lower the age of widows higher the stress level.
5. More the number of children higher the stress level of widows.
6. Higher the social work interventions lower the stress level of widows.
7. Higher the social work intervention higher the stress coping mechanism of widows.
8. There is significant difference in stress and stress coping mechanism of widows who have received social work intervention and those who have not.

3.8 Research Design

Research design of the study is descriptive and diagnostic in nature. This particular design was selected to examine the causes behind the suicide of farmers in Wayanad District and to assess the stress level of widows and their stress coping mechanisms. Moreover, to assess the difference in stress and stress coping mechanism of widows who have received social work intervention and those who have not received social work intervention. It also describes in detail the relationship between the dependent and independent variables.

3.9 Sampling

A sample is a smaller representation of the population. It is a small group, which represents all the traits and characteristics of the population under study.

3.9.1 Sample Size And Procedure

<table>
<thead>
<tr>
<th>Total Population</th>
<th>Sample size 1/7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1690</td>
<td>241</td>
</tr>
</tbody>
</table>

In this study stratified random sampling is used. The strata represent 25 Panchayaths and 1 Municipality of the Wayanad district. For selection of item for the sample from each stratum researcher resorted to simple random sampling. The number of items selected from each stratum is through a method of proportional allocation under which the size of the samples from the different strata are kept proportional to the size of the strata, 1/7th of the population.
### Table 3.2 The table of sample size (Detailed)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Stratum (Panchayat)</th>
<th>Population (Suicide)</th>
<th>I/7 of sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thavinjal</td>
<td>139</td>
<td>20</td>
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<tr>
<td>2</td>
<td>Ambalavayal</td>
<td>137</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Panamaram</td>
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<td>17</td>
</tr>
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<td>4</td>
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<td>105</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Poothady</td>
<td>104</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Pulpally</td>
<td>101</td>
<td>15</td>
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<td>7</td>
<td>Meenangadi</td>
<td>85</td>
<td>12</td>
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<tr>
<td>8</td>
<td>Mullankolli</td>
<td>83</td>
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<td>9</td>
<td>Nenmeni</td>
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<td>26</td>
<td>Vengapally</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1690</strong></td>
<td><strong>241</strong></td>
</tr>
</tbody>
</table>

**Sample for case study**

Of the total respondents in the study, five subjects were taken for case study from different socio-economic and religious background. People involved with and people without involvement in any organization were chosen for the case studies.

In selecting the widows the following inclusion criteria were used.

**Inclusion criteria**

1. Only widows of the farmers who committed suicide were selected.
2. Widows between the age group of 25-55 were selected
3. Farmers who committed suicide between the years 2000 to 2008 were only considered.

4. Widows of only small farmers and farm laborers were selected. (By small farmers the researcher means land holders below 5 acres).

Samples were selected through certain inclusion criteria as mentioned above. All samples satisfying the inclusion criteria have been selected through survey method. Thus, a total of 241 samples were selected. (14% of the universe)

3.9.2 Unit of study
The unit of study is the widow of the deceased farmer who was the first victim of the act of suicide.

3.9.3 Universe of Study
The universe of study is Wayanad district in Kerala state, in which 60 percent of the population is depending on agricultural sector in farming or in farm labour. There are 25 Grama Panchayats and one municipality. It has the second largest number of suicide in Kerala. The universe comprises of all section of population residing in Wayanad district. The universe of the present study is the widows of farmers who have committed suicide in Wayanad District in Kerala state.

Sample size for the study is 241 which is the 1/7 of the total population of 1690 suicide cases identified by Kerala Social Service Forum’s (KSSF) called save Farmers Campaign (SFC) in Wayanad District, with the help of 6 coordinators and 26 facilitators worked in all the Panchayats of Wayanad. The procedure involved in collecting 1690 cases where the following: 1).Information from the Crime Record Bureau of Kerala Police, 2) Verification of the records with the concerned Villages/Panchayat offices. 3). Verification of the above data rechecked and ascertained by local health care workers, ward volunteers, Anganvadi workers and ‘Kudumbashree’ units.

3.10 Data Collection
The actual data collection period for the study was 21 months, from November 2007 to August 2009. The period also included the initial qualitative components. Interviews were carried out by researcher and she was assisted by six trained field staff who were post graduates in social work. They were trained for befriending the
victims of suicide, as they were working for a collective NGO movement called ‘Save Farmers Campaign” (SFC) supported by CARITAS India – Delhi.

The researcher gave them special training to facilitate uniform collection of data. The schedule was administered by the interviewer in local language using translated version of the instrument, the respondents were also subjects. It took more than two to three hours to complete one interview, longer hours due to the widows pouring out of their sorrows, grief and struggles of life, especially for those who lost their husbands recently. Therefore, the interviewer had to bring them back to their normal mental and emotional state of mind before the interviewer could take leave of them. In many cases it helped them to ventilate their pent up emotions.

3.10.1 Pilot Study
A pilot study was conducted on 20 widows of farmers committed suicide, using the interview schedule. Samples taken from the five Panchayaths with the help of an NGO with these following objectives

1. To examine the general scope of the study.
2. To select the sample for the study.
3. To obtain the co-operation of the NGOs and their field staff to get support for the study.
4. To conduct seminars for widows and farmers and discuss with professionals of different field related to farm and farming, to get more clarity to the farmers crisis.
5. To decide upon the method of data collection.

3.10.2 Sources of Data
In order to get a clear cut idea of the study, the researcher conducted many informal discussions with the competent professionals in the field, reviewed previous studies, collected articles, referred many books, journals, magazines, survey reports, newspapers and internet sources that helped to gather relevant information in this particular field of study. For the collection of primary data, the researcher used interview schedule, which covered all the areas that were intended to be studied. To substantiate the study few case studies and focus group discussions were also carried out.
3.11 Tools of the study
The tools were prepared in English and hence, it was translated into Malayalam by a bilingual person and translated back into English by a third person to ensure that the meaning had not been lost in the processes.

These measures were then tested on 20 subjects to guarantee that the questions were comprehensible to the target population and were unambiguous. After the pre-test, the schedule was refined and finalized with meaningful response categories. This process also assessed the feasibility of carrying out the study. Background information data of the respondent, profile of the farmers committed suicide, economic data assessment, psychological factors assessment, social factors assessment, stress coping methods of widows and social work intervention relating to widows of farmers were collected by interview schedule formulated by the researcher. Each respondent is asked to rate each items, on a 1 to 5 response scale. The tool on mental stress is a standardized scale adapted from R.S. Eliot-stress personality test.

3.11.1 Pre-test
A pretest was carried out administrating the tools, to twenty widows/families. Efforts were made to collect their personal data, details about the farmers committed suicide, the psycho-social, economic factors that lead farmers to suicide, whether the families are informed of the social work agencies, their interventions and other care providers and the stress coping pattern of widows. In the interview schedule, some relevant questions were added and some questions which were found difficult to find answers were omitted.

The stress coping pattern assessment questions were retained, as such it was from standardized scale. This helped to get an insight about the collection of data to deal with the respondent in suitable manner.

3.11.2 Interview Schedule
There are six parts in interview schedule as follows-

Part 1. Profile of widows and farmers who committed suicide
1. Profile of the widow: This part of the interview schedule is to collect the information regarding relevant variable such as age, education, occupation, religion, Panchayat and family constellation of the widow.
2. Profile of the deceased farmer: This part of the interview schedule consist of age, qualification and the month and method adopted by the farmer for committing suicide.

**Part 2. Economic factor**

This part of the interview schedule deals with the economic factor of the household. There are 10 items which include information regarding monthly income, yearly income, main source of income, loan taken, the source of loan, use of loan, repayment of loan, and reason for non-repayment of loan, land holding, and main cultivation.

**Part 3. Psychological factor of the farmer committed suicide**

Psychological factors of farmers committed suicide, there are 15 statements to elicit the psychological factors of the farmer committed suicide. Those are categorized into 4 components each including sub statements.

1. Behaviour and Attitude- consisting sociable and friendly nature, not losing temper, calm at facing issues, does not quarrel with wife, do not speak about suicide, and happiness.
2. Habits- consist of sound sleep, good appetite, self care, neat and tidy, not alcoholic, no smoking and healthy sexual relationship.
3. Medication – consist of only one statement i.e. whether the deceased was under medication for psychiatric illness.
4. Heredity- consists of one statement about the history of suicide in the family and among close relatives.

**Scaling and Scoring**

There are 15 statements on a five point scale – strongly disagree, disagree, neutral, agree and strongly agree. The statements with positive response were scored as 1, 2, 3, 4 and 5 respectively.

*The test split half reliability test coefficient alpha of 0.73 was found.*

**Part 4. Social factor assessment**

There are ten statements in this interview schedule to collect mainly the details regarding the contact of the farmer and his household with social institutions of the society where they lived. All ten statements were categorized into three components.
1. Relationship with organization – consisting of five statements, help from the social work organization, help from government, help from religious community, support of women groups and support from political parties.

2. Interest shown by the people - consisting of three items, concern of relatives, concern of neighbours and concern of own caste/community.

3. Evaluation by outsiders - consisting of two statements, no blame by relatives or neighbours and competitive spirit of the husband.

**Scaling and Scoring**

There are 15 statements on a five point scale – strongly disagree, disagree, neutral, agree and strongly agree. The statements with positive response were scored as 1, 2, 3, 4 and 5 respectively.

**Part 5. Stress Coping Mechanism of Widows**

The stress coping mechanism data schedule was prepared by the investigator, from a prior encounter with few widows and in the light of pilot study. Their response to the stress coping pattern helped the researcher to form the questions that were relevant. There are ten statements and those were categorized into four-

1. Spiritual Aspect – consist of three statements; faith in God, God forgives the human faults and no feeling of vengeance.

2. Love and loyalty – consist of two statements; love for children and loyalty to deceased husband.

3. Optimism – consist of two statements; everything happens for good, and do not entertain negatives.

4. Responsibility and Social Consciousness – consist of three statements; sole responsibility of the family, tolerance in consideration of the public, and active involvement in the community and family.

**Scaling and Scoring:** There are ten statements on a 5 point scale 1 – 5, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5= strongly agree. Statements are indicative of positive response. For the 10 statements, the value on the scale range from 10 – 50 score. Score 10 would be the most unfavorable response and scores from 11 to 29 are negative responses. 30 would be neutral response and score 50 would be the most favorable response. 31 to 49 are positive responses. Accordingly, higher the score better the response vice versa.

The 13 items that included in this variable addresses the importance of social work, the interventions that are carried on by social work agencies, the relationship of the respondent and her household with the social work agencies, counseling, awareness programmes, link between the farmer and resources, rehabilitation of the victim of suicide, prevention of suicide, imparting information and knowledge about governmental scheme and social securities and develop skills for better management of household with available income. All ten statements are categorized into four.

1. Experience of Widows – consist of 6 statements; help from social work agencies, contact with social work agencies, social work agency as a catalyst, help from social work agency in cash and kind, social work agency as a link to resources, and gives counseling.

2. Expectation of widows from social work agencies – consists of four statements; can help farmers, can prevent suicide with timely intervention, has role in rehabilitation of the families of farmers committed suicide, need not to provide cash or kind rather impart skills and knowledge in handling problems.

3. Reasons stated for suicide – consist of two statements; lack of knowledge on home and money management, and lack of knowledge and information about types of loans, cultivation related markets demands.

4. Profession of social work – consist of one statement; indicative of the awareness of widows of this profession. Agency does employ professional social workers.

Scaling and Scoring: For the 13 statements, the values on the scale range from 13-65. Score 13 is the most unfavorable response, score 39 is a neutral response, and score 65 is the most favorable response. If the score happens to be above 39 it would mean that it is a favorable response. Score below 39 would mean an unfavorable response and a score exactly 39 would be suggestive of a neutral response. Higher the score, better the stress coping mechanism of widows.

3.11.3 Stress Personality Assessment Scale (R.S. Eliot, 1994)

There are 20 items in this stress personality assessment scale. For a positive statement, a weightage of 1-4 was given for the responses to a ‘Never’ to ‘All the times’. For a negative item the weightage was reversed as 4-1 for the response- All the time to Never. A response sheet was not scored if there were more than one
response for a particular item or if there were three or more omitted item. The total score of the draft scale was calculated by summing up the weightage of all the items in a scale.

The total score ranges is 20 to 80. The high score indicates high stress level.

The author of this test provides the following analysis

**Scoring:**

Score 20-29. One is own best ally, with a high degree of (control) self-esteem, and identity.

Score 30-49. Have a healthy sense of control over your life, but occasionally negative self-talk causes you to feel anxious in stressful situations.

Score 50-69. Options are often clouded and you feel trapped because of frequent negative self-talk.

Score 70-80. Life has become one of crisis and struggle after another.

Reliability is tested by the use of split half reliability test of coefficient alpha of 0.85 was found.

3.11.4 Reliability and Validity

1. Reliability
The average of all possible split half reliabilities, the internal consistency reliability was found with a coefficient alpha and to assess the stability of the scale overtime it was assessed with test – retest reliability of the tools of each objectives. The same measurement was administered on 20 respondents within ten days gap. Then the correlation of both the sets of respondents to the instrument was calculated. The value of each set of measurement is given in scaling and scoring under tool for data collection.

2. Validity
The validity ascertained by sending the test to social workers, social work academicians and experts in social work research. The test used was face validity test.

3.11.5 Observation and Discussion
Since the widows of the deceased farmers were interviewed, the details about the deceased could be collected directly, and the discussion with other members of the family enabled the researcher to know more about the deceased and the widow. The
direct contact with the family also helped the researcher a lot in understanding more about each family. All these helped to make the collection of the data as perfect as possible.

### 3.11.6 Case Studies

Case study is the means to understand, analyze and to interpret the experiences of widows in relation to their stress in coping with the daily demands of the family, social contacts, relationships, faith aspect and economic demands that are faced alone. Rise above or being crushed the social stigma of being a widow. The researcher has done five case studies apart from the quantitative studies. The qualitative studies will give a close understanding of the real victim of farmers committed suicide. From among the selected study subjects, representing different socio-economic and Panchayats engaged in different agricultural occupation, from different religion, with debts left behind by their deceased husbands and those who have received various aids from different organizations and those who have not received any help from any one.

### 3.11.7 Focus Group Discussions (FGDs)

Focus group discussion (FGD) was another tool used to generate data for facilitating interpretations of qualitative result and to obtain new insights and knowledge about the social work intervention and the coping mechanism of widows and their stress level. It also explains how the service providers can be either, assisting them to put up with their maladies or their intervention act as an agent in aggravating their stress situation.

### 3.12 Analysis Pattern

The data collected were edited and coded. It was then entered in SPSS (Statistical package for the social sciences) 19.0 version for statistical analysis. Frequency percentage and cross tabulations analysis were done for background information of respondents and the data of farmers committed suicide. The data relating to factors leading to suicide of farmers, stress scale and stress coping mechanism of widows and social work interventions in working among widows were used custom table for mean value, cross tabulations, statistical tests such as Chi – square, Kruskal-wallis Test, Karl Pearson’s Correlation Coefficient, Mann-Whitny U Test. Cross tabulation for frequency and mean value, were used to test the hypotheses and to generate the results.
of the study. Descriptive statistics like frequency tables and diagrams were also used to present the data. Kolomogorov-Simirnov (K.S. Test), and Split half- Coefficient Alpha to test reliability.

3.13 Theoretical Framework of Suicide

Suicide, although apparently a highly personal act, was explicable only by the state of the society to which the individual belonged. Each society had a collective inclination to suicide expressed in the suicide rate, which tended to remain constant as long as the character of the society did not change. This collective inclination of society influenced the individual and could coerce him to kill himself. A certain number of suicides were to be expected in every society. Serious faults in the social structure can lead to an increase in the suicide rates. The more strongly the individual was integrated with social groups, the smaller was the likelihood of suicide. Therefore, suicide was relatively rare among members of big families and of closely/ knit religious or other social groups.

Emile Durkheim’s theory of anomic suicide was found to be more applicable to this particular study of the researcher. Anomic suicide is based on the notion of regulations. The anomic suicide kills himself because of a change in position so sudden (especially in economic crisis) and unregulated (anomic) that he is unable to cope with it. Durkheim insists that suicide has social rather than individual causes which may be ascertained through the analysis of statistical regularities. ‘In anomic suicide, society’s influence is lacking in the basically individual passions, thus leaving them without a check-rein’. Its counterpart fatalistic suicide is consequences of excessive regulations that of persons with future pitilessly blocked and passion violently choked by oppressive discipline exerted excessive physical or moral despotism. Yet, Durkheim’s primary concern is with those forms of suicide which arise from a lack of social constraint and moral regulation. (Durkheim, Suicide pp 258, 276). The state of crisis and anomic is constant and so to speak normal. From top to bottom of the ladder, greed is associated without knowing where to find its ultimate foothold. Nothing can calm it, since its goal is far beyond all it can attain. Reality seems valueless by comparison with the dreams of fevered imaginations. Reality is therefore, abandoned but so too is possibility abandoned when it in turn becomes reality. A thirst arises for novelties, unfamiliar pleasures, nameless sensations, all of
which lose their savor once known. Henceforth, one has no strength to endure the least reverse (Durkheim, Suicide pp 253,254,256). Financial crisis increases suicides. This is not because it causes poverty, since crisis of prosperity have the same result. It is crisis that disturbs the collective order. Every disturbance of equilibrium, even though it achieves greater comfort and a heightening of general vitality, is an impulse to voluntary death. Whenever serious readjustment takes place in the social order, whether or not due to the sudden growth or to an unexpected catastrophe, men are more inclined to self destruction.

3.14 Ethical consideration

Verbal consent was taken from each respondent before interviewing. The purpose of study, nature of information and method of data collection were explained to them and assured confidentiality of all information. Once the data collection is over, the respondents were given chance to ventilate their pains and burden, widows are helped to relax and get comfort and relief from their emotional stress.

3.15 Chapterisation

The first part of this study concentrates on psychological factors of the deceased farmer specially those of their attitudinal, behavioral, and value system, and on social factors inclusive of economic condition of the family, family’s capacity to relate to societal organizations. The second part of the study focuses on mental stress of the widows and their stress coping mechanisms. Third part of the study is focused on social work intervention among the widows.

3.16 Limitation of the Study

Delicate and sensitive nature of the topic of study was a serious problem throughout this research process. Study on psychosocial factors leading farmers to suicide and social work intervention among their widows was very challenging and it was indeed an extensive study. To make an accurate study on the factors leading farmers to suicide was difficult because, to understand exactly why one has killed himself will not be totally known to others, as the person whom you make study is no more. The evidence that collected were from their dear ones, specially from their widows. The families for obvious reasons were not prepared to divulge full details of the circumstances that led to the suicides. To certain extent, we can rely on the
explanations they provide. Moreover, the unit of the study was too scattered into interior villages. Most of them belong to lower and labor class, found financially too meager, and were barely able to meet their daily demand for food and other amenities. To reach out to their living place was another struggle.

The whole affair of collecting the data was not a pleasant affair for the interviewer. Often the widows were emotionally very down as they had to get back to situation of the loss of their husband. Therefore, the interviewer had to take extra time to get them back to their normal self. Often the effort of the researcher served also as counseling. Thus, data collection took almost two years even with the help of trained staff. The usefulness of the research is revealed when we notice that the researcher’s findings on farmers’ suicide was contradicting to the views of political parties, State and Centre Governments, social workers, social thinkers, NGOs, economists, psychologists and psychiatrists. Thus, literature review serves as the very important part of this dissertation and it has to be studied with extra caution.