CHAPTER- 7
FINDINGS, CONCLUSION AND SUGGESTIONS

7.1 Introduction

Agriculture is the backbone of India which provides employment to more than 50 percent people and food to all. Moreover, it has a significant contribution in the national income and international trade. However, farming sector is in distressed position and a large number of farmers have committed suicide overall India. Maharashtra is also facing this problem in acute position, which is the most developed and leading state of India. This chapter considers findings on responsible factors for agrarian crisis, farmers’ suicide and making remedial suggestions to solve both problems and improve living standards of farm businessmen.

7.2 Conclusion

The agrarian crisis has been not only affected the growth rate of economy but also survival of rural people in India. Maharashtra is one of the states, which facing issue of suicide among farming community. According to the National Crimes Records Bureau Report, almost 295000 farmers have committing suicide during 1995-2014 overall India. In Maharashtra alone, more than 62000 farmers have committed suicides during same period. This epidemic of suicide is borne from the changing agriculture policy according to the new economic reforms in India. The introduction of new economic reforms and liberalisation of economy, large dependence of farm business on monsoon and backwardness of farmers are creating many more issues in front of agriculture sector and it results into increasing farmers’ suicide in Maharashtra and many more states of India. It is indeed, industrial and service sector has been showing positive and higher growth rate because of liberalisation and new economic reforms policy, but it could not be benefited to decentralised sector particularly farming in India. Lack of government efforts to create awareness of changing agriculture policy of India and other major import countries regarding international food standards among the farmers is one of the important factor of increasing distress among farmers.
The present study has following objectives.

1. To know nature, size and other characteristics of suicide victim households.
2. To ascertain source and level of income of suicide victim households.
3. To know size of land holding, availability of irrigation, cropping pattern of suicide victim households.
4. To study productivity of major crops in selected districts and compare to average productivity of nation.
5. To ascertain nature and causes of indebtedness among suicide victim households prior committing suicide and during field visit (2010-11).
6. To study the causes of farmers suicide in different regions of Maharashtra.
7. To know contemporary economic situation of suicide victim household.
8. To study the measures made by government to issue of prevent farmers’ suicides in different regions.
9. To suggest the remedial measures for preventing farmers suicides.

Scope and Limitations of the study

This study considers brief introduction of economic structure of India and Maharashtra. Similarly, it involves detailed study of agriculture sector of India and Maharashtra and selected districts. The research study includes trends of farmers’ suicides in India, Maharashtra and selected districts. Moreover it considers socioeconomic characteristics of suicide victim households i.e. size of family, nature of house, main business, subsidiary business, income of the suicide victim households, per capita income of the suicide victim households and size of land holding, availability of irrigation, major crops of suicide victim farmers, source of credit, amount of outstanding credit, reasons of indebtedness. Similarly, sex, age, marital status, caste, means adopted for committing suicide, habit of suicide victim, immediate cause of suicide and post suicide socioeconomic situation of suicide victim households are also considered in study. Moreover, intensity of various causes of farmers’ suicide is also calculated by the primary data collected through non suicide victim farmers’.

There are following limitations of the study.

- The issue of farmers’ suicide is national. But area is restricted with the Maharashtra state only.
The period from 1991-2011 is considered for study, although information of farmers’ suicide in Maharashtra is available from 2001. Therefore, analysis about suicide victim farmers’ is for period only 2001-2011.

The present study “comparative study of farmers’ suicide in various regions of Maharashtra during 1991-2011 - causes and measures” is divided into seven chapters.

1. **Introduction and Research Methodology**

   This is the first chapter of thesis. It involves the introduction of the subject, objectives and hypotheses, need and importance, scope and limitations, sample size and sampling methods, statistical tools. The research methodology is given in detail.

2. **Review of literature**

   Review of literature is helpful to understand the basic concepts of subject. It helps to understand the evolution of subject. It involves the review of Ph.D. theses, reference books related to the subject, related articles and government and non-government reports. It helps to enrich the research work.

3. **Status of agriculture in India**

   Agriculture sector is backbone for development of India. The evolution of agriculture in India is explained with the time series. The development of agriculture during planning period is given with the evidence. The chapter is also focuses on land use pattern, employment generation, contribution in economic development, cropping pattern, production and yield of various crops, planned outlay, irrigation extension during pre and post economic reforms period. It represents growth rate of agriculture sector is declining during post economic reforms period due to policy fatigue of central government. It has adversely affected not only yield growth but also will power of farm businessman. The adverse impact of new agricultural policy has seen on the irrigation extension, prices of seeds, fertilisers and pesticides, rural infrastructure development. Moreover, increasing number of unviable operational holdings also affected income, employment level and survival of farm community.
4. **Profile of Maharashtra and selected districts**

   The research area is Maharashtra. Therefore, 13 districts are chosen for primary data collection throughout Maharashtra. The geographical profile, history, land use pattern, climate, demographic change is studied in the chapter. Similarly, detailed agricultural environment of overall Maharashtra and selected districts is given in this chapter and compared with India. It helps to support objectives of study. The chapter reveals that despite of large rainfed area and absence of government support agriculture sector has been performing better way in Maharashtra during globalisation period. However, heavy pressure of dependent, seasonal nature of farm business, increasing number of uneconomic land holdings, uncontrolled market intermediaries, lack of subsidiary business and employment opportunities, declining performance of extension services is affected agriculture sector of Maharashtra. It leads to exploitation of farmers and consequently survival.

5. **Farmers’ suicides in Maharashtra**

   The core theme of the study is farmers’ suicide. The trends and causes of farmers’ suicide studied with the primary and secondary data. Suicide is the social, economic, cultural and national issue in India. The chapter also focuses on government strategy, policy and schemes for preventing farmers’ suicide in Maharashtra. It represents that farmers’ suicide is complex issues and many factors are responsible for increasing farmers’ suicides in Maharashtra.

6. **Data analysis and interpretation**

   This chapter is mainly based on the analysis of primary data. 652 suicide victim cases and 130 non suicide victim cases studied and analysed and interpreted. The data analysis is useful to test hypothesis and make conclusion. The statistical tools like mean, percentage, standard deviation and correlation coefficient are used for data analysis. The hypotheses tested by chi-square and t test method and results are positively support it.

7. **Findings, suggestion and conclusion**

   It is the last core chapter based on the analysis of primary and secondary data. It summarises the thesis. Findings drawn and suggestions are provided on the
basis of primary and secondary data. Further research scope is given with conclusion.

The major thrust areas of agriculture and factors responsible for increasing distress among farmers are discussed briefly as below.

First, an increasing dependency on marketable inputs and uncontrolled prices inputs largely affected agriculture sector in India. This corporate not only increase the prices of inputs, but also sold low quality and sometimes spurious seeds, pesticides and insecticides overall India. Consequently, cost of production has increased rapidly and on the other hand intensity of crop failure. But, government does not have proper legal provisions to take action against them. Therefore, exploitation of farmers is more by traders in Maharashtra.

Second, declining trend of public expenditure on agriculture and allied activities has largely affected prices of fertilisers and seeds, irrigation extension, infrastructure development in Maharashtra rather in India. The central government has spent less than 6 percent amount for development of agriculture and allied activates since 1980’s in five year plans. It was lowest 4.9 percent during ninth five year plan. Similarly, government of Maharashtra was also neglected during recent five year plan. The amount spent on agriculture and allied sector had 6 percent in sixth plan, 4.7 percent in seventh plan and 2.8 percent in eighth plan period in Maharashtra.

Third, commercial banks have not only neglected for providing loans to agriculture sector, but also a number of commercial bank offices have declined in rural areas of Maharashtra. It enables indirectly money lenders. The numbers of bank offices of SCB have declined from 2749 to 2170 during 1991 to 2011 in Maharashtra. As well as, SCB has distributed only 4.6 percent and 1.9 percent credit amount in rural area against total distributed credit in 1991 and 2011 respectively. This policy leads to increasing indebtedness among farmers. Almost 590 (90 percent) selected suicide victim households were indebted and Rs. 94330 was average loan prior committing suicide against the estimated average annual income of Rs. 69190 of 2010-11. Similarly, 528 (81 percent) suicide victim households were indebted during 2010-11 and Rs. 87850 was the outstanding loan amount. Moreover, almost 57 percent selected suicide victim households had non
institutional loan prior committing suicide and 28 percent during 2010-11 in Maharashtra. Most of them had taken their loan at minimum 24 percent per annum interest rate.

Almost 90 percent selected suicide victims were from the working age group, in which 61 percent were from the age group of 26-50 years. Widow women and children of these families are facing acute economic distress due to large number of dependent members and its adverse impact have been send in drop out of children from school, child labour and issue of girl marriage and social insecurity.

More than 70 percent farmers have marginal and small operational holders in Maharashtra. These farmers are economically poor and illiterate particularly in rainfed areas. Absence of holding capacity, dependency on crop loan for input purchase and absence of subsidiary business are largely affected economic status of farmers in Maharashtra. Moreover, uncertainty of rainfall fails the crop one or two consecutive years affect on the food security of farmers and leads to suicidal tendency. The large number of farmers committed suicide were rainfed (75 percent), marginal and small (69 percent), cultivating full year crops in large number across all districts excluding Thane and Bhandara.

Moreover, increasing number of nuclear families in rural areas, lack of irrigation facilities, absence of subsidiary business, seasonal nature of farm business, commercialisation of farming sector and trends of cultivating full year crops particularly cotton, dominant money lenders, low level of minimum support prices, addiction among the rural people, tradition of dowry, family disputes are largely responsible for increasing agrarian distress and farmers’ suicide in Maharashtra.

Therefore, government has appointed many committees and commissions to ascertain the causes of increasing distress among farmers and has announced packages. But packages implemented by the government in Maharashtra could not remove or reduce the intensity of farmers’ suicide. Similarly, it is not possible to overcome this issue through financial support to only suicide victims households. In the words of National Farmers Commission, “the burning issue of agrarian crisis can be solved through structural changes in farming sector through policy
decisions with public participation. The measures should be long term and priority basis overall India.”

In short, farmers’ suicide is a complex and complicated issue in Maharashtra. It is not possible to overcome only through financial provisions and decisions of government. There is a need of public participation for strengthening farming community through creating awareness about global changes, food standards and cultivation methods at community level. Therefore, every village needs to form farmer’s organisation, arrange Krishi Parayana, leave traditional methods of irrigation and use every drop for value addition through only modern methods of irrigation and accounting of farm business.

7.3 Findings

The main findings of research are divided into findings from primary data and findings from secondary data. It has discussed below.

i. Saliend findings from Primary data

1. An average age of family head of selected suicide victim households is almost 41 years. However, family head of 84 suicide victim households had reported 60 and above years old, which are not efficient to take responsibility in our head (see Appendix table 6.3).

2. An average 61.4 percent selected suicide victim families reported are run by male members and rest by the female members. The largest number of families run by female were found in Bhandara district (61.5 percent), followed by 50 percent in Thane and Jalgaon district. Most of the female family heads are recorded widows (see Appendix table 6.3).

3. Average 55 percent selected suicide victim families were reported nuclear. The numbers of nuclear families of selected suicide victim were ranges 33 percent to 70 percent in selected districts (see Appendix table 6.3).

4. It is found that there is a positive relationship between number of farmers’ suicide and nuclear nature of families. The correlation coefficient of number of selected farmers’ suicide and number of reported nuclear families was found 0.98 among suicide victim of selected districts.
5. An average size of suicide victim families is 4.7 persons per household. An average size of family had seen lowest in Wardha district (3.8 person) and highest at 5.5 person per family in Nanded district (see Appendix table 6.5).

6. It is found that 18 (2.8 percent) suicide victim households have a single family member and 62 families (9.5 percent) having two members. Moreover, 23 families don’t have any able person who could take responsibility to run family (see Appendix table 6.5 and 6.6).

7. The number of dependent member had reported more than two in 44 percent suicide victim families of selected district (See appendix table 6.7).

8. The 16 suicide victim families had rented houses and remaining was owned houses, in which leafy 123 (18.9 percent), tin 137 (21 percent), muddy 239 (36.7 percent) and cement 137 (21 percent) (see table 6.2).

9. The 48 (7.4 percent) respondents of suicide victim households reported that they don’t have piece of land and 602 was agricultural land either titled or registered on name of family member (table 6.3).

10. Almost 67 percent and 32 percent suicide victim families reported farming and agriculture labour are main business respectively (see appendix table 6.8).

11. Proportion of SVH doing farming as major business in Marathwada and Vidarbha was comparatively more than selected district of Khandesh and West Maharashtra. Absence of employment opportunities in other field, lack of people willing to join farming as profit making business in Vidarbha and Marathwada are to be found the main causes of largest peoples engaged in agriculture as main business. It is also reported that, peoples do not willing to purchase agriculture land at lowest cost in some blocks of Yawatmal and Wardha district of Vidarbha.

12. The average income of SVH in selected districts was Rs. 55575 from main business (see appendix table 6.8).

13. Almost 54 percent SVH were doing supplementary business to support our families and rest were not any other business. Farming as secondary business was reported by 23 percent, agricultural labour by 26 percent and
4.4 percent SVH had reported other business such as dairy, Pan Thela, hotel, tailor, carpenter, mechanic, general stores and private jobs (see appendix table 6.9).

14. More than 50 percent suicide victim households reported that they were doing main and supplementary business.

15. An average annual income of SVH was Rs. 69190 in selected districts. It means Rs. 190/- per day was average earning of suicide victim families in selected districts of Maharashtra (see figure 6.11).

16. Annual income of almost 54 percent suicide victim households’ had less than below poverty line in selected districts of Maharashtra. The highest number of BPL suicide victim households were in Bhandara district 32 (82 percent), followed in Chandrapur 12 (71 percent) and lowest in Nasik 3 (15 percent) and Solapur 4 (19 percent) among all selected district. However, number of BPL card holder suicide victim household were 44 percent (see appendix table 6.11).

17. Despite of Amravati, estimated BPL suicide victim household of all other districts of Vidarbha, Marathwada and Thane have more than the actual card holders. On the contrary, Jalgaon, Nasik, Solapur and Satara have found more BPL card holders than actual estimated BPL numbers during the field study. It means, government had failed to eradicate poverty in Maharashtra caused by faulty selection of below poverty line people and it adversely affected actual BPL citizens (see appendix table 6.12).

18. An average size of operational land holding of SVH is found 4.7 acre in selected district (see appendix table 6.13).

19. The number of SVH respondents had reported small and marginal land operational holders were 69 percent and 23.6 percent were medium and large operational holders (see appendix table 6.13).

20. More than 70 percent small and marginal suicide victim households had found in Thane (100 percent), Satara (92.9 percent), Nasik (95 percent), Amravati (74.2 percent), Nanded (81.6 percent), Beed (75 percent), Jalgaon (72 percent) and Bhandara (79.5 percent) district (see appendix table 6.13).
21. Almost 165 suicide victim families were reported access of irrigation, which is 25 percent of selected suicide victims. More than 50 percent suicide victims of Nasik (90 percent), Satara (78.6 percent) and Solapur (52.4 percent) have irrigation access (see appendix table 6.14).

22. It is found that largest 35.1 percent marginal land holders suicide victims had irrigation access, followed by 31.8 percent small land holders’ suicide victims and only 9.7 percent medium and large land holders suicide victim. Therefore, higher the irrigation level, lower is the size of land holding in particular region (see appendix table 6.14).

23. Almost 46 percent SVH had access to canal and 26 percent of wells and 20 percent of tube wells among suicide victim households (see appendix table 6.15).

24. Almost 449 (76.5 percent) suicide victim farmers had cultivated two crops, 316 (53.8 percent) three and more crops and only single crop cultivator were 138 (23.5 percent) (see appendix table 6.16).

25. Cotton was the major crop of more than 60 percent suicide victim farmers households, followed by 22.8 percent soybean and rice (7.3 percent) and sugarcane (4.4 percent) (see appendix table 6.16).

26. Almost 65 percent suicide victim farmers have treated long term crop as major crops in selected districts. It means there is positive association between period of crop harvesting and farmers’ suicide (see appendix table 6.16).

27. Soybean was cultivated more than 60 percent suicide victim as second major crop, followed by cotton (8.5 percent), jowar (7.1 percent) and wheat (5.6 percent) (see appendix table 6.16).

28. More than 60 percent suicide victim households of Chandrapur, Wardha, Yawatmal, Amravati, Buldhana, Nanded, Beed and Jalgaon had reported cotton as a major crop. Rice was the major crop of suicide victims of Thane (100 percent) and Bhandara (100 percent). Sugarcane was major crop in district Nasik (31 percent), Satara (60 percent), Solapur (53 percent) of suicide victim households (see appendix table 6.16).
29. The 57 (8.7 percent) suicide victim households had sold their land before committing suicide. A largest number of suicide victim households sold land found in Solapur district 9 (43 percent), followed by Jalgaon 11 (34 percent), Bhandara 4 (10 percent) and Amravati 12 (10 percent) (see table 6.3).

30. Repayment of loan was reported major cause by 22 (38.6 percent), marriage by 2 and other reasons by 33 (58 percent) behind the selling of land (see table 6.3).

31. The 460 (70.6 percent) suicide victims had institutional loan prior commit suicide, in which 27.6 percent suicide victims had loan of commercial banks and 43 percent suicide victims had loan of cooperative banks. Despite of Chandrapur, suicide victims of all other districts of Vidarbha had institutional loan were less than 70 percent of average institutional loanee suicide victims (see table 6.4).

32. 396 SVH (81 percent) had taken loan for crop cultivation, 1.7 percent for marriages and nonfarm business and 12.2 percent for capital expenditure. Moreover, 375 (81 percent) reported proper and productive use of loan, although few district reported less level of productive use of loan (see table 6.6).

33. The 590 (90.5 percent) respondents had reported taken either institutional or non institutional loan (see table 6.7).

34. The 373 (57.7 percent) respondents of selected suicide victims had reported non institutional loan before committing suicide. Hence after, largest 40 percent suicide victims had taken loan from only Sawkar, followed by 10 percent from relatives and 5 percent from friends. However, 212 (58 percent) suicide victims had loan taken for unproductive purposes (see appendix table 6.19).

35. The number of suicide victim households were bound to pay monthly interest rate more than 5 percent were 18 (4.8 percent), 5 percent 125 (33.5 percent), 3 percent 133 (35.6 percent), 2 percent 31 (8.3 percent) and zero interest rate 61 (16.3 percent) (see appendix table 6.21).

36. The reported average institutional loan was Rs. 75460 and Rs. 56140 of non institutional loan. An average loan of suicide victim households was Rs.
94330 from all sources prior commit suicide. It is also found that there is a positive association between reported size of land holding and average outstanding credit and some proportion number of suicide victim all over selected districts (see table 6.8).

37. The number of respondents who reported low level of income were 181 (27.8 percent), crop failure were 209 (32.1 percent), heavy debt were 85 (13 percent), high rate of interest (12.1 percent) and 36 (5.5 percent) other reasons as responsible for increasing indebtedness (see table 6.8).

38. Large number of reported suicide victims was male, which contribute 93.6 percent of total selected’ suicide victim farmers. The female suicide victim farmers were reported comparatively more 20 (11.1 percent) in Yawatmal district, 5 (10.2 percent) in Wardha district (see appendix table 6.22).

39. The average age of suicide victim was 43 years ranging from 13 years to 85 years. However, the percentage of suicide victim committed in working age was 89.6 percent (see appendix table 6.23).

40. More than 83 percent reported suicide victims were married, 14 percent were unmarried and rest were either widow or widower in selected district. Largest 25 percent suicide victims of Wardha and Amravati district were reported unmarried (see appendix table 6.22).

41. However, more than 65 percent reported suicide victims had taken up to primary education including illiterate and literate suicide victims (see appendix table 6.22).

42. Largest 245 (37.6 percent) reported suicide victim were belonging to the Maratha/Kunbi Maratha community, 72 (11 percent) Boudh/Mahar and Matang, 58 (8.9 percent) Banjara, 41 (6.3 percent), Adivasi, 32 (4.9 percent) Teli and 29 (4.4 percent) Dhangar/ Hatkar in selected districts (see table 6.9).

43. Out of the 652 suicide farmers, 401 (61.5 percent) farmers died due to consumption of pesticides, hanging 144 (22.1 percent) and 38 (5.8 percent) throwing in the water and burning our self each and remaining 4.7 percent by other methods for committing suicide (see appendix table 6.24).
44. Almost 40 percent reported suicide victims was not any habit, although 38.3 percent victims had habit of smoking bidi or tobacco, followed by addiction of alcohol 21.5 percent and only 3 cases found habit of lottery and quarrelling in selected district. The largest number of reported suicide victim had addiction of alcohol in district Bhandara 14 (35.9 percent), Wardha 17 (34.7 percent), Buldhana 19 (31 percent) and Thane 2 (33 percent) (see appendix table 6.25).

45. On an average majority of the farmers (590 farmers) committed suicides due to debt burden, followed by 450 and 380 farmers committed suicide due to unviable land holding and pressure of bank officials and money lenders. Due to higher dependency ratio, poor financial position 290 and 355 farmers respectively committed suicide. Moreover, farmers committed suicide due to widespread addiction of alcohol, crop failure, family dispute and illness were 140, 192, 91 and 49 respectively (see appendix table 6.25).

46. Number of SVH received grant from government under immediate relief were 286 (43.9 percent) and other agencies 6 (0.9 percent) (see table 6.10).

47. Excluding suicide victims of Chandrapur district, less than 50 percent suicide victims of all remaining districts of Vidarbha were liable for grant aggregating only 38 percent against 45 percent of all selected districts (see table 6.10).

48. Out of 652 suicide victim households, 501 (76.8 percent) families had found facing one or more than one problem and rest were economically and socially stable because of joint family system (see table 6.11).

49. Largest number of suicide victim families are facing problem of repayment of loan (82 percent), social insecurity (66 percent), education of child (64 percent) and searching of employment (64 percent). Moreover, 39 percent suicide victims have faced acute poverty (see appendix table 6.11).

50. In 2010-11, almost 66 percent and 28.7 percent suicide victim households had institutional and non institutional loan respectively (see appendix table 6.26).
51. Average outstanding loan of suicide victim households before committing suicide and in 2010-11 had more than the average annual income of 2010-11 (see figure 6.28).

52. The largest number of suicide victim households have taken non institutional loan during 2010-11 at rate of interest 3 percent per month were 88 (47 percent), followed by 57 (30.5 percent) on 5 percent per month rate of interest and 29 (15.5 percent) on free interest rate reported by respondents in Maharashtra (see table 6.12).

53. Almost 289 (44 percent) suicide victim household respondents had reported that taken benefit of debt relief scheme and 84 respondents were unable to provide information (see table 6.13).

54. The number of suicide victim households’ respondents had reported that need to consider in Antodaya Anna Yojana were 139, 114 partial was expected grants for self-employed business, 111 respondents expected wells under irrigation schemes, 91 had a need of debt relief and 89 Niradhar Yojana (see appendix table 6.27).

55. The largest 632 (97 percent) respondents had given first preference to irrigation facilities, 441 (67.6 percent) respondents to distribution of seeds and fertilisers on concessional prices as a second preference and 341 (52.3 percent) respondents to employment for all as third preference for long term measures as a measure for preventing suicides in Maharashtra (see table 6.14).

56. In second preference, 125 respondents suggested interest free loan, 40 respondents for government procurement for agriculture produce (see table 6.14).

57. In third preference, 224 (34.4 percent) respondents had preferred interest free loan, 35 respondents’ government procurement of agriculture produce and 38 respondents for distribution of farm inputs through government (see table 6.14).
ii. Salient findings from secondary data

1. The relative per capita income of agriculture sector has continuously declined. Therefore, gap between the urban and rural per capita income is widened in Maharashtra and all over India.

2. Share of agriculture and allied activities at current prices in GDP of India has continuously declined and had 16.9 percent in 2011-12. However, dependency on agriculture sector could not decline considerably and it is at 58 percent in 2013-14. It affects income of rural people.

3. Despite of some exceptional five year plan, growth rate of agriculture and allied sector is continuously below than 4 percent (see table 3.5).

4. Since sixth five year plan, the plan outlay on agriculture and allied sector has continuously near about 6 percent during planning period. It has adversely affected growth rate of irrigation extension and cropping intensity of farm sector.

5. The gap of potential created and potential utilized has increased during planning period overall India. It had almost 20 percent during eleventh five year plan (see table 3.7).

6. New economic policy has adversely affected the compound annual growth rate of per hectare yield of food grains, cereals. However, yield CAGR of pulses has positively improved during same period all over India.

7. Animal husbandry and milk production have a significant place, which contributes 4.1 percent in GDP and 25.6 percent in value of agriculture output at current prices during 2012-13 in India. However, contribution of Maharashtra has 7.7 percent in milk production, 7.6 percent in livestock production and 7 percent in poultry production of India. Here researcher has concluded that, Maharashtra has a worst performance as compared to Gujarat, Haryana in animal husbandry and milk production and it must promote to reduce the pressure of high population on agriculture sector.

8. The net sown area in Maharashtra has declined considerably since introduction of new economic policy. The CAGR of net sown area had negative 0.03 percent during 1990-91 to 2000-01 and negative 0.02 percent
during 2000-01 to 2010-11. It is also found that agriculture land had used for non agriculture purposes, where soil quality and water availability is high. It means Maharashtra had leaved high fertile land for non agriculture purposes (see table 4.1).

9. It is found that compound annual growth rate of net state domestic product at 2004-05 prices is continuously higher than all over India during planning period (see figure 4.1). It means Maharashtra has been performing better than overall India during planning period.

10. The CAGR of state domestic per capita income has declined during post liberalisation, particularly during first decade of 21st century in Maharashtra.

11. The share of primary sector in state domestic product of Maharashtra has been declined significantly and it had almost 15 percent in 2010-11. However, more than 55 percent population is dependent on primary sector and pressure of surplus population has adversely affected labour productivity and income of rural households (see table 4.5).

12. The number and relative share of operational holdings of small and marginal farmers’ have been considerably increasing in Maharashtra. The total number of small and marginal operational holdings had 89.1 lakh (78.5 percent) and contributes more than 45 percent operational area in 2010-11. These uneconomic operational holdings borne deficiency of income among such farmers’ to protect the subsistence level rather in rainfed area (see table 4.9).

13. An average size of different groups of operational holders had different in Maharashtra. It had 0.47 ha of marginal farmers’, 1.42 ha of small farmers, 2.67 ha of semi-medium farmers, 5.62 ha of medium farmers and 15.96 ha of large farmers during 2010-11 in Maharashtra.

14. Similarly, the relative share of small and marginal farmers’ had more in irrigated areas than rainfed areas. Therefore, researcher has concluded that there is negative relationship between size of operational holdings and level of irrigation.

15. Despite of natural calamities, per hectare yield of food grains, pulses and oilseeds has significantly increased during post liberalisation in
Maharashtra. The CAGR of foodgrain yield has 1.4 percent during 1960-61 to 1990-91 and 1.8 percent during 1991-2011 (see table 4.12).

16. The CAGR of cotton yield increased significantly from 0.1 percent during 1960-61 to 1990-91 to 5.2 percent during 1990-91-2010-11 in Maharashtra. However, CAGR of jowar yield has declined considerably from 1.5 percent to 0.5 percent during same period (see table 4.12).

17. Area under horticulture crops has significantly increased in Maharashtra. In 2010-11, area under horticulture crops had 10.6 percent of net sown area (see table 4.12).

18. Maharashtra has only 18 percent irrigation, out of which 2/3 has created by only private sector. However, Maharashtra contributes 34 percent share of dams created in India. Therefore, researcher has concluded that the either dams were built on only political places where normal rainfall is lowest or the large number of water reserves were reserved for drinking purposes and industrialisation (see table 4.14).

19. Number and relative share of SCB branches have declined during new economic reforms in Maharashtra. The number of rural SCB had 2749 in 1990-91 and declined to 2170 in 2010-11 in Maharashtra. Moreover, the share of rural SCB has declined from 49 percent to 27 percent during same period (see table 4.17).

20. In terms of credit supply, SCB has continuously neglected towards rural credit during post reforms period in Maharashtra. Out of the total credit supply of SCB, only 4.6 percent amount has allotted for rural areas in 1991 and declined up to 1.9 percent in 2011 (see table 4.18).

21. The number of commercial bank offices in 2008 was 8 per lakh population in Maharashtra. It had found lowest 4.8 in Beed district and 8.9 in Thane district. However, commercial bank offices per lakh population could not found more than 8 in selected districts of Maharashtra except Thane district (see table 4.29).

22. Total outstanding credit of SCB in selected district was merely 6.25 percent and 12.7 percent of agriculture outstanding credit of state. (see table 4.30).
23. Since sixth state five year plan, actual plan outlay on irrigation and allied sector had less than 10 percent of total plan outlay of Maharashtra, rather than it had less than 5 percent during seventh, eighth and ninth plan period. However, positive sign of plan outlay had found in recent two five year plans respect to plan outlay on agriculture and allied activities (see table 4.19).

24. Despite of low level of irrigation, irrigation level is found varying among various divisions of Maharashtra. In relative terms, percentage of gross irrigated area to gross cultivated area was lowest in Konkan division (6 percent), Amravati division (7 percent), Aurangabad division (15 percent) and rest divisions represents more than 20 percent gross irrigated area to gross cropped area (see table 4.23).

25. Taking selected districts, Satara, Bhandara, Nasik, Beed and Chandrapur had large area under irrigation compared to 17 percent at state level but Wardha (9.9 percent), Yawatmal (5.8 percent), Amravati (8.2 percent), Buldhana (6.1 percent), Nanded (11.8 percent), Jalgaon (11.5 percent) and Thane (8.4 percent) had lower gross irrigated area with respect to the gross irrigated area of Maharashtra in 2012-13 (see figure 4.8).

26. The proportion of marginal and small operational holdings in district Satara had almost 93 percent and area operated 65 percent, followed in Bhandara 91 percent of small and marginal operational holding and 61 percent of operated area. However, lowest proportion of marginal and small operational holders had found in district Yawatmal (60.4 percent) and Wardha (60.6 percent) and operated had 33 percent and 36 percent in 2010-11 (see table 4.24).

27. An average size of operational holdings is found largest 2.24 ha in Wardha district, followed by 2.21 ha in Yawatmal and all other selected district had less than 2 hectare during 2010-11. It is important that lowest average size was 0.95 ha in Bhandara and 1.28 ha in Satara district (see table 4.24).

28. It is also found that higher the size of land holding higher is the area under commercial crops and vice versa.
29. It is important that except Bhandara area under food grains was low in all other selected districts of Vidarbha. Commercialisation of agriculture sector in selected district of Vidarbha, Marathwada and Jalgaon has found respect to cotton crop (see table 4.25).

30. It is found that there is positive relationship between area under food grain crops and irrigation level of districts.

31. Taking population share and net district domestic product (NDDP) of selected districts, excluding Thane district NDDP share of all other district have less than population share of same district (see table 4.27).

32. Taking NDDP and share in geographical area of state, selected districts contributes 45.7 percent geographical area and 36.7 percent SNDP of Maharashtra. However, only Thane district has a 13 percent contribution in SNDP, but 3.1 percent in geographical area of state (see table 4.27).

33. Therefore, excluding Thane district, all other 12 selected districts contribute 42.6 percent geographical area, but 23.7 percent of SNDP of Maharashtra (see table 4.27).

34. Moreover, selected six districts of Vidarbha and two districts of Marathwada have 18.6 percent and 6.9 percent share in geographical area and merely 7.8 percent and 2.9 percent share in SNDP respectively during 2010-11 (see table 4.27).

35. There is found large variation in per capita income of the selected districts. Per capita net district domestic product of Maharashtra was Rs. 83395 during 2010-11. Despite of Thane, average net per capita district domestic product of selected district had almost 3/4 (76 percent) of overall Maharashtra. It was lowest at Rs. 53174 in Bhandara and highest at Rs. 124202 in Thane district (see table 4.27).

36. During the 20 years period of 1995-2014, as many as 294966 farmers’ have committed suicide in India, excluding absence of 1996 data, in which female suicide farmers’ accounts 14.8 percent (see table 5.1).

37. An average 15520 farmers were committing suicide in India. During the first decade of 1995-2004, on an average 15855 farmers’ were committing
suicide and in second decade of 2005-2014, an average 15226 farmers had committed suicide in India.

38. Average 14.8 percent female farmers committed suicide during 1995-2014 overall India. The ratio of female farmers committed suicide had more than 15 percent before 2000, but it is continuously lower than 15 percent during 21st century. The share of female farmers’ suicide had lowest in 2013 at 10.9 percent (see table 5.1).

39. Andhra Pradesh, Kerala, Madhya Pradesh, Karnataka and Maharashtra are most farmers’ suicide prone states of India. These five states accounted average almost 65 percent farmers’ suicide of India during 1995-2014, but it contributes only 30 percent share in population (see table 5.2).

40. The number of farmers committed suicide during 1995-2014 periods had 62773, which contributes 21.3 percent of farmers’ suicide of India. However, numbers of male farmers’ suicide is much higher than the female farmers’ suicide in Maharashtra (see table 5.3).

41. The minimum support prices for several crops for several years have been below the actual cost of cultivation.

42. There has been a sharp increase in production cost during the post reforms period due to the decontrolled prices of marketable input and heavy use of pesticides and fertilisers.

43. Co-operative sector is the major source of credit to farmers in Maharashtra. But, Vidarbha and Marathwada did not receive sufficient benefits of the movement.

7.4 Hypotheses testing

The entire six hypotheses are proved by statistical tools and tests.

**Hypothesis 1: Mass poverty is the prime cause of farmers’ suicide in Maharashtra.**

According to hypothesis estimated below poverty line suicide victim households has depicted in Table 7.1. This relationship is whether higher or lower can be found by Correlation coefficient and paired t-test.
Table 7.1: Number of BPL suicide victim household in selected district

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>District</th>
<th>Total Suicide Victim</th>
<th>BPL Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bhandara</td>
<td>39</td>
<td>32</td>
</tr>
<tr>
<td>2.</td>
<td>Wardha</td>
<td>49</td>
<td>23</td>
</tr>
<tr>
<td>3.</td>
<td>Chandrapur</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>Yawatmal</td>
<td>180</td>
<td>113</td>
</tr>
<tr>
<td>5.</td>
<td>Amavarati</td>
<td>124</td>
<td>67</td>
</tr>
<tr>
<td>6.</td>
<td>Buldhana</td>
<td>61</td>
<td>25</td>
</tr>
<tr>
<td>7.</td>
<td>Nanded</td>
<td>49</td>
<td>27</td>
</tr>
<tr>
<td>8.</td>
<td>Beed</td>
<td>40</td>
<td>26</td>
</tr>
<tr>
<td>9.</td>
<td>Jalgaon</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>10.</td>
<td>Nasik</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Satara</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>12.</td>
<td>Solapur</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>Thane</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>Total</td>
<td>652</td>
<td>355</td>
</tr>
</tbody>
</table>

Source: Field survey

H₀ = There is no association between poverty and farmers’ suicides in Maharashtra

H₁ = There is positive association between poverty and farmers’ suicides in Maharashtra.

The value of Mean, Standard deviation and correlation co-efficient has shown in Table 7.2.

Table 7.2: Analysis table of hypothesis 1

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Vidarbha</th>
<th>Rest 7 District</th>
<th>Maharashtra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>33</td>
<td>14.4</td>
<td>22.84</td>
</tr>
<tr>
<td>SD</td>
<td>25.49</td>
<td>6.9</td>
<td>19.76</td>
</tr>
<tr>
<td>Correlation</td>
<td>0.97</td>
<td>0.91</td>
<td>0.98</td>
</tr>
<tr>
<td>Standard error</td>
<td>10.4</td>
<td>2.6</td>
<td>5.48</td>
</tr>
<tr>
<td>Calculated Value</td>
<td>3.17</td>
<td>5.41</td>
<td>4.16</td>
</tr>
<tr>
<td>Table Value</td>
<td>2.57</td>
<td>5.20</td>
<td>3.93</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>5</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Significance Level</td>
<td>0.025</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

It is also ascertain that there is positive relationship between farmers’ suicide and poverty in selected district. This correlation coefficient had 0.98 for all
suicide victims. However, it had 0.97 for Vidarbha and 0.91 for remaining selected districts. It is also important that largest number of BPL suicide victim households were either small and marginal farmers or rainfed farmers.

The results of paired t-test are discussed below.

1. The calculated value 3.17 is more than the table value 2.57 at 0.025 significance level in selected suicide victim of districts from Vidarbha. Hence, null hypothesis is rejected. It means there is strong association between poverty and farmers’ suicide in all selected district of Vidarbha.

2. The calculated value 5.41 is more than the table value 5.2 at 0.001 significance level in selected districts excluding Vidarbha. Hence, null hypothesis is rejected. It means there is strong association between poverty and farmers’ suicide in the selected districts of Maharashtra excluding districts of Vidarbha. It represents that poverty is more among the suicide victim of all other districts excluding Vidarbha.

3. The calculated value 4.16 is more than the table value 3.93 at 0.001 significance level for all suicide victims. Hence, null hypothesis is rejected. It means there is strong association between poverty and farmers’ suicide in all selected district of Maharashtra.

**Hypothesis 2: There is close association between marginal and small operational holdings and farmers’ suicide.**

Above hypothesis represents relationship between number of marginal and small operational holders and farmers’ suicide.

**H₀:** There is no association between number of small and marginal operational holders suicide victims and farmers’ suicide in Maharashtra

**H₁:** There is positive association between number of small and marginal operational holders suicide victims and farmers’ suicide in Maharashtra.

According to hypothesis number of reported marginal, small, medium and large farmers’ suicide victims had depicted in Table 7.3.
By this hypothesis correlation coefficient of total suicide victim had 0.98. Hence, it represents close relation between farmers’ suicide and number of
marginal and small operational holder’s suicide victims. This hypothesis can be proved by paired t test.

1. The calculated value 2.97 is more than the table value 2.57 at 0.025 significance level in selected suicide victim of districts of Vidarbha. Hence, null hypothesis is rejected. It means there is strong association between small and marginal land holdings and farmers’ suicide in all selected district of Vidarbha.

2. The calculated value 2.7 is more than the table value 2.44 at 0.025 significance level in selected districts excluding Vidarbha. Hence, null hypothesis is rejected. It means there is strong association between small and marginal land holding and farmers’ suicide in selected district of Maharashtra excluding districts of Vidarbha. It also represents there is strong association between small and marginal land holding and farmers’ suicide in all other districts excluding Vidarbha.

3. The calculated value 2.94 is more than the table value 2.68 at 0.01 significance level in all selected districts. Hence, null hypothesis is rejected. It means there is strong association between number of small and marginal land holdings and farmers’ suicide in all selected district of Maharashtra.

**Hypothesis 3: There is association between nature of family (nuclear family) and farmers’ suicide.**

The hypothesis represents relationship between number of nuclear suicide victim families and total number of suicide victim families’. This relationship is whether higher or lower can be found by correlation coefficient.

\[ H_0 = \text{There is no association between number of nuclear suicide victims families and farmers’ suicide in Maharashtra.} \]

\[ H_1 = \text{There is positive association between number of nuclear suicide victims families and farmers’ suicide in Maharashtra.} \]

According to hypothesis number of reported nuclear suicide victim households and total number of suicide victim households are shown in Table 7.5
**Table 7.5**

Number of selected nuclear suicide victim households in selected district

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>District</th>
<th>Total suicide victim</th>
<th>Number of nuclear suicide victim family</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bhandara</td>
<td>39</td>
<td>26</td>
</tr>
<tr>
<td>2.</td>
<td>Wardha</td>
<td>49</td>
<td>34</td>
</tr>
<tr>
<td>3.</td>
<td>Chandrapur</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Yawatmal</td>
<td>180</td>
<td>94</td>
</tr>
<tr>
<td>5.</td>
<td>Amavarati</td>
<td>124</td>
<td>70</td>
</tr>
<tr>
<td>6.</td>
<td>Buldhana</td>
<td>61</td>
<td>42</td>
</tr>
<tr>
<td>7.</td>
<td>Nanded</td>
<td>49</td>
<td>16</td>
</tr>
<tr>
<td>8.</td>
<td>Beed</td>
<td>40</td>
<td>27</td>
</tr>
<tr>
<td>9.</td>
<td>Jalgaon</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>10.</td>
<td>Nasik</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>11.</td>
<td>Satara</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>12.</td>
<td>Solapur</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>13.</td>
<td>Thane</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>14.</td>
<td>Total</td>
<td>652</td>
<td>359</td>
</tr>
</tbody>
</table>

Source: Field Visit

The values of Mean, Standard deviation, and correlation co-efficient, calculated value according to students paired t test are shown in Table 7.6.

**Table 7.6: Analysis table of hypothesis 3**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Vidarbha</th>
<th>Rest 7 District</th>
<th>Maharashtra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>33</td>
<td>13.57</td>
<td>22.53</td>
</tr>
<tr>
<td>SD</td>
<td>30.5</td>
<td>9.65</td>
<td>23.15</td>
</tr>
<tr>
<td>Correlation</td>
<td>0.98</td>
<td>0.82</td>
<td>0.98</td>
</tr>
<tr>
<td>Standard error</td>
<td>12.45</td>
<td>3.65</td>
<td>6.42</td>
</tr>
<tr>
<td>Calculated Value</td>
<td>2.64</td>
<td>3.71</td>
<td>3.5</td>
</tr>
<tr>
<td>Table Value</td>
<td>2.17</td>
<td>3.36</td>
<td>3.14</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>5</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Significance Level</td>
<td>0.025</td>
<td>0.01</td>
<td>0.005</td>
</tr>
</tbody>
</table>

The correlation coefficient between number of nuclear families and farmers’ suicides is 0.98 and P value of correlation coefficient is close to one. It means correlation is statistically significant. That is, there is a close relationship between number of nuclear families and suicide victim families in all selected district.
It is also found that correlation coefficient of Vidarbha was 0.98 and 0.82 for remaining 7 selected districts. That is, nature of nuclear family and farmers’ suicides are closely associated.

**Results of paired t test:**

1. The calculated value 2.64 is more than the table value 2.17 at 0.025 significance level in selected suicide victim of districts from Vidarbha. Hence, null hypothesis is rejected. It means there is strong association between number of nuclear suicide victim families and farmers’ suicide in all selected district of Vidarbha.

2. The calculated value 3.7 is more than the table value 3.36 at 0.01 significance level in selected districts excluding Vidarbha. Hence, null hypothesis is rejected. It means there is strong association between numbers of nuclear suicide victim families in selected district of Maharashtra excluding districts of Vidarbha.

3. The calculated value 3.5 is more than the table value 3.14 at 0.005 significance level in all selected districts. Hence, null hypothesis is rejected. It means there is strong association between numbers of nuclear suicide victim families in all selected districts of Maharashtra.

**Hypothesis 4: Indebtedness is found more among suicide victim household prior committing suicide.**

By this hypothesis, number and level of indebted reported suicide victim had represented in table 7.7 and tested hypothesis by chi-square method and ANOVA.

**Table 7.7: Number indebted suicide victim and level of indebtedness prior committing suicide (in rupees)**

<table>
<thead>
<tr>
<th>Region</th>
<th>1-25000 (G1)</th>
<th>25001-50000 (G2)</th>
<th>50001-75000 (G3)</th>
<th>75001-100000 (G4)</th>
<th>100001-150000 (G5)</th>
<th>150001-200000 (G6)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vidarbha (A)</td>
<td>128</td>
<td>124</td>
<td>56</td>
<td>48</td>
<td>20</td>
<td>44</td>
<td>420</td>
</tr>
<tr>
<td>Marathwada (B)</td>
<td>15</td>
<td>30</td>
<td>10</td>
<td>11</td>
<td>8</td>
<td>11</td>
<td>85</td>
</tr>
<tr>
<td>Rest Maha (C)</td>
<td>6</td>
<td>21</td>
<td>7</td>
<td>11</td>
<td>15</td>
<td>25</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>175</td>
<td>73</td>
<td>70</td>
<td>43</td>
<td>80</td>
<td>590</td>
</tr>
</tbody>
</table>
The intensity of indebtedness can be tested by $x^2$ test (Chi-square Test).

$H_0$: Indebtedness and farmers’ suicide are independent.

$H_1$: Alternative hypothesis is negative of $H_0$.

**Table 7.8 Analysis table of hypothesis 4**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square</td>
<td>56.430</td>
</tr>
<tr>
<td>Table Value (5% level of Significance)</td>
<td>25.2</td>
</tr>
</tbody>
</table>
| Degree of Freedom                               | $(C-1)(R-1)$  
|                                                | $=(6-1)(3-1)$  
|                                                | $=10$    |
| P-Value                                         | 0.000   |

Here, $x^2 \times 10, 0.05 = 25.2$. It means farmers’ suicide and indebtedness are not independent. That is, issue of farmers’ suicide and level of indebtedness are closely associated. Moreover, here P-value is close to zero. It strongly supports rejection of $H_0$ under consideration. Above result concludes that there is close association between level of indebtedness and farmers’ suicide.

Here, we have calculated the ANOVA for regions and various groups of level of indebtedness.

**Table 7.9: Two-way ANOVA: Regions (F1) V/S Level of Indebtedness (F2)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Degree of Freedom</th>
<th>Sum of Square</th>
<th>Mean Square</th>
<th>F- Ratio</th>
<th>P- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regions (Column)</td>
<td>5</td>
<td>4429.1</td>
<td>885.82</td>
<td>1.40</td>
<td>0.304</td>
</tr>
<tr>
<td>Groups (Row)</td>
<td>2</td>
<td>12469.4</td>
<td>6234.72</td>
<td>9.85</td>
<td>0.004</td>
</tr>
<tr>
<td>Error</td>
<td>10</td>
<td>6326.6</td>
<td>632.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>23225.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It concludes that the regions are not significant for indebtedness. That is level of indebtedness is found to be different in different regions. Although, level
of indebtedness is found significant that it is equally distributed among various regions.

**Hypothesis 5: Most of the suicide victim farmers was from working age group.**

According to hypothesis the number of reported suicide victim farmers’ by various age groups has depicted in table 7.10.

\[
H_0: \text{Working age group of suicide victim farmers and number of suicide victim are independent.}
\]

\[
H_1: \text{Working age group of suicide victim farmers and number of suicide victim are closely associated.}
\]

**Table 7.10: Number of working and dependent age group suicide victim**

<table>
<thead>
<tr>
<th>Region</th>
<th>Dependent age group (G1)</th>
<th>15-35 (G2)</th>
<th>36-59 (G3)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vidarbha</td>
<td>55</td>
<td>170</td>
<td>245</td>
<td>470</td>
</tr>
<tr>
<td>Marathwada</td>
<td>4</td>
<td>34</td>
<td>51</td>
<td>89</td>
</tr>
<tr>
<td>Rest of Maha.</td>
<td>9</td>
<td>18</td>
<td>66</td>
<td>93</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68</strong></td>
<td><strong>222</strong></td>
<td><strong>362</strong></td>
<td><strong>652</strong></td>
</tr>
</tbody>
</table>

Above hypothesis represents relationship between number of Suicide Victim household and number of victim coming under working age group. Whether this relationship is true or false can be found by \(x^2\)test (Chi-square Test).

**Table 7.11: Analysis table of hypothesis 5**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated value of Chi- Square</td>
<td>=15.778</td>
</tr>
<tr>
<td>Table value (5% level of Significance)</td>
<td>=14.9</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>= 4</td>
</tr>
<tr>
<td>P- Value</td>
<td>0.003</td>
</tr>
</tbody>
</table>
Here, $x^2, 0.05 = 14.9$ is less than the calculated value. It means working age group of suicide victim farmers and numbers of suicide victims are not independent. That is, working age group of farmers and suicides made by farmers are associated and number of working age group farmers are committing suicides. Moreover, here P-value is close to zero (0.003). It strongly supports rejection of $H_0$ under consideration.

**Hypothesis 6: Productivity of major crops in selected district is less than productivity at all India level.**

This hypothesis is based on secondary data collected from government reports for productivity of major crops in selected district, state of Maharashtra and all India level in 2010-11. Major crops of suicide victim farmers were reported cotton, soybean, sugarcane, gram, jowar, wheat and rice.

**Table 7.12**

*Per hectare yield of major crops in selected district, Maharashtra and India (Kg/ha)*

<table>
<thead>
<tr>
<th>District</th>
<th>Rice</th>
<th>Jowar</th>
<th>Gram</th>
<th>Soybean</th>
<th>Cotton</th>
<th>Sugarcane</th>
<th>Wheat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhandara</td>
<td>1493</td>
<td>0</td>
<td>309</td>
<td>942</td>
<td>0</td>
<td>54</td>
<td>971</td>
</tr>
<tr>
<td>Wardha</td>
<td>0</td>
<td>898</td>
<td>518</td>
<td>1033</td>
<td>230</td>
<td>68</td>
<td>1672</td>
</tr>
<tr>
<td>Chandrapur</td>
<td>1400</td>
<td>975</td>
<td>365</td>
<td>981</td>
<td>230</td>
<td>0</td>
<td>949</td>
</tr>
<tr>
<td>Yawatmal</td>
<td>0</td>
<td>982</td>
<td>496</td>
<td>537</td>
<td>295</td>
<td>61</td>
<td>1466</td>
</tr>
<tr>
<td>Amravati</td>
<td>726</td>
<td>956</td>
<td>563</td>
<td>479</td>
<td>280</td>
<td>69</td>
<td>1951</td>
</tr>
<tr>
<td>Buldhana</td>
<td>0</td>
<td>1128</td>
<td>378</td>
<td>936</td>
<td>275</td>
<td>67</td>
<td>1800</td>
</tr>
<tr>
<td>Nanded</td>
<td>521</td>
<td>1287</td>
<td>501</td>
<td>938</td>
<td>260</td>
<td>60</td>
<td>1621</td>
</tr>
<tr>
<td>Beed</td>
<td>444</td>
<td>604</td>
<td>532</td>
<td>873</td>
<td>259</td>
<td>66</td>
<td>1415</td>
</tr>
<tr>
<td>Jalgaon</td>
<td>0</td>
<td>1830</td>
<td>957</td>
<td>2116</td>
<td>366</td>
<td>78</td>
<td>2379</td>
</tr>
<tr>
<td>Nasik</td>
<td>407</td>
<td>1228</td>
<td>626</td>
<td>1844</td>
<td>339</td>
<td>77</td>
<td>1764</td>
</tr>
<tr>
<td>Satara</td>
<td>1146</td>
<td>1727</td>
<td>834</td>
<td>1838</td>
<td>142</td>
<td>94</td>
<td>1594</td>
</tr>
<tr>
<td>Solapur</td>
<td>329</td>
<td>866</td>
<td>490</td>
<td>2256</td>
<td>495</td>
<td>98</td>
<td>1359</td>
</tr>
<tr>
<td>Thane</td>
<td>2030</td>
<td>0</td>
<td>650</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>1770</td>
<td>1169</td>
<td>562</td>
<td>900</td>
<td>322</td>
<td>89</td>
<td>1700</td>
</tr>
<tr>
<td>India</td>
<td>2239</td>
<td>949</td>
<td>895</td>
<td>1327</td>
<td>499</td>
<td>70.3</td>
<td>2988</td>
</tr>
</tbody>
</table>


Table 7.12 reveals the per hectare yield of various crops in selected district of Maharashtra, overall average of Maharashtra and average of India. Here, researcher has been concluded from the secondary data, if productivity of major
crops in selected district is close to Productivity of India, less is the rate of farmers suicide and vice versa. It is explained and proved below.

a. Cotton

Cotton is a major crop in Vidarbha and Marathwada. 604 of, 393 suicide victim farmers respondents were reported to be producing cotton. The Figure 7.1 shows that except Solapur productivity of Cotton in all other selected district is too much lower than the average at all India level. A per hectare yield of cotton was 64 percent less of Maharashtra than all India average productivity of cotton during same period.

Figure: 7.1

Yield of Cotton (kg/ha) in selected district, Maharashtra and India in 2010-11

Taking district level per hectare yield of cotton had all district had less compared to all India average per hectare yield of cotton. In relative terms, per hectare yield of cotton had less than 40 percent to all India average per hectare yield in district Satara (72 percent), Chandrapur and Wardha (54 percent), Beed and Nanded (48 percent), Amravati (44 percent), Yawatmal (41 percent) in selected district. However, only Nasik (32 percent), Jalgaon (27 percent) and Solapur (1 percent) have shown less than 40 percent per hectare yield of cotton.

Note: Graph is calculated from table 7.12
b. Soybean

Despite of Thane some farmers of all other selected district were producing Soybean. The number of suicide victim farmers reported produce soybean was 433 among total suicide victim.

Figure 7.2 shows that per hectare yield of Soybean in district Solapur 2256 kg (70 percent) Jalgaon 2116 kg (60 percent), Nasik 1844 kg (39 percent) and Satara 1838 kg (38 percent) more than average per hectare yield of soybean all over India. On the other hand, per hectare yield of overall Maharashtra had 900 kg, which shows 32 percent less than all India average per hectare yield of soybean.

**Figure 7.2**

Yield of Soybean (kg/ha) in selected district, Maharashtra and India in 2010-11

Note: Graph is taken from the table 7.12

Moreover, all selected district of Vidarbha had lower per hectare yield than India i.e. Amravati 479 kg (64 percent), Yawatmal 537 kg (60 percent), Bhandara 942 kg (29 percent), Wardha 1033 kg (22 percent), Buldhana 936 kg (30 percent), Chandrapur 981 kg (26 percent). Similarly, per hectare yield of soybean in Nanded 938 (29 percent) and Beed 873 (34 percent) represents poor performance in yield.
c. **Gram**

Farmers of all selected districts of Maharashtra were producing gram. 102 of 604 suicide victim farmers was reported producing gram in selected district. Despite Jalgaon, yield of gram in all selected district had lower than the all India average per hectare yield of gram (see figure 7.3).

**Figure 7.3**

Yield of Gram (kg/ha) in selected district, Maharashtra and India in 2010-11

![Graph showing yield of gram in selected districts](image)

Note: Graph is taken from the table 7.12

In relative terms, yield of gram had lower in all selected district of Vidarbha and Marathwada i.e. Bhandara 309 kg (66 percent), Chandrapur 365 kg (59 percent), Wardha 518 kg (42 percent), Yawatmal 496 kg (45 percent), Amravati 563 kg (37 percent), Buldhana 378 kg (58 percent), Nanded 501 kg (44 percent) and Beed 532 kg (41 percent) against 895 kg of all India average yield of gram. Similarly, Nasik 626 kg (30 percent), Satara 834 kg (7 percent), Solapur 490 kg (45 percent) and Thane 650 (27 percent) less than all India average yield of same crop.

d. **Sugarcane**

Despite of Chandrapur and Thane district, some respondents of all other districts were reported to be producing sugarcane. Of 604, 30 suicide victim households were producing sugarcane. Figure 7.4 represents that except rest of Maharashtra all other district having less yield of sugarcane than all India average yields.
Figure 7.4

Yield of Sugarcane (tonne/ha) in selected district, Maharashtra and India in 2010-11

<table>
<thead>
<tr>
<th>District</th>
<th>Productivity of Sugarcane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhandara</td>
<td>54</td>
</tr>
<tr>
<td>Wardha</td>
<td>68</td>
</tr>
<tr>
<td>Yawatmal</td>
<td>61</td>
</tr>
<tr>
<td>Amravati</td>
<td>69</td>
</tr>
<tr>
<td>Buldhana</td>
<td>67</td>
</tr>
<tr>
<td>Nanded</td>
<td>60</td>
</tr>
<tr>
<td>Beed</td>
<td>66</td>
</tr>
<tr>
<td>Jalgaon</td>
<td>78</td>
</tr>
<tr>
<td>Nashik</td>
<td>77</td>
</tr>
<tr>
<td>Satara</td>
<td>94</td>
</tr>
<tr>
<td>Solapur</td>
<td>98</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>89</td>
</tr>
<tr>
<td>India</td>
<td>70.3</td>
</tr>
</tbody>
</table>

Note: Graph is taken from table 7.12

In relative terms, yield of sugarcane had lower in all selected district of Vidarbha and Marathwada i.e. Bhandara 54 tonne (23 percent), Wardha 68 tonne (3 p percent), Yawatmal 61 tonne (13 percent), Amravati 69 (2 percent), Buldhana 67 (5 percent), Nanded 60 (15 percent) and Beed 66 (6 percent) against 70 tonne of all India average yield. However, Jalgaon 78 tonne (11 percent) Nasik 77 tonne (9 percent), Satara 94 tonne (38 percent), and Solapur 98 tonne (39 percent) more than all India average yield of same crop.

e. Rice

Suicide victim households respondents of Bhandara, Thane was reported rice is the major crop, although farmers of Chandrapur, Amravati, Nanded, Beed, Nasik, Satara, Solapur are also producing rice in some areas of selected district of Maharashtra.

Figure 7.5 shows that per hectare yield of rice in all other selected district is lower than the all India average yield. The yield of rice had 1770 kg against 2239 kg of all India average yield, which shows 20 percent less. A district level data represents that except Thane (2030 kg), per hectare yield of rice in all other selected district is too much lower than all India average yields. It had 1493 (33 percent) in Bhandara, 1400 kg (38 percent) in Chandrapur, 726 (68 percent) in Amravati, 521 kg (77 percent) in Nanded, 444 (80 percent) kg in Beed, 407 kg (82
percent) in Nasik, 1146 kg (49 percent) in Satara, 329 kg (91 percent) in Solapur shown less yield than all India average yield of rice.

Figure 7.5
Yield of Rice (kg) in selected district, Maharashtra and India in 2010-11

Note: Graph is taken from table 7.12

f. Jowar

Except Thane and Bhandara suicide victim farmers of all other district are reported to be producing Jowar. Almost 64 suicide victim farmers were producing Jowar.

Figure 7.6
Yield of Jowar (kg) in selected district, Maharashtra and India in 2010-11

Note: Graph is taken from table 7.12
Figure 7.6 represents that except Beed, Solapur and Wardha yield of jowar in all other selected district of Maharashtra is higher than all India average yield. Per hectare yield of jowar in Beed, Solapur and Wardha district had 604 kg, 866 kg and 898 kg, which shows 34 percent, 9 percent and 5 percent less than all India average yield of jowar.

g. Wheat

Except Thane suicide victim farmers of all other district are reported producing wheat. The 59 suicide victim farmers household reported were producing wheat. Figure 7.7 shows per hectare yield of wheat in all selected district of Maharashtra is too much less than India. Yield of wheat was lowest 1700 kg in all over Maharashtra 43 percent less.

In relative terms, per hectare yield had 50 percent lower than all India average yield in district Chandrapur 949 kg (68 percent), followed by 971 kg (67.5 percent), 1466 kg (51 percent) in Yawatmal, 1415 kg (53 percent) in Beed, 1359 kg (55 percent) in Solapur district.

![Figure 7.7](image-url)

**Yield of Wheat (kg) in selected district, Maharashtra and India in 2010-11**

Note: Graph is taken from table 7.12

To sum up, excluding sugarcane and Jowar, all India average per hectare yield of all other crops had higher than yield of selected district rather there is big difference between per hectare yield of districts of Vidarbha, Marathwada and all
India average yield. It adversely affects the net per hectare return of these crops and also net income of farmers.

7.5 Suggestions

An understanding of the agricultural risk and the ways of managing it are very crucial in the context of their impact on agricultural production and livelihood of the people, particularly in a rainfed region of Maharashtra. The use of high-yielding varieties has brought huge gains in yield but variability in yield of different crops is still difficult risk in rainfed areas of Maharashtra. Indeed, recommendations made by National farmers commission are most welcome for farming community. It is suggested that there is no need to appoint any committee if suggestions made by national commission on farmers are implemented as soon as possible in India. Some important suggestions made by NFC are discussed below. Moreover, many suggestions have also made according to socio economic condition of suicide victim families and observations and discussions made with the people. Therefore government, non government agencies, businessmen and farming community must consider following suggestions.

a. Suggestions for farming related people

1. Most of the suicide victims are doing farming in rainfed conditions. Moreover, monsoon days are ranging from 35-60 in same regions. Therefore, farmers should cultivate only short term crops such as jowar, soybean, green gram, black gram, bajara, maize. The yield of these crops is comparatively high in Maharashtra, in which soybean have took by most of the suicide victim as major and second major crop.

2. Each and every farmer must form a subsidiary business like animal husbandry, diary, fishery or any other business.

3. Government should promote for use of organic pesticides and fertilisers for plant and crop protection. For this purpose extra amount of subsidy given to him.

4. Farmers need to form local organisation with the help of Krisi Seva Kendra and government agencies and organize workshop prior commencement of session. Similarly it must be focused on post harvest situation.
5. Every village needs a processing unit on local crop. Farmers should establish it on cooperative basis or company act basis.

6. Farmers must visit once a year to agriculture universities for knowledge upgradation.

7. Every farmer should test soil in laboratory and crop cultivation should be according to potential of soil.

8. Farmers need to adopt crop rotation system to avoid the deterioration of soil health.

9. Farmers need to organise Krishi Parayana (daily meetings) for discussions about farm, village and family related problems.

10. All farmers should maintain the accounts of farm expenditure according to accounting standards or conventional basis.

11. Farmers need compulsory family planning after maximum two children.

12. Farmers must avoid discrimination among the male child and the female child.

13. Rural people should accept concept of community marriages to avoid the unproductive expenses.

14. Government should ban the selling of alcoholic products within the boundary of Maharashtra.

15. Every farmer must accept joint family system.

16. Farmers must produce required seeds and test in the laboratory. Similarly, local seeds should be used by farmers.

17. Each farmer should plant minimum five trees within the one acre of area.

18. All farmers need to be planting horticulture crops like mango, lemon, custard apple and other rainfed crops on minimum one fourth operational holding.

19. Large numbers of farmers are producing cotton as major crop in suicide prone region. However, production cost of cotton is higher than all other short term crops, although yield is found too much less. Therefore,
researcher has suggested that if irrigation facility is available farmers must prefer cotton. Otherwise it is better to leave cotton and adopt short term crops like jowar, bajara, soybean, gram, maize.

20. Large number of suicide victims having marginal and small land holding (less than 5 acre). All these farmers are poor. They cannot invest more money for farm development, rather than basic infrastructure of farm business. If these farmers apply contract farming or co-operative farming. This will reduce the risk of farmers on one hand and more benefits of experienced farmers can take on the other hand. Therefore, government must promote for contract farming and it will helpful to reduce dependency of people on farming.

21. Each and every farmer must build either wells or farm ponds.

22. Farmers should voluntarily participate in water shed development.

23. All farmers must adopt multi cropping pattern to avoid the intensity of economic distress by crop failure.

24. Suicide is not a solution to emerge from economic distress. It must be pointed out in the minds of farmers particularly who are under pressure of the distress. Social organisations, medical practitioners must play role of counsellors. Therefore, government must promote to them.

25. Dowry system is found high in districts of Vidarbha, Marathwada and Jalgaon of north Maharashtra. Therefore, it should be eliminated through boycott by society who want dowry. Moreover, the tradition of dowry is found comparatively low in Satara, Solapur and Nasik district but expenses on marriage ceremony are large in these districts. It is better to accept collective marriage for reducing expenses on marriages.

26. Farmers must establish organizations at village level and block level and discuss on various issues of farming.

27. Farmers must communicate with existing farmers organization like Shetkari Sanghatna, Swabhimani Shetkari Sanghtana, and various NGO who are working on issues of farm business.

28. Every farmer must be member of the SHG.
29. Farmers must buy certified seeds from the registered dealers and bills, packing cover must possess till harvesting of crop.

30. Minimum every rainfed farmers should be applying for crop insurance to distribute the risk.

31. Capturing and conserving every drop of rainwater. For this, farmers should adopt either sprinkler or drip irrigation system.

32. Follow-up care should be provided to who attempted suicide but have failed and provision of community support should be made.

33. Pesticides and insecticide should not be kept in open at home.

b. **Suggestions for policy makers**

There are various committees organized by central and many state governments to overcome farmers through agrarian distress in India. Similarly, many policy decisions have taken to improve the economic conditions of farmers and introduced various schemes in Maharashtra. However, government had failed to create awareness among farmers about this scheme on one hand and some are only creating desire of direct economic benefit. Therefore, benefits of these schemes could not reach up to the targeted farmers and its positive impact could not seen in reducing the economic distress of farmers and agrarian crisis in India. Most of suicide victim farmers were not found eligible caused by absence of registered land but they were family head. Therefore, government must give compensation to them if any family members have registered land as kindness to suicide victim household. The suggestions made for policy makers are discussed below. It is essential that government must implement recommendations made by NCF for promoting farming and subsidiary business on priority basis overall India.

i. **Suggestions about risk mitigation schemes of farm business and farmers**

1. Price variability or income variability insurance scheme must be implemented.

2. The unit of the area approach for determining the claims should be reduced to the villages or community of villages.
3. The guaranteed yield base of the AIC must be moving average of best five seasons out of preceding 10 seasons.

4. Level of indemnity must be 100 percent or 150 percent consists with cost of production.

5. The pre-sowing risk and post harvest losses must be considered.

6. Reduce the gap between actual loss and claim payment.

7. At least, 50 percent of the claim amount should be released within one week.

8. The burden of premium must be shared by the financial institutions almost half.

9. The burden of premium of all foodgrain crops must be taken by the government.

10. The burden of all small and marginal farmers must be taken by the government.

11. Similarly, insurance cum savings scheme with a subsidy element needs to be developed to meet marriage expenses especially for girls.

12. Health insurance must provide on affordable and lowest premium.

ii. Suggestions about seeds quality and distribution

1. Strict quality control on seeds particularly Bt Cotton seed is a pre-requisite for preventing farmers’ suicide in Maharashtra.

2. Public sector seed companies and research institutions should explore the possibilities of developing domestic pest resistant hybrid seeds.

3. Only certified seeds should be allowed to be sold in the market only after its satisfactory performance is verified on the basis of 3-5 years of field trials.

4. The permission of marketing and selling of seeds, fertilisers, pesticides and insecticides should be given only to degree holders of agriculture science and management. Similarly, every year must be given training of minimum one week.

5. Government must provide list of authorised companies to Krisi Seva Kendra for marketing of product.

6. Existing legal provisions under Seeds Act must be modified according changes in the global terms and condition to curb the entry of unauthorized seed traders in the market.
7. Government must distribute seeds of foodgrain crops under its control with concessional prices to all farmers and lowest prices to marginal and small farmers to reduce the production cost.

8. Strict action should be taken against producer and distributors of seeds if supplied low quality and unauthorized seeds.

iii. Suggestions to yield Improvement

1. Soil testing laboratories need to be upgraded.

2. Soil Health Clinics must be operated by SHGs comprising rural women and men who can issue each farm family with a Soil Health Card

3. There is need of computerization of soil testing records and provide information to farmers community centers at village level.

4. More research is required on processing of rainfed crops.

5. Most of the rural farmers have taken formal education, but it is unskilled. These peoples must get skilled education of farm and subsidiary, processing of agriculture produce through farm schools, Krishi Vidyan Kendras and from establishing new training centers. It will beneficial to improve the yield of agriculture sector and increase the employment generation in rural areas.

iv. Suggestions to increase value of per drop of irrigated water

1. Compulsory drip or sprinkler irrigation should be employed according to the needs of each farmer to increase the efficiency of water in India.

2. Irrigation level must be extended in Vidarbha and Marathwada region through regional backlog.

3. Water distribution should be done on a more scientific basis by volumetric measure.

4. The effective involvement of farmers in water management is essential for improving the operational efficiency and financial viability of public irrigation systems.

5. Government should implement watershed development programme by public participation.

6. The scheme Jalyukt Shivar should be extended for all districts and introduced as public programme.
v. **Suggestion to improving living standard of rural India**

1. Cottage industry must be promoted in rural areas.
2. Landless labour should be supported in specialized activities; particularly with women self help groups for beekeeping, vermicompost, production of bio agents, tissue culture and other planting materials.
3. Provide work for all through employment guarantee act.
4. Organic farming along with its limitations of being successful only in large farms needs to be studied on ground situations.
5. A productivity, quality and value addition revolution is urgently needed in cotton production and processing.
6. Extensive use of pesticides seems to induce depression. Therefore, safe and judicious use of it in cotton belt may be demonstrated and promoted.
7. Small farmers cotton growers associations are promoted to empower them. Federating such associations at block / district level in Maharashtra.
8. Contract farming concepts should be promoted with private sector / NGOs so that risks can be shared. Information and knowledge can be shared and a joint economic response is possible at the farm level.
9. To promote better farm practices for cotton, the need for harmonized production of bales so as to meet the technical parameters of good quality. This type of work effectively and harmoniously in progress in Gujarat state of India by share holders of ginning mills.
10. Farmers need proactive advice on land use.
11. Large area in Vidarbha is low fertile. This land must use for non-agriculture purpose. Therefore, government should promote for industrialization.

vi. **Suggestions to improve knowledge and skill of farming community**

1. The central government should establish support services and extension services in every village.
2. These extension services operate through the agricultural universities & Panchayati.
3. The main goal of extension system must be to provide knowledge of global new trends & government policies related to the health, education, on farm and off farm practices, enterprise development and market linkages.
4. Farm school must be opened in each block in our country in order to spread their innovative and knowledgeable message and methods. These schools
have services of soil testing, water testing, seeds quality test, major crop quality test facilities.

5. The farm schools must be connected with KVS and KVS should be upgraded according to global changes.

6. To achieve goal of knowledgeable and skilled farmers government must be open new television channel, which provide 24 hours knowledge of farm related issues to public.

7. New international food standards, pesticide standards and fertilizer standards should be published and upgraded.

vii. Suggestions to preventing farmers suicide

1. Reduce access to the means of suicide (e.g. pesticides, firearms, certain medications).

2. Introducing alcohol policies to reduce the harmful use of alcohol.

3. Early identification, treatment and care of people with mental and substance use disorders, chronic pain and acute emotional distress.

4. Training of non-specialized health workers in the assessment and management of suicidal behaviour.

5. Government must focus to improve the standard of living of small and marginal farmers.

6. Minimum basic prices of rainfed crops must be based on production cost and minimum net return from it.

7. Government must take responsibility of daughter marriage expenses of small & marginal farmers in Maharashtra.

8. Low cost green houses and fertilization should be actively promoted.

9. The import duty on cotton may be raised up to 30 percent

10. Being perishable commodities, horticultural crops need effective infrastructure support in the areas of production, processing, storage, transportation and marketing.

11. Create multiple livelihood opportunities in the off-farm and non-farm areas

12. MSP as well as procurement need to be strengthened in the suicide hotspot areas

13. Rainbow revolution should be promoted in suicide prone and rainfed areas for achieving substantial enhancement in the productivity of millets, pulses,
oilseeds and livestock through large scale adoption of highly successful new technology packages, such as hybrid pigeon pea.

7.6 Scope of the future in research

It is indeed, many factors have affected socio economic status of farmers in India. However, study mainly focuses on limited number of factors for avoiding confusion, complications and to obtain micro results of particular factors. Therefore, results drawn in same study might could not final for preventing farmers’ suicides. It is seen that academicians and non academicians have neglected towards empirical study on impact of WTO agreement on small and marginal farmers, methods of determining production cost of basic prices of agriculture produces, impact of marketing channels and risk mitigation schemes. These factors are also adversely affected agriculture sector of India. Hence, researcher suggests that it is essential to focus more on the above issues while doing study on the issues of farmers’ suicide and agrarian distress.

To sum up, farmers’ suicide has become a serious, complicated and complex issue due to manmade and natural factors in Maharashtra. This issue has been adversely affecting not only agriculture development but also entire social environment of rural community in Maharashtra. It is indeed, government has taken many policy decisions for preventing farmers’ suicide and improve the standard of living of rural community in Maharashtra. However, government could not succeed in it. Consequently, most of the farmers have discontent against government. Hence after, the issue of farmers’ suicide has spread all over Maharashtra. Therefore, it is essential to eradicate issue of farmers’ suicide for food security, and avoid the discontent among farming community through sustainable and long term policy decisions. Similarly, it is necessary to provide employment opportunities for survival and all the services regarding agro allied activities for bringing flow of development.