

Study No. 157

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Farmers' Suicide: Causes and Policy Prescription in Uttar Pradesh

Javed Akhtar



**Study Sponsored by Ministry of Agriculture &
Farmers Welfare Government of India,
New Delhi**

**Agro-Economic Research Centre
University of Allahabad Prayagraj**

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Preface

‘Farmers’ suicide’, has got its own meaning and significance, in a country like India; which can neither be left over untouched nor can be ignored in any way and at any cost. This being so, in view of well-known and established facts, that (i) As agriculture is the backbone of India’s national economy, in the same way an Indian farmer is the country’s strongest pillar of overall agriculture infrastructure. (ii) Agriculture is the primary source of livelihood for more than half of the total Indian population. (iii) India’s economic development can be well thought of and is possible only if farmers community is taken care of on top priority basis; and that (iv) overall these; the fact that ‘Indian farmers are the feeders of our entire countrymen’; too, needs prime consideration. Under such a state of affairs, it is the saddest part that their, i.e. farmers conditions are far away from the real satisfactory level, reasons maybe whatsoever, in singular or plural and on account of natural calamities or otherwise, as well.

In this regard our national government is fully aware of the ground level conditions and has been well in action as well, by launching a number of development/ welfare schemes from time to time towards well-being of farmers and overall agricultural development as well. At present more than a dozen schemes have already been launched by the Government of India and are well in action as well, towards farmers’ welfare in different parts (States) of the country; and this also being a fact that majority of farmers have already switched over or tend to’ improved and hi-tech cultivation practices and farming methods thereof, towards enhancing farm incomes to all possible extent.

But, in spite of this, still we find not only a single but groups of farmers being pushed away to such a critical and pathetic stage of living conditions that they are under such a depression and mental agony that, they find no option, other than to commit suicide. While, this may also be specifically stated that such group of farmers are mainly ‘marginal and small farmers’ who are living just at the subsistence level of farming and are the worst sufferers for one reason or the other. Apart natural disasters like severe droughts, floods, heavy rain falls, hailstorms, cyclones etc.; damaging the crops severely; there are a number of other factors as well, which sometimes in isolation and many a times in multiplicity, result to crop losses to such an extent that the farmers are totally marooned and even unable to understand as ‘what to do?’.

Under such conditions it becomes most inevitable and the earnest, on the part of the government to take a real stock of such unfavourable and unfortunate conditions of farmers and provide to them, all the needed assistance so that they are able to aggrv and come up of all such odd situations and live upon under a reasonable and sustainable living conditions. It has been with this motto, that our national Government, as a step forward, has initiated the study entitled, Farmers Suicide- Causes and Policy Prescription in India', not only in one, but 13 states of the country including Uttar Pradesh; covering both the types of states i.e. high farmer suicide prone states like Maharashtra, Karnataka, and as well as low/moderate farmer suicide prone states like Uttar Pradesh, Punjab.

The present study, which has been conducted in the state of Uttar Pradesh by the Agro-Economic Research Centre (AERC), Prayagraj, under the overall guidance of the coordinating Centre, the ADRTC (Agricultural Development and Rural Transformation Centre), ISEC (Institute for Social and Economic Change), Bengaluru and sponsorship of Ministry of Agriculture and Farmers Welfare, Government of India, revealed the following salient points, among many in the State of Uttar Pradesh, a low farmer suicide prone state, as (i) A total of 87 Indian farmers committed suicide during the year 2020 in the State of Uttar Pradesh as per reports of NCRB upto2020. (ii) the farming conditions and indebtedness are not in a way to affect the farmers to such an extent as to commit suicide (iii) mainly these are the marginal and small farmers, who are the worst sufferers on account of various uneven farming and environmental conditions and that there is strong need to take care of them through various developments/ welfare schemes by the government to their rescue (iv) the victim farmers household family members too were subject to varied problems during farmers post suicidal period and that they too deserve special mention to be taken care of for their well-being (v) among pre-suicide symptoms of the victim farmers the main have been his/her disturbed sleeps during nights and not taking food regularly and as per required; while all the farmer suicides were committed in their own house/ farm house; either by 'hanging' or by 'taking poison' (vi) in spite of Uttar Pradesh being a low farmer suicide prone state; there is an urgent need to take all the measures and steps thereof by the Government in the same fashion as in high farmer suicide prone states; to make Uttar Pradesh, still better in respect of farming conditions towards welfare of farming communities in particular and the entire agriculture sector as a whole, to curb farmer suicide still more.

The study has been conducted on the guidelines of Dr. Vilas Jadhav and Prof. I Maruthi Ex Head, ADRTC, ISEC, Bengaluru. They have done a lot in preparation of the research proposal of the present study, for which they deserve my special mentions and regardful thanks. I am highly obliged to the Officers of the Crime Branch, Lucknow, Uttar Pradesh, for their support and cooperation in providing the district wise list of the farmer suicide victims for the year of 2020, towards the selection of the sample. For this I express my deep sense of gratitude to Superintendents of Police of Banda and Hamirpur districts of Uttar Pradesh. I am also grateful to all the officers of concerned departments of Uttar Pradesh and the sample respondents for their cooperation and support for smooth conduct of the study in a scientific manner. I am thankful to Shri. Rajesh Gupta, Director of Agriculture Statistics and Crop Insurance, Uttar Pradesh and also thankful to Deputy Director Agriculture of Fatehpur, Lakhimpur, Banda and Hamirpur districts of Uttar Pradesh, for their most valuable support.

This study has been conducted under my overall supervision and guidance. The field survey was conducted by Sri. Hasib Ahmad and Dr. H.C. Malviya, while the tabulation and data analysis were carried out by Sri. Hasib Ahmad and Dr. Tinku Paul. Sri. Ovesh Ahmad and Ms. Divya Tiwari typed the report meticulously; whereas the supervision as well as drafting of the report was accomplished by Dr. Ashok Kumar, Research Officer (contractual) of the Centre.

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Field Survey

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List of Acronyms

AERC	–	Agro-Economic Research Centre
ADRTC	–	Agricultural Development and Rural Transformation Centre
APL	–	Above Poverty Line
AAY	–	Antyodaya
ADSI	–	Accidental Death and Suicides in India
BPL	–	Below Poverty Line
CAGR	–	Compound Annual Growth Rate
DCRB	–	District Crime Records Bureau GVA
	–	Gross Value Added
HH	–	House Hold
ISEC	–	Institute for Social Science and Economic Change
IJITEE	–	International Journal of Innovation Technology and Exploring Engineering
MOAFW	–	Ministry of Agriculture and farmers Welfare
NCRB	–	National Crime Records Bureau
NABARD	–	National Bank of Agriculture and Rural Development
RRB	–	Regional Rural Bank
SCRB	–	State Crime Records Bureau
SHG	–	Self Help Group
WHO	–	World Health Organization

Chapter 1

Introduction

1.1 Background

Ever from the very start of the life era, the word ‘suicide’ has been termed as the most crucial and dreadful even than that of the very end of life itself, i.e., the death. This is so, since it refers to the most unnatural, unwanted and disheartening way of ending one’s life, for the entire human society; while as an event, this refers to the highest stage of cowardice of human mind and action thereof, irrespective of age, sex, status, breed and creed whatsoever it may be and that such an act of shame can never be tolerated and overlooked in any way and at any cost.

Coming over to ‘farmers’ suicide’, particularly for a country like India; a prime agriculturally dominated country witnessing not only one, but a number of agricultural revolutions like green, yellow and golden, apart those of white and blue; it is a great ‘blot’ and a matter of serious concern for the whole country as well as its countrymen.

As such; the up gradation of our country’s status particularly on agricultural front, has now become most imperative and the urgent need of hour. This being so realized in the light of fact that

- (i) As agriculture is the backbone of entire Indian economy, in the same way an ‘Indian farmer’ is the main pillar of country’s entire agricultural structure and
- (ii) As per very popular and prominent quote “India lives in villages” by Mahatma Gandhi, the father of nation, and otherwise as well; we have to take care of boosting our country’s agricultural economy, which in turn will automatically boost India’s overall economy.

In the light of above, our national planners and policy makers have a great role to play in evolving suitable short term (immediate) and long term (future) remedial measures through appropriate policies and correspondingly their quick and effective implementation as well,

on top priority basis to build a strong 'farmer' and strong 'India'. This has also been considerable in view of fact that

- i. Agriculture is the primary source of livelihood for 51 per cent of India's population, while Gross Value Added (GVA) by agriculture, forestry and fishing is estimated at INR. 19.48 lakh crore (2020) and that all the economic development in the country is possible only and only if, farmer's community is taken care of on a priority basis and, that
- ii. Agriculture has been prevalent in India for ages and being rightly called the backbone of India's economy and plays a vital role with 54.6 per cent of total workforce being engaged in agriculture and allied sector activities (census 2011) and accounts for 17.8 per cent country's GVA for the year 2019-20 (at current prices)

Moreover, a 'farmer' being the "ultimate and the nucleus unit" of the entire agriculture sector, cannot at all be left over to such a sorrowful and pity able state of affairs of committing suicide, cause whatsoever maybe and instead, concerted efforts have to be evolved and made towards locating out the main root cause amongst a number of such causes compelling a farmer to suicide and get rid of this traumatized act in the direction of creating a state of affairs leading to Happy Farmer, Profitable Agriculture and a High Prosperous India.

The agricultural sector has not yet reached its full potential for varied reasons like small land holdings, monsoon dependency and lack of irrigation facilities, availability of cheap credit and insurance etc. Due to these multiple factors coupled by the illiteracy, unawareness of government schemes, vicious circle of poverty and social taboos lead to poor farm productivity and losses. Consequentially such extreme conditions culminate to occurrence of farmers' suicides. The Ministry of Agriculture & Farmers Welfare and Ministry of Home Affairs took cognizance of the issue and directed the National Crime Records Bureau to disseminate data farmers' suicides. The present study conducted by the Agro-Economic Research Centre, Prayagraj, focuses on the study of farmer suicides occurrences in the state of Uttar Pradesh.

1.2 Status of Farmers' Suicides

Need not to say that for a country like India, mainly these are the farmers who feed the entire nation; but at the same time it is also the most pathetic state of affairs that in spite

of our government's best efforts and majority of farmers switching to progressive and improved techniques of farming, we still find groups of farmers mainly small and marginal farmers, the bulk of entire farming community whose conditions are far away from the real satisfactory and desired level. A number of crises of varied nature like social, economic, political, individual have forced and compelled the farmers of the country to take drastic steps of ending their lives. Our national Government is also aware of this. Consequently, it has launched various development programmes/schemes accordingly for farmer's welfare to curb suicide menace to all possible extent. But, still farmers are continuing to commit suicides for one reason or the other. The extent of suicides have been varying among various states of the country with it being relatively high in States like Maharashtra, Karnataka and moderate or low in status like Uttar Pradesh, Kerala.

As per Wikipedia sources, the farmer's (farmer, cultivator) suicides in India ranged between 1.4 to 1.8 per 100,000 total population over, a 10 year period through 2005; while as per reports of National Crime Records Bureau (NCRB), the farmer suicide figures in India were recorded as 5763 in 2018 and 5957 in 2019, respectively. Further, the Honourable Union Minister of Agriculture, Shri. Narendra Singh Tomar, in Lower House (i.e. Lok Sabha) on November 30, 2021 stated, "5,579 Indian farmers died by committing suicide as per released statistics of NCRB, through published reports on farmer suicide upto 2020."

In respect of the state-wise status of farmer suicide, states like Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Telangana are major suicide prone states in the country while those like Kerala, Tamil Nadu, Uttar Pradesh, Gujarat, Punjab, Haryana, West Bengal as relatively moderate suicide prone states. As per NCRB data, placed before the Lower House (November 30, 2021) of the total number of farmers 'suicide committed during 2020, maximum (2567) were from Maharashtra followed by Karnataka(1072), Andhra Pradesh(564),Telangana (466), Madhya Pradesh (235)and Chhattisgarh (227), along with those of Uttar Pradesh (87),Tamil Nadu (79), Kerala (57),Assam (12), Himachal Pradesh(6), Meghalaya (4), Mizoram (4) and others.

Switching over to district wise variations in the status of farmer suicides "within the state of Uttar Pradesh"; it has been found that as per report of NCRB entitled "Accidental Deaths and Suicides in India, 2020" and treating farmers as farmers/cultivators whose profession is farming and who cultivate on their owned land or leased/ other land; out of total 75 districts of U.P (i) the highest three farmer suicide districts have been Hamirpur, Banda and

Pratapgarh (ii) 61 districts reporting no farmer suicide at all while (iii) remaining 11 districts reporting moderate/meagre farmer suicides.

1.3 Causes for Farmers' Suicides

The causal factors responsible for farmers' suicides are mainly drawn from empirical studies. The primary source for secondary data is the NCRB (National Crime Records Bureau) reports titled, "Accidental Deaths and Suicides in India (ADSI), which provides timeline data for farmers' suicides every year. However, the present time NCRB report does not include the causal factors of farmers' suicides.

Causes of farmer's suicides are not only one, but in numbers; like family problem, severe illness; bankruptcy/ indebtedness; land dispute; property disputes; crop damages/loses due to hailstorm, heavy rains or droughts etc.; unaffordable costs of seeds, fertilizers, pesticides, irrigation charges, high costs of labour and equipment /machineries required for cultivation purposes; loan distress; lack of market integration; low farm product returns and like that. All such causes are subject to varying impacts and after effects on farmers; in the sense that sometimes even a single factor like indebtedness/non-payment of loans from banks or private money lender leads the farmers in deep distress and compelling him/her to take the drastic steps of ending the life, while more often a few factors as a whole put the farmers in the most unbearable state of living and leaving him/her with no other option but to cease exist in this world. As such, while exploring out the various causes that lead to farmer's suicides, the main focus must be on locating the 'root cause' of all such causes which put the farmers under distress and to end their lives.

In this regard, the data from NCRB (National Crime Records Bureau) shows a strong linkage between farmer's suicides and indebtedness and that while Maharashtra and Karnataka had highest number of farmer suicides, these two states had also a high rate of suicides for indebtedness while there have also been a few incidences of farmer's suicides on account of land disputes. Likewise, there have also been empirical evidences of farmer's suicides due to severe droughts in some part of the country. It may also be stated that suicides are not restricted only to marginal farmers and that even small farmers are committing suicides; leading to the fact that among various causes of farmer's suicides;

extreme economic backwardness and scarcity of even minimum required food for living/survival maybe considered as the prime ones irrespective of type of farmers though, mainly these are marginal and small farmers who are bound and subject to this dreadful act, on account of their awful and subsistence level of living conditions. Apart from these, more often factors like (i) selection of crop which is not suitable to existing soil conditions (ii) farmer's unawareness about various farmer's welfare schemes towards improved cultivation practices (iii) drug abuse/addiction; also come up as a disastrous factor to a farmer, leading him to suicidal act.

1.4 Coverage of Government Programmes

The Government of India is fully aware of this most tragic and sensitive event of 'farmers suicide' in a country like ours, a prime agricultural country, where even a single farmer suicide has its own importance. In this regard it may be stated that, the Seventh Schedule of Constitution of India, places agriculture in State list, thereby the entire responsibility of promotion and development of agriculture lies with the State Government. Nevertheless, Government of India through Ministry of Agriculture & Farmers Welfare administers and supports States/UTs in development & welfare of persons involved in agriculture. The government approach to address the issue of farmers' suicide can be seen in two ways. The first approach includes array of schemes/programmes that directly focus on farmer suicides. The second approach includes range of schemes initiated by the government to strengthen the different sectors of farming and agricultural production, indirectly helping to curb farmer suicides.

Among many, the most prominent National Schemes/Programmes to cater to Needs of the Farmers of India, have been-

- **Agricultural Debt Waiver and Debt relief Scheme:** The Government of India implemented the Agricultural debt Waiver and Debt Relief Scheme in 2008 to benefit over 36 million farmers at a cost of Rs. 653 billion (US\$8.2 billion). This spending was aimed at the writing part of the loan principal as well as the interest owed by the farmers. Direct agricultural loan by stressed farmers under the so-called Kisan Credit Card.
- **2006 Relief Package:** In 2006, the Government of India identified 31 districts in the four states of Andhra Pradesh, Maharashtra, Karnataka, and Kerala with a high relative incidence of farmer suicides. A special rehabilitation package was launched

to mitigate the distress of these farmers. The package provided debt relief to farmers, improved supply of institutional credit, improved irrigation facilities, employed experts and social service personnel to provide farming support services, and introduced subsidiary income opportunities through horticulture, livestock, dairy, and fisheries.¹

Specific Schemes/Programmes to Address Farmers' Suicides

Also, various state governments in India launched their own initiatives to help prevent farmer suicides. The government of Maharashtra set up a dedicated group to deal with farm distress in 2006 known as the Vasantrao Naik Sheti Swavlamban Mission.²

- **2013 diversify income sources package:** In 2013, the Government of India launched a *Special Livestock Sector and Fisheries Package* for farmers in suicide-prone regions of Andhra Pradesh, Maharashtra, Karnataka, and Kerala. The package was aimed to diversify the income sources of farmers.³
- **Maharashtra Bill to Regulate Farmer Loan Terms, 2008:** The State government of Maharashtra passed the Money Lending (Regulation) Act, 2008 to regulate all private money lending to farmers.
- **Maharashtra Relief Package, 2010:** The State Government of Maharashtra made it illegal, in 2010, for non-licensed moneylenders from seeking loan repayment. The State Government also announced that it will form Village Farmer Self Help Groups to disburse government-financed loans.
- **Kerala's Farmers Debt Relief Commission bill, 2012:** Kerala, in 2012, amended the Kerala Farmers' Debt Relief Commission Act, 2006 to extend benefits to all distressed farmers with loans through 2011.

Apart these, the scheme of distribution of Soil Health Cards (SHCs) to farmers, already initiated by the Government of India, Ministry of Agriculture and Farmers' Welfare, will also serve a meaningful purpose, on long-run as well as short run basis, in curbing farmer suicides in general and mainly of marginal and small farmers in particular who are the worst sufferers in respect to this. The scheme of SHC will be most helping to farmers, since on

¹ Press Information Bureau (pib.gov.in), Govt. to launch special rehabilitation package to mitigate the distress of farmers in 31 Districts in 4 States Govt. of India.

² VNSS Mission (vnss-mission.gov.in)

³ Annual Report- 2012-2013, Department of Animal Husbandry, Dairying & Fisheries – Ministry of Agriculture, Government of India, New Delhi.

account of Soil Health Cards they will be subject to relatively less risk of crop failures, by adopting “soil” suited and environmentally favoured crops, on region to region basis.

1.5 Review of Literature

Review of literature serves as a best guide line in conducting any empirical findings based study on the basis of the outcomes of similar or related allied studies, in any field of application be it agricultural sciences or social sciences. Farmer’s suicide is not a new event, whether in our own country or even worldwide. The coming paragraphs are brief and concise presentations of viewpoints of eminent researchers/ social scientists/ organizations, in respect of farmer’s suicides, their causes and the remedial measures thereof.

As per study proposal of Agricultural Development and Rural Transformation Centre (Institute of Social and Economic Change), Bengaluru⁴:

- i. The latest NCRB (National Crime Records Bureau) shows that during the year 2019 of the total cases registered in the “Accidental Deaths and Suicides in India”, about 7.40 per cent were farmer suicide which has marginally declined as compared to that of 7.70 per cent in 2018.
- ii. Over viewing into the changes in farmer suicides committed by farmers/cultivators, the corresponding figures worked out to be 5,763 in 2018 and 5,957 in 2019 respectively and that
- iii. The topmost states for the farmer suicide cases include Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Telangana which when taken altogether is accounting for 83 per cent of the suicides committed by farmers; and hat these states are categorized as major suicide prone states; while states like Kerala, Tamil Nadu, Uttar Pradesh, Gujarat, Punjab, Haryana and West Bengal being quoted as minor suicide prone states; in respect of farmer suicides. Further, to add with it may also be stated here that, of the total number of farmer suicide of 5579 committed by farmers/cultivators during 2020; maximum 2,567 cases were reported from Maharashtra, followed by 1,072 cases from Karnataka, 564 from Andhra Pradesh, 466 from Telangana, 235 from Madhya Pradesh and 227 from Chhattisgarh, as per NCRB data placed before the Lower House of the Parliament; while the number of farmer’s suicides as registered in 2020, has been 87 in Uttar

⁴ ADRTC (ISEC) (2021)-Study proposal on Farmer Suicide: Causes and Policy Prescriptions in India

Pradesh, 79 in Tamil Nadu, 57 in Kerala, 12 in Assam, six in Himachal Pradesh and four cases each in Meghalaya and Mizoram.

Union Minister of Agriculture and Farmers Welfare, Government of India, Narendra Singh Tomar, told the Lok Sabha (November 30, 2021) that “5579 Indian farmers died by suicide in 2020”⁵ as per latest figures issued by the National Crime Records Bureau (NCRB) based on published reports on farmer’s suicides upto 2020, adding further that cyclonic storms/ flash floods/ floods/ landslides/ cloud burst etc. had affected approximately five million hectares of agricultural area during 2021.⁶

Suicide is a global phenomenon resulting into hundreds of thousands of deaths each year. Often, suicide is attributed to mental disorders or “moments of crisis with a breakdown in the ability to deal with stresses.” (WHO 2014) But, it must be emphasized that suicides are multifaceted and cannot be regarded only as an individual action but as affected by wider social or cultural circumstances (Staples 2012). As such, suicide is of public concern and is recognized as a public health priority (Staples and Widger 2012; WHO 2014).

With regard to variations in occupational groups; it is argued that farmers constitute a high risk group (Behere and Bhise 2009, Milner Etal, 2013); while this elevated risk among farmers is due to their access to lethal means as well as social and economic disadvantages (Milner Etal, 2013) and their being exposed to fluctuations in commodity markets, uncertainty of weather patterns and to some extent agriculture becoming relatively a non-remunerative, whereas it may be well specified that

- i. Farmers in India comprise those, “who own fields (viz. farmer/ cultivators) as well as those who employ/hire workers for field work/farming activities” (NCRB 2015, 66) and that
- ii. As per NCRB (2014, 2015) a suicide must fulfill that, it is an unnatural death, the desire to die must come from the person himself/herself and that a cause to end one’s life must exist.

⁵ Down to Earth (DTE) (2021): As told to the Parliament (November 30, 2021)

⁶ Hafle Alexandra (2018): Farmer’s Suicide in India: A Methodological and Thematic Analysis in the state of Maharashtra. Master’s Thesis submitted to Haidelburg University, Haidelberg, August 2015

On the basis of a primary-cum-secondary data based study; in respect of identifying key determinant factors towards adoption of a crop at the farm level, in respect of major staple food wheat and rice (paddy) in Allahabad (Prayagraj) district of Uttar Pradesh conducted in the agricultural year 1980-81, through sample survey of 90 farmers categorized as S₁ (small up to 2 hectare) , S₂ (medium:2.01-4 hectare) and S₃ (large;>4 hectare) under multistage stratified sampling; the author in the general welfare of the farmers, mainly marginal and small⁷; reports a few salient points’ as under:

- i. In hectareage allocation under wheat/ rice, “family requirement” is the main consideration; particularly for S₁ i.e. small farmers.
- ii. High cost input(s), is a limiting factor in adoption of wheat/rice at farm level; particularly for small farmers and they in turn, rather than increase hectareage under wheat/rice, preferred to grow crops like gram, jowar, bajra, barley etc. where so much of cost in terms of chemical fertilizers, irrigation, etc. is not required.
- iii. Among other factors, soil complex and relatively smaller risk to find a place to influence decision making of farmers in adopting wheat/ rice.
- iv. Marketable surpluses of wheat/rice at farm levels are not at all available with small (S₁ category) farmers and in most of the cases they had to buy back these commodities for their family consumption, during lean period, when prices in open market rule very high.

The number of farmers who committed suicide dropped to 5,579 in 2020 as compared to 5,957 in previous year, Agriculture Minister Narendra Singh Tomar informed the Parliament on Tuesday, citing the latest NCRB report⁸. The National Crime Records Bureau (NCRB) has not given “separate reasons” for farmers suicides in 2020. However, the causes of suicides of persons (including farmers) have been like family problems, illness, drug abuse/addiction, marriage related issues, bankruptcy or indebtedness, property dispute, professional/career problem, land disputes etc. It was also stated by the Honourable Minister in the Lower House that the Government has not received any reports on “farmers committing suicides due to unavailability of fertilizers” in the country and that the State Governments provide relief to families of farmers who committed suicide and that “Agriculture being a State subject, the Centre supplements efforts of States through

⁷ Kumar, Ashok (1992) – Agricultural Technology and Price Policy in India

⁸ NDTV (2021) - Number of farmer’s suicides fell to 5,579 in 2020: Agriculture Minister

appropriate policy measures for the development of the farm sector.”

Reddy K., Sravanth Sar. , Sundaram N. (2019)⁹ report and express their view points on the basis of their review of the literature extracted from journals, reports and newspapers from 2004 to 2019; as excerpted under.

- Agricultural sector is the main income for the rural people in India. It plays a significant role in their life. In India, small and marginal farmers account for 70 per cent according to 2011 census of the Government of India. These small and marginal farmers took credit from banks and private money lenders. The non-repayment of credit led to an agricultural crisis and farmer suicides.
- Focusing on the reasons of such disaster, the authors review identified following reasons for the agricultural crisis and farmers suicides:- Poverty, indebtedness, crop failures, distress, lack of awareness of new technologies, marketing of the produce, the high interest of non-institutional credits and depletion of water levels.
- The article concluded that- The Government had to shift its focus from industries to agriculture and shift its agricultural policies from short-run to long-term ones.

The main findings and the resultant policy implications in respect of various causes of farmers suicides and remedial measures thereof, on the above mentioned study conducted in district Allahabad in the year 2015-16 (Roy Ramendu; Malviya, H.C., Ahmad Hasib 2017)¹⁰ are most concisely and briefly presented as under :-

- i. The brothers and fathers of the victim farmers were mostly respondents of the study. Besides these, wives/sons were also respondents. All the victims were male. None was female. The social status of sample households was SC, OBC and general. . Most of victims were Hindu, while only 3.33 per cent were Muslims. Of the total victims, 40 per cent were illiterate. Victim farmers adopted the hanging method of suicide (66.67 per cent) followed by poison consuming (30.00 per cent) and shoot

⁹ Reddy K., Sravanth Sar. , Sundaram N. (2019) – “Agricultural Crisis and Farmers Suicides in India”: International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, vol. 8, Issue II, September 2019

¹⁰ Roy Ramendu; Malviya, H.C., Ahmad Hasib, (2017) – “Farmer Suicides in Uttar Pradesh” : A study sponsored by Ministry of Agriculture and Farmer’s Welfare, Government of India and conducted by A.E.R.C Allahabad: January 2017

- themselves (3.33 per cent). The place of suicide was generally within the house.
- ii. Out of 30 farmer's suicide, 83.33 per cent belonged to marginal farmers followed by 13.33 per cent and 3.34 per cent to small and medium farmers respectively. None of large farmer had committed suicide among the sample farmers in the reference year.
 - iii. The indebtedness had been one of the main causes of farmers' suicides on the sample farms during 2015-16, in the study areas. Of the total 30 sample farmers, 16 had borrowed loan from cooperative banks, commercial banks and relatives /friend. Out of total amount of borrowed loan of Rs.9,58,000 farming purpose loan accounted for 81.21 per cent against 18.79 per cent for non-farming purposes. The outstanding amount per household was estimated at Rs.38,750 at the aggregate level.
 - iv. There had been three causes namely social, farming and indebtedness of farmers' suicide in the study areas. The victim farmers before suicide become non identical and wanted to cut from the society. Their attitude and behavior were also changed before the suicides. These symptoms were generally observed by family members. Out of total victim households of 30, 90 per cent households had reported that victims weremanaging with their own family members. No sign of depression and tension was observed on their face. However, victims were not consuming food regularly and sleeping adequately and were in massive depression and tension before their suicide.
 - v. Among the social causes of suicide, the frequent quarrel among family members, love failure, illness and drug abuse were main causes of farmer's suicides on the sample farms. The farming related causes had not occurred at all, on the sample farms in the reference year.
 - vi. The indebtedness had been one of major causes of sample farmers' suicide of the study areas during 2015-16. Of the total sample being 30, 16 (53.33 per cent) had committed suicide due to indebtedness. Due to loan indebtedness, fear of arrests, auction of assets and fall in social reputation, etc. were cause of farmers' suicides in the study areas during 2015-16.
 - vii. The impact on household after committing suicide was found very discouraging. Some of victim families became orphan, some family members were under depression and 30.00 per cent families felt insecure while some reported that the marriage of daughters had been postponed. Also, schooling of the children had been stopped and that no earning member was left alive as present.

Policy Prescriptions

- i. Government should make policy to waive the outstanding borrowed amount of farmers at the time of failure of crops due to natural calamities, to help, the farmers to not come under depression and tension due to debt trap.
- ii. Revival of Cooperative Banks: To eliminate the professional money lenders from remote rural areas and that the NABARD should provide the financial help to cooperative banks. Majority of respondents of victim households had suggested that compound rate of interest should not be charged by banks to provide the relief to the farmers.
- iii. Rate of interest on Loan should be about 4 per cent per annum and expansion of banking Net-work in Rural Areas be done.
- iv. To strengthen the functioning of RRBs, KCC and SHGs and Money Lending Regulation Act be implemented in Uttar Pradesh also.
- v. The Debt Relief Commission Act 2012 should also be passed by Uttar Pradesh Government along with expansion of irrigation net-works and proper management of water.
- vi. Care should be taken towards (i) proper and effective implementation of crop insurance schemes and (ii) Adequate compensation which is needed to farmers for the loss of their crops due to natural calamities and (iii) providing required relief packages.

Various reasons have been offered to explain why farmers commit suicide in India; including floods, drought, debt, use of genetically modified seeds, public health, use of lower quality pesticides due to investment constraints and thus producing decreased yield; but there is no consensus on what the main causes might be¹¹. In this report, studies show that suicide victims are motivated by more than one cause, and on average three or more causes for committing suicides; while the primary reason being the “inability to repay loans”.

Pangariya, an economist at the World Bank states, “farm-related reasons get cited only approximately 25 per cent of the time as reasons for suicides” and that “studies do consistently show greater debt burden and greater reliance on informal sources of credit “among farmers who commit suicide.”

¹¹ Wikipedia (2022) – Farmers Suicides in India (updated 28.06.2022)
https://en.wikipedia.org/wiki/farmers%27_suicides_in_India#

1.6 Need of the Study

Farmers, i.e. farmers/cultivators whose profession is farming and who cultivate on their owned land or leased in/others land; are backbone of Indian Agriculture and rather entire economy of the country; as agriculture is still a dominating sector of the Indian economy and needs to be taken care of and looked after accordingly in respect of not only one but all of its aspects. In this regard, “farmers’ satisfaction is of prime importance, not only for the development and upliftment of rural sector but for the entire country’s agricultural growth”.

No doubt, during last few decades Indian Agriculture has taken great strides and majority of farmers have already switched over or trend to progressive and improved methods of crop cultivation and agriculture related activities but in spite of that there are still number of groups of farmers mainly marginal and to some extent small farmers as well, who are facing great hardships for one reason or the other, to such an extent that their survival becomes an unaffordable problem and in turn under unbearable distress, they are forced to take this most tragic and dreadful act of suicide.

Our national government is also well aware of this tragic fact of farmer’s suicide in the country and accordingly well ‘in action’ also, through conducting /undertaking and launching various development and welfare schemes for farmers in the country like Farmers Suicide Scheme; Pradhan Mantri Krishi Sinchayee Yojana; Fasal Bima Yojana (crop insurance); Kisan Samman Nidhi Yojana (Farm Income Support) (Central/State government Farm Income Support); Kaushal Vikas Yojana; Anndata AAY Sanrakshan Yojana Abhiyan; Soil Health Card; Farm Loan Waiver Scheme; Seed Mini-kit Scheme and like that. But, in-spite of all such farmer schemes/programs by the government farmer suicide is not coming to halt and continuing in varying magnitude in different states of the country like Maharashtra, Karnataka as relatively high prone and Uttar Pradesh, Punjab as low prone farmer suicide states. Moreover, National Crime Record Bureau (NCRB), does not cover the causes of the farmer suicides and ways to tackle the same. This makes the conduct of such studies most contemporary for, the simple reason that for a country like India, even a single farmer suicide is a great blot on the country.

All these lead us to probe out and hit at the “cause of all such causes”, i.e. the root cause which is generating a number of causes leading farmers under humiliating distress and take the drastic action of suicide and it is in this very direction that our national government has

initiated and conducting this study firstly to identify the main causes of farmers suicides and thereafter in turn respective remedial measures; not only in one but thirteen states of the country including Uttar Pradesh.

The present study also serves as an endeavour to specify causes of farmers' suicides in the state of Uttar Pradesh; in the light of "the rising pressure of indebtedness, escalating costs of cultivation, declining returns from agriculture, adverse impact of economic liberalization etc. which are commonly identified as prime causes for agrarian distress in India."

1.7 Objectives of the Study

The present study aims to achieve the following objectives in respect of farmer's suicide

1. To study the trends in inter-state variation in the farmer's suicide rates and the reasons of these differences.
2. To identify the factors that influenced the intensity of farmer's suicide and responses.
3. To re-visit the victim's household (old farmers suicide households of 2015-16) and assess the adequacy of the current income levels to meet current expenditure of victim's households.
4. Ways to tackle the root cause of the farmer's suicide with the best pragmatic remedies.
5. To analyze the effectiveness of different interventions on the farmer's suicide.

1.8 Data and Methodology

The present study corresponds to both the types of data i.e primary data and the secondary data, while the primary data has been collected from family members of the victim farmers (farmers/cultivators) as a result of farmer suicide the secondary data have been procured from the SCRB (State Crime Record Bureau) Police Headquarters, Lucknow in the state of Uttar Pradesh. Realizing the severity of the problem of farmer suicide on the overall basis, this study is being conducted in 13 states of the country, which includes six major suicide prone states (Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh, Chhattisgarh and

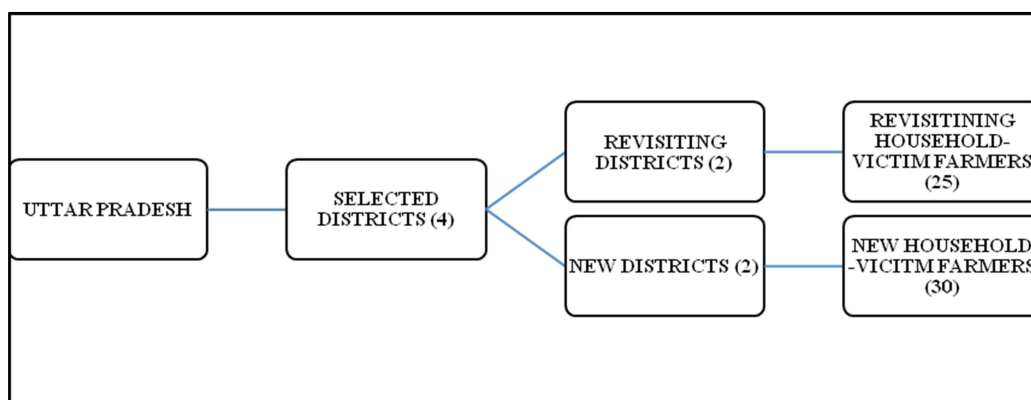
Telangana). Seven minor suicide prone states are (Kerala, Tamil Nadu, Uttar Pradesh, Gujarat, Haryana, Punjab and West Bengal) in respect of farmer suicides; while of course the present study refers to the state of Uttar Pradesh, a minor suicide prone state with regard to farmer suicide.

While the secondary data has been procured from concerned sources like published reports of National Crime Report Bureau (NCRB) and the data supplied by SCRB, police Headquarters, Government of Uttar Pradesh, Lucknow (all duly mentioned and acknowledged); primary data has been collected by personal interview of AERC, Prayagraj Research team, with the victim family members through structured questionnaire designed for the study. The questionnaire covered all the basic data such as family details, land holding, income and expenditure pattern, credit details etc. among others. The main focus of the study has been to elucidate the factors (causes) leading to farmers suicide. As such, the respondent households have been enquired about all such 'causes' which are related to factors like social, farming, indebtedness, land disputes, family quarrels etc. Data has also been collected for understanding the post suicide situation of the victims 'family'.

The members of the victims households (HHs) have been contacted using the detailed list of the farmer' suicides provided by the respective offices of the Senior Superintendent of Police (SSP)s of the district Hamirpur and district Banda, in the state of Uttar Pradesh. Further, focus has also been given in the study on both irrigated and rain fed farmers to analyze the impact of farmers suicide on farmers livelihood security and that primary data has been collected using a multi-stage sampling technique, keeping in view purposive selection sampling in respect of special event of 'farmer suicide'.

The selection plan is illustrated through following schematic diagram and the following table thereof, i.e. Table 1.1 which clearly shows that out of the total 55 sample households, highest (36.36 per cent) are from district Lakhimpur Khiri and minimum (9.09 per cent) from district Fatehpur; resulting to sample size (total number of selected households) as 55.

Stratified Sample Selection (UP)



This may be well mentioned that apart from revisiting (i.e. 2015-16 study selected districts) districts of Lakhimpur Khiri and Fatehpur; the two new districts i.e. , Hamirpur and Banda have been selected on the basis of the ‘highest number of farmer suicides’ determined on the basis of average of the three years viz. 2018,2019 and 2020.

Analytical Approach

The analytical approach of the present study aiming at hitting at the very ‘root cause’ of all such causes which lead to and compel the farmers to the drastic action of suicide; is mainly through tabular analysis based on average (mean) values and supported by suitable diagrams, to have still more clarity in respect of visual display of various factors (causes) of the farmers suicides; while farmers suicide rates have been worked out on the basis of ‘number of farmer suicides per 1,00,000 basis’; and that Compound Annual Growth Rates (CAGR) over a period of time; have been worked using the formula

$$CAGR = \left(\frac{V_{final}}{V_{begin}} \right)^{1/t} - 1$$

expressed as ‘percentages’

where;

CAGR = Compound Annual Growth Rates

V_{begin} = Beginning Value

V_{final} = Final Value

t = Time in Years

Apart, while exploring explanatory variables towards the main variable (factor) i.e. farmer suicide, multiple regression models have been employed along with working out respective regression coefficients for every selected variable and for the whole regression equation and testing their statistical significance, by using statistical tests of significance, like the t-test and the F-test.

As per the design of the study, 30 victim households were to be selected each from the revisiting households and new households. It is pertinent to mention here that 5 households from the revisiting households could not be traced on the given addresses. Therefore, only 25 revisiting households were enumerated for the study. In case of new households, 30 cases of farmer suicide victim households were taken up for the study.

The distribution of 'new household' sample across districts show, highest concentration of sample households (17), from Hamirpur, followed by 13 households from Banda. 20 sample victim households were taken up from Lakhimpur and five from Fatehpur District. Representation of victim households across villages shows that mostly one victim household was enumerated from each village except for villages Galiha and Aondera from Hamirpur District and Lohra and Panchehi from Banda District from which two households each were selected. Highest sample representation in the study is from the Lakhimpur district (36.36 per cent).

Chart 1.1
Distribution of Households in the Sample Selection

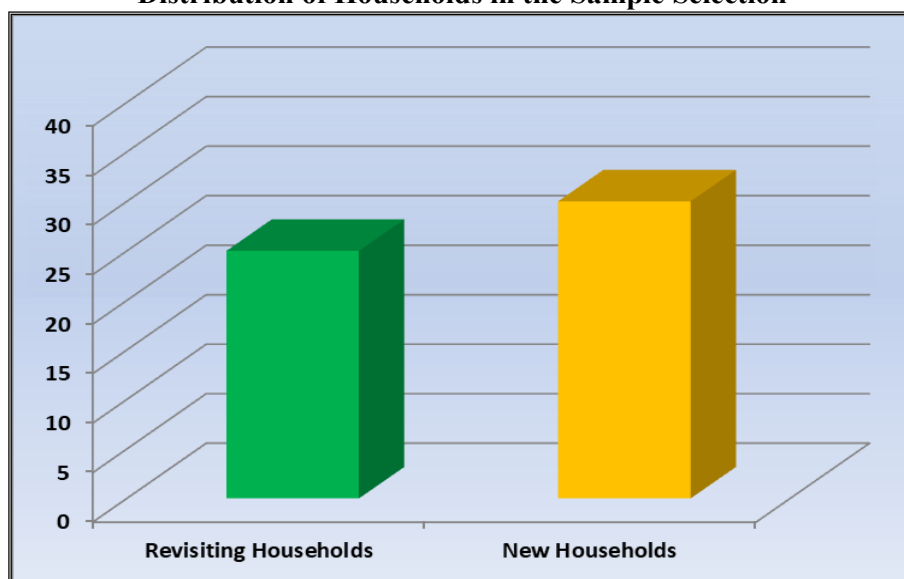


Table 1.1
Details of Selected Sample Districts and Sample Size

Sl. No	Name of the districts	No. of Taluka/ Blocks	No. of Villages	No. of Revisiting Households	No. of New Households	Total Victim HHs	% to the total sample
1	Fatehpur	5	5	5	-	5	9.09
2	Lakhimpur	2	20	20	-	20	36.36
3	Hamirpur	1	15	-	17	17	30.91
4	Banda	2	11	-	13	13	23.64
5	Total Sample	10	51	25	30	55	100.00

1.9 Organization of Report

The present report with reference to “Farmers Suicide: Causes and Policy Prescription in Uttar Pradesh” has been organized in eleven chapters; followed by References as 12 and the Annexures. While, Chapter-I deals with Introduction covering Background, Status and Causes of Farmers Suicides, Need and Objectives of the Study, Data and Methodology, etc.; Chapter-II details with Trends in Farmers Suicides; Chapter-III highlights Socio-Economic Characteristics and Ownership of Assets; Chapter-IV describes Employment and Ownership of Assets; Chapter -V presents Cropping Pattern and Net Returns; Chapter -VI displays Credits and Sources of Net Income; Chapter-VII examines the Adequacy of the Current Income levels to meet current expenditure of Victim households; Chapter- VIII explores the Causes and Ways to Tackle the Root Causes, while Factor Influencing to Farmer’s Suicide has been dealt in length in Chapter IX; followed by Chapter X illustrating Effectiveness of different Government Programme Intervention on the Farmer Suicides and the Chapter XI as Summary and Conclusions; followed by References- XII and the Annexures.

Trends in Farmers Suicides (Uttar Pradesh)

2.1 Preamble

To control and check the happening of unwarranted events in any country or specified region, the trend of incidences of such events over a period of time, plays the most important and vital role. As such, for controlling this most tragic event of farmer's suicides in the State of Uttar Pradesh, the highest populated state in the prime agriculture based country like India, deserves special mention and care thereof. It is in this direction that the present study is an attempt towards observing trends in "Inter-district variations in farmer's suicide rates", in the state of Uttar Pradesh.

2.2 Trends in Inter-district Variation in Farmers' Suicides Rates

a) The recorded observations of the Table-2.1, displaying trend in 'Farmer's Suicides' and 'All Suicides' in Uttar Pradesh, during the period 2012-20 show that:

During entire period of "2012 to 2020" (i) the highest farmers suicides as per cent of all suicides was found to be 16.84 per cent in the year 2012, while lowest as 3.58 per cent in the year 2020,

(ii) except for the year 2015 and 2018 where farmers suicides as percentages of all suicides recorded an increases over that of previous year; in general this percentage displayed a clear cut declining trend on overall period basis (iii) all suicide rates per 1,00,000 population recorded minimum i.e. 1.6 in the year 2016 and maximum as 2.5 in the year 2013 (iv) However, there is no definite trend in all suicide rates per 1,00,000 population, during the entire 2012-20 period and it has been oscillating on either side (v) while in general, the farmers suicides as percentage of all suicides, is showing declining trend over the whole period; no such trend is observed in case of all suicide rates per 1,00,000 population (vi) The Annual Compound Growth Rate has been recorded as (-)15.03 per cent in case of number of farmer suicides and as (-) 0.92 per cent in case of number of all suicides, during the entire period of 2012 to 2020 and that this has been an 'encouraging factor' in respect of farmer suicides as compared to 'all suicides'.

Table 2.1
Trend in Farmers Suicides and all Suicides in Uttar Pradesh 2012-2020

Year	Farmers Suicides		All Suicides	
	Number	As % of all Suicides	Number	Suicide Rates (per 100,000 population)
2012	745	16.84	4422	2.2
2013	750	14.18	5286	2.5
2014	192	5.34	3590	1.7
2015	324	8.30	3902	1.8
2016	184	5.23	3518	1.6
2017	203	4.59	4426	2.0
2018	254	5.24	4849	2.2
2019	261	4.78	5464	2.4
2020	172	3.58	4804	2.1
Total number of suicides in the period 2012-2020*	3085	-	40261	-
Annual Compound Growth Rate (in %)	-15.03	-	-0.92	-

Source: Various Records of ADSI (Accidental Deaths & Suicides in India), issued by NCRB

Note: In Table 2.1 and Subsequent tables of this Chapter, Data available only upto 2020 as per NCRB Records

b) Further, the data of the Table 2.2 showing Gender wise ‘farmer suicides’ and ‘all suicides’ in Uttar Pradesh during the period 2012-20, records that during the entire range of the period 2012-20.

- (i) The percentage of male farmer suicides to total male suicides in Uttar Pradesh is continuously showing a declining trend except for the year 2015 when it increased to as compared to that of the year 2014 and that an overall period basis it fell down from 24.80 per cent in 2012 to just 5 per cent in the year 2020.
- (ii) The percentage of female farmer suicides to total female suicides has been quite lower to that of corresponding counter male suicides and it has also showed declining trend during the period 2012-20 except for the years 2016, 2017 and 2019 when it increased compared to the respective previous year figures and that on overall basis it also decreased from 6.54 per cent in 2012 to just 0.85 per cent 2020.
- (iii) The declining trend in percentage of male farmer suicide to all male suicides as well in percentage of female farmer suicides to all female suicides is a clear cut sign of checking farmer suicide rate whether male or female over the period of time 2012 to 2020.
- (iv) Male farmer suicides as a percentage of ‘all farmers ‘suicides have been quite high with their respective percentage varying between 83.09 per cent in the year 2012 to

91.86 per cent in the year 2020. However, there is no definite trend at all over the period of time 2012-20 and figures increasing and decreasing alternatively.

- (v) In respect of all suicide as well as the number of male suicides have been higher as compared to those of female suicides and that the percentage of male suicides to all suicides has been ranging between 56.42 per cent to 65.82 per cent over the period 2012-20.; but their extent is not so high as it has been in case of male farmer suicides to all farmer suicides which ranged between 83.09 and 91.86 per cent.
- (vi) In respect of all suicides, there has been no definite trend over the period of time 2012-20, whether we consider number of male suicides or number of female suicides or the percentage of male suicides to all suicides.
- (vii) As a sign of positivity in the state of Uttar Pradesh, Annual Compound Growth Rates have been reported as negative in case of “number of farmer suicides” whether male or females with respective values as (-) 14.07 per cent for male farmers and (-) 26.21 per cent for female farmers.

Table 2.2
Gender-wise Farmers Suicides and all Suicides in Uttar Pradesh, 2012-2020

Year	Farmer Suicides					All Suicides		
	Male		Female		Male Farmers' suicides as a % of all farmers suicides	Male	Female	Male suicide as a % of all suicides
	Number	% of all male suicides	Number	% of female suicides				
2012	619	24.80	216	6.54	83.09	2495	1927	56.42
2013	644	20.36	106	4.99	85.67	3163	2123	59.84
2014	165	7.86	27	1.82	85.94	2099	1485	58.47
2015	274	11.97	50	0.31	84.57	2289	1613	58.66
2016	164	8.07	20	1.34	89.13	2031	1487	57.73
2017	169	6.62	34	1.82	83.25	2554	1872	57.70
2018	230	7.96	24	1.23	90.55	2891	1958	59.62
2019	226	6.99	35	1.57	86.59	3233	2231	59.17
2020	158	5.00	14	0.85	91.86	3162	1642	65.82
Total no. of suicides in the period 2012-2020	2649	-	526	-	-	23917	16338	-
Annual Compound Growth Rate(in%)	-14.07	-	-26.21	-	-	2.66	-1.76	

In respect of 'all suicides' the Annual Compound Growth Rate works out to be 2.66 per cent for males and (-) 1.76 per cent for females; which of course is an indicator of more social awareness and courage and bearing capacity among women folks as compared to their counterpart male folks; though in case of farmer suicides, male and females both are subject to negative annual compound growth rate which is a sign of positive thinking.

c) The details of the Table 2.3, showing annual compound growth rates of farmer suicides in major districts of Uttar Pradesh, during the three years period 2018-2020, results to that (i) out of 10 major districts, three districts viz. Banda, Badaun and Bahraich resulting to negative Annual Compound Growth Rate to indicate positivity towards reducing farmers suicides; while five districts record zero i.e. no change in annual compound growth rates and in two districts it has been positive annual compound growth rates to indicate insignificant effects of various means and measures to curb farmers suicides in these districts (ii) there has been greater variations in district wise annual compound growth rates to the extent of (+) 56.05 per cent in district Pratapgarh to (-) 46.41 per cent in district Badaun (iii) this gives an overall reflection that some districts are showing quite encouraging results in respect of lowering down farmer suicides, while in others still more efforts have to be made to control this act of farmer suicides.

Table 2.3
Annual Compound Growth Rate of Farmers suicides & all suicides in major districts of Uttar Pradesh 2018-2020

S. No	Name of districts	Farmers Suicides
1	Banda	-1.79
2	Hamirpur	3.03
3	Kanpur Dehat	0.00
4	Lucknow	0.00
5	Pratapgarh	56.05
6	Unnao	0.00
7	Badaun	-46.41
8	Bahraich	-37.00
9	Auraiya	0.00
10	Deoria	0.00

d) The detailed data of the Table 2.4 depicting gender wise Annual Growth Rate of farmer's suicides in major districts of Uttar Pradesh during the period 2018-20; shows that:

- i. In respect of Annual Compound Growth Rates for males out of 10 major districts, it has been positive in three districts (Hamipur, Kanpur Dehat and Pratapgarh) and negative in three districts (Banda, Badaun and Bahraich); while in four districts it worked out nil i.e. zero or indeterminate due to no farmer suicides either in starting (2018) or end year (2020) and these districts being Lucknow, Unnao, Auraiya and Deoria. The negative annual compound growth rates of male farmer suicides in Banda, Budaun and Bahraich positively indicate to fall in rates of male farmer suicides.
- ii. In case of females as well, annual compound growth rates could be known only in two districts viz. Kanpur Dehat and Pratapgarh, while it worked out to be nil (zero) in the remaining eight districts due to zero suicide either in 2018 or in 2020.
- iii. Encouragingly, negative growth rate in district Kanpur Dehat, indicates proper and the most effective applicability of various programmes/schemes of our national/state government in checking and controlling female farmers suicides.
- iv. There has been greater variability in gender wise annual growth compound growth rates among various districts to the extent that in case male farmers suicides if ranged from (-) 46.41 per cent in district Badaun to (+) 61.97 per cent in district Pratapgarh while among female farmer suicides it varied from (-) 20.63 per cent in Kanpur Dehat to (+) 25.99 per cent in district Pratapgarh.

Table 2.4
Gender-wise Annual Compound Growth Rate of Farmers suicides and all suicides in major districts of Uttar Pradesh 2018-2020

S. No	Name of districts	Farmers Suicides	
		Male	Female
1	Banda	-5.57	0
2	Hamirpur	1.03	0
3	Kanpur Dehat	2.33	-20.63
4	Lucknow	0	0
5	Pratapgarh	61.97	25.99
6	Unnao	0	0
7	Badaun	-46.41	0
8	Bahraich	-14.5	0
9	Auraiya	0	0
10	Deoria	0	0

e) The detailed observations of the Table 2.5 which depicts Farmer's suicide rates among the years and populations in Uttar Pradesh, during the period 2012-20, records that:

- (i) The total population of Uttar Pradesh increased from 2050.26 lakhs in the year 2012 to 2289.3 lakhs in the year 2020; with a continuous rising trend in between the entire period of 2012 to 2020.
- (ii) The farmers suicide number in Uttar Pradesh including farmers/cultivators and agricultural labour showed a decreasing trend during the whole period of 2012-2020, with 'up and down' in between years on year to year basis; with initial number of farmer suicides as 745 in the year 2012 and final value as 172 in the year 2020.
- (iii) The rate of farmer suicides on number of suicides per 1,00,000 basis, too resulted to a declining trend from 0.36 suicides per 1,00,000 in 2012 to 0.07 suicides per 1,00,000 in 2020; with ups and down on year to year basis, in between.
- (iii) The highest percentage change in rates of farmer suicides 'in current year over previous year' has been (+) 66.67 per cent in the year 2015 over 2014 and lowest as (-) 69.44 per cent in the year 2014 over 2013.
- (iv) On overall basis, during the entire period of 2012-20, the percentage change in rate of farmers suicide in the year 2020 over that of year 2012 has been of the order of (-) 77.78 per cent.

Table 2.5

Farmers Suicide Rates among the year and Population in Uttar Pradesh 2012-2020

Year	Population (in Lakhs)	Farmers Suicides (Number)	Rate of Farmers suicides (per one lakh)	Percentage Change in rate of farmers suicides over the previous year
2012	2050.26	745	0.36	-
2013	2089.2	750	0.36	0.00
2014	2123.9	192	0.09	(-) 69.44
2015	2158.4	324	0.15	(+) 66.67
2016	2192.4	184	0.08	(-) 46.67
2017	2200.4	203	0.09	(+)12.50
2018	2230.0	254	0.11	(+) 22.22
2019	2259.7	261	0.12	(+) 9.09
2020	2289.3	172	0.07	(-) 41.67

- (vi) The declining trend in the number of farmer suicides (farmer/cultivators/agri-labourers) and also in the rate of farmer suicides on per 1,00,000 basis in the state of Uttar Pradesh during the period 2012-20, shows an encouraging picture for the state in respect of controlling the extent of farmer suicides in the state; supplemented by the fact that during the entire period, the percentage change in rate of farmer suicides in the year 2020 over that of year 2012 has been (-) 77.78 per cent.

The observed data of the Table 2.6 in respect of population of Uttar Pradesh along with gender wise numbers and rates of farmer suicides on per 1,00,000 basis during the period 2012-20 shows that:

- i. The population of Uttar Pradesh state records a rising trend all through the entire period of 2012 to 2020; with initial and final value as 2050.26 lakhs in the year 2012 and 2289.30 lakhs in the year 2020.
- ii. The data of number of farmer suicides in Uttar Pradesh, apart year wise ups and downs, in general show a declining trend on entire period basis, with respective values as 745 in the year 2012 and 172 in the year 2020.
- iii. Gender wise also apart year wise rise and fall in between, number of farmer suicides show a declining trend in case of both the sexes i.e. males as well as females. The number of male farmer's suicides decreased from 619 in 2012 to 158 in 2020; while that of female farmers fall down from 126 in 2012 to just 14 in the year 2020.
- iv. Year to year wise and during the entire period as well male farmers suicide have been always higher than those of female farmer suicides
- v. As a sign of positivity the total farmer's suicide rates in Uttar Pradesh oscillating on either side on year to year basis during the period 2012 to 2020 finally fell down from 0.41 per 1, 00,000 in the year 2012 to just 0.08 per 1, 00,000 in the year 2020.
- vi. Gender wise as well, same trend is observed for male farmer suicide rates as well as for female suicide rates; with downward trend during the entire 2012-20 period.
- vii. The male farmers suicide rate declined from 0.31 per 1,00,000 in 2012 to 0.07 per 1,00,000 in 2020; while that of the female farmers declined from 0.11 per 1,00,000 in 2012 to 0.01 per 1,00,000 in 2020.

Table 2.6
Gender-wise Farmers Suicide Rates among the year & Population in Uttar Pradesh
2018-2020

Year	Population (in Lakhs)	Farmers Suicides (Number)			Rate of Farmers suicides (per one lakh)		
		Male	Female	Total	Male	Female	Total
2012	2050.26	619	126	745	0.31	0.11	0.41
2013	2089.2	644	106	750	0.31	0.05	0.36
2014	2123.9	165	27	192	0.08	0.01	0.09
2015	2158.4	274	50	324	0.13	0.02	0.15
2016	2192.4	164	20	184	0.07	0.01	0.08
2017	2200.4	169	34	203	0.08	0.02	0.09
2018	2230.0	230	24	254	0.10	0.01	0.11
2019	2259.7	226	35	261	0.10	0.02	0.12
2020	2289.3	158	14	172	0.07	0.01	0.08

2.3 Chapter Summary

The key points of this chapter with regard to trends in farmer suicides in Uttar Pradesh during the period 2012 to 2020; are considered as under:

- (i) While no definite trend is recorded in all suicide rates (on per 1,00,000 basis) in the state of Uttar Pradesh during the whole period 2012-2020 with oscillating on either side in between ; the farmer suicides as percentage of all suicides records a clear cut declining trend on overall whole period 2012-2020 basis in the state of Uttar Pradesh; except for the years 2015 and 2018 recording slight increase over previous year value
- (ii) The farmer suicides as percentage of all suicides fell down from 16.84 per cent in 2012 to 3.58 per cent in 2020; while the all suicide rates on per 1,00,000 population have been moving along between 1.6 to 2.5 per 1,00,000, all along this period. To add with during 2012-20 period, the annual compound growth rates of number of farmer suicides have been (-) 15.03 per cent in comparison to that of 0.92 per cent in per cent age of number of all suicides.
- (iii) The declining trend in per cent age of male farmer suicide to all male suicides and per cent age of female farmer suicides to all female suicides is a clear out sign of checking farmer suicides, whether males or females in the State of Uttar Pradesh, over the period of time 2012 to 2020.

- (iv) As a percentage of all farmer suicides male farmers have been dominating over their counterpart female farmers during the entire period of 2012-2020.
- (v) There has been no definite trend in respect of all suicides over the period of time 2012-2020, whether we consider number of male suicides or number of female suicides or percentage of male suicides to all suicides
- (vi) As a sign of positivity; in the state of Uttar Pradesh annual compound growth rates have been reported as 'negative' in case of 'number of farmers suicide' whether males or females.
- (vii) In case of 'all suicides' as well annual compound growth rates have been reported as negative but to a much smaller extent as compared to those of farmer suicides male.
- (viii) Among major districts of Uttar Pradesh the negative annual compound growth rate of male farmers in Banda, Budaun and Bahraich and that of female farmers in Kanpur Dehat, indicate proper and most effective applicability of various programmes/ schemes of our national/ state government in the checking and controlling farmers suicides
- (ix) In respect of district wise variations in the state of Uttar Pradesh, a greater variations are found in compound growth rate to their extent of (+) 56.05 per cent to (-) 46.16 per cent, resulting to overall reflection that while some districts are showing quite encouraging results in respect of lowering down farmer suicides in other, still much has to be done to control and curb this act of farmer suicide.

Socio-economic Characteristics of Sample Households

3.1 Background

The various socio-economic characteristics are of prime importance and play a most deterministic role, on the state of affairs of quality and the adoption of cultivation practices by a farmer. This is so, since the quality and status of various cultivation practices and respective input applications thereof enable the farmer to get desired levels of output in the form of crop produce and its resultant returns in terms of physical as well as value units. Apart these, there are other factors as well which govern the economic and social status of a farmer, but among all, socio-economic characteristics are the main and as such any lapse or lacunae in respect of these, ultimately results to unbearable economic and financial setbacks to a farmer, who in turn finds himself under such a great depression and frustration that he is left with no option; but to suicide. In light of these it becomes an inseparable aspect of any study, undertaken in respect of controlling farmers' suicides, to have atleast an over-view idea of farmer's socio-economic characteristics.

The Chapter three presents the socio-economic characteristics of the sample households. The presentation of the demographic, economic and social structures of the family of the victim households has been displayed for the revisiting households as well as the new households. The various socio-economic parameters of respondents by their relation to the victim, gender, categorized age, educational status, type of family, family size, proportion of dependent population, caste, religion, occupation of the head of household, marital status and type of PDS card holding have been studied in detail in this chapter. It is pertinent to delve into these details to understand the background of the victim farmer families before we investigate the details and causes of farmer suicides. The implications of these socio-economic factors do have a decisive impact on understanding the trajectories of farmer suicides.

3.2 Type of Respondents

The district-wise distribution of victim household respondents by their relation to the victim shown in the Table 3.1, results to

- i) In case of 'Revisiting Households' 80 per cent are spouse or heir of the victim and 20 per cent belong to others like parents, brothers/sisters as in district Fatehpur; with corresponding percentages as 55 per cent and 45 per cent in district Lakhimpur; while
- ii) In case of 'new households' the percentage distribution of households as per spouse or heir of victim and 'others' i.e., parents, brothers/sisters being respectively as 52.94 per cent and 47.06 per cent in district Hamirpur and as 23.08 per cent and 76.92 per cent in district Banda; respectively.
- iii) It is also observed that majority of respondents consisted of spouse or heir of victim in three districts out of four. (Table 3.1)

Table 3.1
District-wise Details on the Type of respondents

S. No	Districts	Data collected from (Revisiting households)		Data collected from (New households)	
		Spouse or Heir of victim (% to total sample of HHs)	Others like parents, brothers/ sisters, relatives, friends of victim (% to total sample of HHs)	Spouse or Heir of victim (% to total sample of HHs)	Others like parents, brothers/ sisters, relatives, friends of victim (% to total sample of HHs)
1	Fatehpur	4 (80)	1 (20)	-	-
2	Lakhimpur	11 (55.00)	9 (45.00)	-	-
3	Hamirpur	-	-	9 (52.94)	8 (47.06)
4	Banda	-	-	3 (23.08)	10 (76.92)

3.3 Distribution of sample households by Gender

The gender-wise distribution of sample households as per revisiting and new households; as shown in the Table 3.2, depicts that

- i) In case of re-visiting households out of total 25 households 68.0 per cent are males

and 32.0 per cent are females; while

- ii) In case of new households, of the total 30 sample households, 80 per cent are males and 20 per cent are females.
- iii) On the whole, female representation was only 25.5 per cent of the total sample. This was also true categorically for the revisiting as well as new households wherein the female representation was far below the male representation.

Table 3.2

Distribution of sample Households by Gender

Sl. No.	Family type	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Male	17	68.0	24	80.0	41	74.5
2	Female	8	32.0	6	20.0	14	25.5
3	Total	25	100.0	30	100.0	55	100.0

3.4 Distribution of sample households by age

The details of the Table 3.3, showing the distribution of sample households by categorised age groups; reflects that

- i) Majority of respondents correspond to old age category (> 47 years), followed by young respondents (<40 years) and middle (40-47 years) age group respondents, for revisiting households, New Households and the overall sample as well. While, 49.09 per cent representation of respondents on the whole, was from the age category more than 47 years, 34.55 per cent respondents from victim households were in age group less than 40 years and 16.36 per cent respondents belonged to age group 40-47 years.
- ii) The percentage distribution as per old, young and middle age groups respectively been as 56 per cent, 28 per cent and 16 per cent for revisiting ; 43.33 per cent. 40.00 per cent and 16.67 per cent for New Households.
- iii) Representation of young respondents was more from the new' households' category of farmer victim households.

Table 3.3
Distribution of Sample Households by Age

Sl. No.	Age category	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Young (<40 years)	7	28.00	12	40.00	19	34.55
2	Middle (40-47 years)	4	16.00	5	16.67	9	16.36
3	Old (> 47 years)	14	56.00	13	43.33	27	49.09
	Total	25	100.00	30	100.00	55	100.00

3.5 Distribution of sample households by literacy

The details of the Table 3.4, showing the distribution of sample household by categorised literacy shows that

- i) In case of 'Revisiting Households', majority of respondents (40.00 per cent) had education upto secondary level followed by Primary level education (20.00 per cent), Intermediate (12.00 per cent) and Degree level education (12.00 per cent) with 16.00 per cent being illiterate.
- ii) In case of 'New Households' maximum (33.33 per cent) were primary level educated followed by 23.33 per cent educated upto secondary level; 16.67 per cent as intermediate level educated. Illiteracy was higher in the new household sample, which were 26.67 per cent compared to 16 per cent in the revisiting households. It is seen that education status of the respondents from revisiting households was better-off compared to new households.
- iii) On the whole, distribution of sample respondents as well, similar to revisiting and New Household respondent group; majority (72.73 per cent) of them correspond to primary, secondary and PUC/Intermediate level education, when taken together; while 5.45 per cent corresponding to Degree/graduate level and that 21.82 per cent being illiterate.
- iv) Higher education (PG level degree) was not possessed by any of the respondents irrespective of their sample type i.e., revisiting or new.

Table 3.4
Distribution of sample households by literacy

Sl. No.	Age category	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Illiterate	4	16.00	8	26.67	12	21.82
2	Primary	5	20.00	10	33.33	15	27.27
3	Secondary	10	40.00	7	23.33	17	30.91
4	PUC/Intermediate	3	12.00	5	16.67	8	14.55
5	Degree	3	12.00	0	0	3	5.45
6	PG	0	0.00	0	0	0	0.0
7	Total	25	100.00	30	100.00	55	100.00

3.6 Distribution of sample households by family type

The Table 3.5 depicting the distribution of sample households by their family type shows that

- i) Empirically 87.27 per cent of the total households were nuclear families while the representation of nuclear families was higher in case of ‘new households’ (93.33 per cent) compared to 80 per cent for the ‘revisiting households’. Thus, it may be concluded that most of the victim household families were nuclear families.

Table 3.5
Distribution of Sample Households by Family type

Sl. No.	Family type	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Nuclear	20	80.0	28	93.33	48	87.27
2	Joint	5	20.0	2	6.67	7	12.73
	Total	25	100.0	30	100.00	55	100.00

3.7 Distribution of sample households by family size

The Table 3.6 shows the distribution of sample respondents across ‘revisiting households’ and ‘new households’ category.

- i) The distribution shows that on the whole most of the families were small families with average family size of upto 4 members per household (67.27 per cent). There were no large families (with more than 8 members per household).

- ii) The data for the ‘revisiting households’ shows that 68 per cent were small families while 32 per cent were medium size households.
- iii) The ‘new households’ also show similar trends with minor variations.

Table 3.6
Distribution of Sample Households by Family Size

Sl. No.	Family size (Members)	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Small (Up to 4)	17	68.0	20	66.67	37	67.27
2	Medium (5-8)	08	32.0	10	33.33	18	32.73
3	Large (> 8)	00	0.0	00	0.0	0.0	0.0
4	Total	25	100.00	30	100.00	55	100.00

3.8 Distribution of sample households by dependency

The Table 3.7 illustrating the distribution of sample households by dependent population shows that:

- i. On the whole 54.09 per cent of the total household population of the sample farmer victim households; were dependent, of which 25.45 were female dependents, 21.82 per cent were dependent children (below 14 years of age) and rest, i.e. 6.82 per cent were dependent males.
- ii. Dependent population was higher in case of ‘New Households’ with 56.78 per cent of the total sample household population as dependent; in comparison to that of ‘revisiting households’ with 50.98 per cent of the total sample household population as dependent. Category-wise highest percentage of dependency was found for ‘females’ (32.35 per cent) in revisiting households; (32.20 per cent) for children (<14 years) in new households and again females (25.45 per cent) on overall sample basis also.
- iii. The dependency percentage has been lowest for ‘males compared to females and children, for ‘revisiting’, ‘new’ as well as total sample households.

Table 3.7
Distribution of Sample Households by Dependency

Sl. No	Particulars	Revisiting Household		New Household		All Household	
		No.	% (as proportion to Total Hhd. Population)	Number	%	Number	%
1	Dependents Male	9	8.82	6	5.08	15	6.82
2	Dependents Female	33	32.35	23	19.49	56	25.45
3	Dependents Children(<14)	10	9.80	38	32.20	48	21.82
4	Total	52	50.98	67	56.78	119	54.09

Note: The Male-female bifurcation of dependent population includes child dependent population

3.9 Distribution of sample households by caste

The Table 3.8 with respect to caste-wise distribution of households shows

- i) Highest proportion of OBC 50.91 per cent on overall basis sample households, while this proportion was 63.33 per cent in case of new households and 36 per cent in case of revisiting households.
- ii) The SC representation was 32.73 per cent on the total sample household basis; while it being 36.00 per cent in revisiting and 30.00 per cent in new households respectively.
- iii) General caste category was only 16.36 per cent of the total sample households; while it was higher in revisiting households (28.00 per cent) compared to only 6.67 per cent in the new households.

Table 3.8
Distribution of Sample Households by Caste

Sl. No	Particulars	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	General	7	28.00	2	6.67	9	16.36
2	OBC	9	36.00	19	63.33	28	50.91
3	SC	9	36.00	9	30.00	18	32.73
4	ST	0	0.0	0	0.0	0	0.0
	Total	25	100.0	30	100.0	55	100.0

3.10 Distribution of sample households by Religion (Number of Families)

The details of the Table 3.9 with respect to religion-wise distribution of sample households results to that

- i) The highest number of sample households was of Hindus on overall basis (96.36 per cent) as well as in each of the two categories i.e., 'revisiting' and 'new' households with respective percentages as 96.00 per cent and 96.67 per cent.
- ii) Next to Hindus were Muslims, but with very meagre percentages as 4.00 per cent for revisiting, 3.33 per cent for new and 3.64 per cent for total sample households.
- iii) Except these two religions, there was no respondent of any other religion.

Table 3.9
Distribution of Sample Households by Religion (Number of Families)

Sl. No.	Religion	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Hindu	24	96.0	29	96.67	53	96.36
2	Muslims	1	4.0	1	3.33	2	3.64
3	Christians	0	0	0	0.0	0	0.0
4	Sikhs	0	0	0	0.0	0	0.0
5	Buddhists	0	0	0	0.0	0	0.0
6	Jains	0	0	0	0.0	0	0.0
	Total	25	100.0	30	100.0	55	100.0

3.11 Distribution of Sample Households by Marriage

The distribution of sample respondents by their marital status is reflected in the Table 3.10 which shows that-

- i) Of the total sample households, maximum has been 'married' followed by 'widow/widower' and 'unmarried', on the total sample basis, as well as for 'revisiting' and 'new' households as well.
- ii) No respondent has been reported as separated/divorced or any other type in either of the cases.

- iii) Married and widow/widower, taken together accounted for 85.40 per cent on overall basis, 96.6 per cent in case of new households and 72.00 per cent in case of revisiting households, respectively.

Table 3.10
Distribution of sample households by marriage

Sl. No.	Family type	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Married	11	44.0	19	63.3	30	54.5
2	Unmarried	7	28.0	1	3.3	8	14.6
3	Widow/Widower	7	28.0	10	33.3	17	30.9
4	Separated/Divorced	0	0	0	0.0	0	0.0
5	Other	0	0	0	0.0	0	0.0
6	Total	25	100.0	30	100.0	55	100.0

3.12 Distribution of household head by occupations

The distribution of households by the occupation of the head of the household shown in the Table 3.11 results to that

- i) Maximum proportion of households earned their livelihood from farming working as farmer/cultivators. This proportion on the whole is 92.8 per cent whereas the corresponding figures for 'new households' stands at 93.3 per cent followed by revisiting households where 92.0 per cent heads of the households earned their living working as farmers or cultivators.

Table 3.11
Distribution of Household Head by Occupations

Sl. No.	Livelihood Groups	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Farmers/Cultivator	23	92.0	28	93.3	51	92.8
2	Agriculture labour	0	0.0	0	0.0	0	0.0
3	Self-employed in business/shop	0	0.0	0	0.0	0	0.0
4	Non-agriculture casual labour	0	0.0	0	0.0	0	0.0
5	Salaried work	0	0.0	2	6.7	2	3.6
6	Pensioner	0	0.0	0	0.0	0	0.0
7	Household work	0	0.0	0	0.0	0	0.0
8	Others	2	8.0	0	0.0	2	3.6
	Total	25	100.0	30	100.0	55	100.0

Source: Field Survey

- i) The data clearly indicates farming (i.e., working as a cultivator/farmer) as the 'primary occupation' for majority of respondents; i.e., above 92 per cent for 'revisiting' or 'new' as well as total sample respondents.
- ii) Among other occupations i.e., 'other than farming', is reported 'salaried work' in case of New Household and 'others' in case of revisiting household respondents.

3.13 Distribution of sample households by PDS Card type (Number of Families)

The data in Table 3.12 illustrating distribution of sample households by PDS (Public Distribution System) card type, results to that

- i) On the whole of the total sample households (55), 69.1 per cent are PDS card holders, while this percentage is reported as 68.00 per cent in case of revisiting households and 70.00 per cent in case of new households. On all household basis 28.9 per cent were BPL card holders and 71.1 per cent were APL card holders.
- ii) In case of the revisiting households, 68.00 per cent households had PDS cards. Among this of 58.8 per cent as APL card holders and the rest 41.2 per cent as BPL card holders.
- iii) In case of 'new households'; among card holders there were 81.00 per cent APL card holders; while 19.00 per cent were BPL PDS card holders.

Table 3.12
Distribution of sample households by PDS Card type (Number of Families)

Sl. No.	PDS Card type	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	APL	10	58.8	17	81.0	27	71.1
2	BPL	7	41.2	4	19.0	11	28.9
3	AAY	0	0	0	0	0	0.0
4	Others	0	0	0	0	0	0.0
5	Total	17	100.0	21	100.0	38	100
6	%age to total respondents	68.0		70.0		69.1	

Source: Field Survey

3.14 Chapter Summary

The main key points as observed on the basis of analytical findings of this Chapter are summarized as under:

- i) Majority of respondents consisted of spouse or heir of victim, in three districts out of four; while in one district majority of respondents have been 'others' like parents, brothers/sisters.
- ii) In case of revisiting households 68 per cent are males and 32 per cent females and in case of new households 80 per cent are males and 20 per cent females.
- iii) Majority of respondents belonged to old age (> 47 years) followed by young (<40 years) and middle age (40-47 years) in case of 'new' as well as revisiting households and thereby on overall basis as well for All respondents.
- iv) Highest percentage of respondents (households) being educated upto secondary level (40.00 per cent) in case of 'revisiting', upto primary level (33.33 per cent) in case of 'New' and secondary level (30.91 per cent) on overall sample household basis.
- v) Majority of victim household families have been "nuclear" families, with respective percentages as 80.00 per cent for revisiting, 93.33 per cent for new and 87.27 per cent for all households.
- vi) Majority of families have been small (upto 4 members) followed by medium (5-8 members), with no large size (>8) family at all; in case of 'revisiting', 'new' as well as 'total' households. Small and medium sized families comprised of cent per cent (100 per cent) of all households when taken together as combined; in each category and also on all households.
- vii) The dependency percentage has been lowest for 'males' as compared to females and children, for 'revisiting', 'new' as well as 'total households' while caste-wise highest proportion was recorded in case of 'OBC' followed by SC and General, with none in the ST.
- viii) Religion-wise, highest number of households were Hindus, being above 96 per cent of the respective households in each of the two categories i.e. 'revisiting' and 'new' households and also on total sample household basis. Rest being Muslims.
- ix) On marital status basis, majority had been married, followed by widow/widower and unmarried; household category-wise and for total sample as well; with no one as separated or divorced.

- x) Occupation-wise, farmers/cultivators dominated overall the other groups of livelihood; accounting for over 90 per cent of the total respondents in case of revisiting, new as well as Total households.
- xi) With respect to type of PDS cards; in case of revisiting households, 58.8 per cent had APL type and 41.2 per cent had BPL type; while in case of New Households 81.0 per cent had APL type and 19.00 per cent had BPL type cards respectively; while on the whole 71.1 per cent APL and 28.9 per cent BPL type. The possession of higher percentage of APL type, PDS Card by new households, compared to Revisiting ones; is beyond any doubt, a sign of prosperity and increased awareness of farming community with advancement of time.

Employment and Ownership of Assets

4.1 Background

Employment and ownership of assets, both are directly related to the economic status of a farmer. It may be clearly stated that employment is positively correlated with the extent of ownership of a farmer, particularly in case of land holding ownership, which in turn enhances employment of farmer's family members in agricultural and its allied activities and this as a step forward increases farmer's income as well, in one way or the other. As such, an overview idea of basic characteristic features of sample households, in respect of employment and ownership of assets play an important role. The present chapter featuring details of employment and ownership status of sample households; is an attempt in this direction.

4.2 Distribution of Household Member's by Employment Pattern

The recorded observations of the Table 4.1, with regard to distribution of the household members by different occupations, show that

- i. For both the categories of sample households, i.e., revisiting and new 'as well as overall sample households', majority (over 90 per cent) of the sample households are engaged with Primary occupation with respective percentages as 92.00 per cent for 'revisiting', 93.3 per cent for 'new' and 92.7 per cent for 'overall' sample households.
- ii. No sample households correspond to secondary occupation in any category; while in case of revisiting 8 per cent corresponds to 'other' and in case of new households 6.7 per cent are engaged with tertiary occupation.

Table 4.1
Distribution of Household Members' by Employment Pattern

(Number of days in year)

Sl. No.	Occupations	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Primary	23	92.0	28	93.3	51	92.7
2	Secondary	0	0	0	0	0	0
3	Tertiary	0	0	2	6.7	2	3.6
4	Others	2	8.0	0	0.0	2	3.6
	Total	25	100.0	30	100.0	55	100.0

4.3 Extent of Migration

The data of the Table 4.2 in respect of extent of migration of sample households, record that

- i. In respect of 'number of days' of migration in the reference year, the leading category being 'new households' (182) days, followed by 'revisiting' households (157 days); resulting to overall average of 173 days
- ii. Distance-wise as well new households are exceeding over that of revisiting households with respective values as 585 kms. and 310 kms, with overall average as 493 days.
- iii. While none of the household family, whether new or revisiting, migrated as whole the corresponding numbers for 'number of times of migration' and 'any one alone migrating' too had been very meager.

Table 4.2:
Extent of Migration of Households by Caste and Class

Sl. No.	Particulars	Revisiting Household	New Household	All Household
1	Number of days in the reference year	157	182	173
2	Number of times in the reference year	2	1	1
3	Distance (KM)	310	585	493
4	Alone (Number of respondents)	3	6	9
5	Family (Number of respondents)	0	0	0

Source: *Field Survey*

4.4 Distribution of households by Ownership of land/assets

The details of the Table 4.3, in respect of distribution of households by ownership of land/assets, record that

- i) In case of residential land as also the residential house; (a) of the 30 ' new households', all of them owe both, with respective per household areas as 1034 sq. feet and value as Rs. 1,34,000 for land and that 840 square feet as area and Rs. 3,52,667 as value for house respectively (b) among 25 revisiting households, only 24 owe the both with respective per HH area and value as 867.5 square feet and Rs. 1,40,896 for land and Rs. 667.5 square feet and Rs. 2,78,958 for house; respectively.

- ii) While in case of new households, none possesses commercial land/ building; among revisiting as well only one had commercial land/ building; covering 100 square feet with a value of Rs. 50,000.
- iii) Cultivable land is owned by all the 30 new households, and only by 24 out of 25 in case of revisiting households; while in respect of cattle sheds/ farm house, 11 among 30 in case of the new households and 13 among 25 in case of revisiting households; possess them.
- iv) None of the households, whether a new household or a revisiting household, had access to pond/ tank, storage house or even sheep/goat shed.
- v) On the overall ‘all household’ basis, out of total 55 households, 54 possessed residential land, residential house, and cultivable land; while 24 had cattle shed/ farm houses and only one household had commercial land; building; with not even a single household with access to pond/ tank, storage house or even sheep/goat shed etc.
- vi) The pattern of distribution of households by ownership of land/ assets has almost been the same for both i.e. ‘new’ and ‘revisiting’ households.

Table 4.3:
Distribution of households by Ownership of land/assets

Sl. No	Ownership	Revisiting Household		New Household		All Household	
		Area (sq. ft.)	Value (in Rs.)	Area (sq. ft.)	Values (in Rs.)	Area (sq. ft.)	Values (in Rs.)
1	Residential land (Sq. Ft)	867.5 (24)	1,40,896	1034 (30)	1 34,000	960 (54)	1,37,065
2	Residential house (Sq. Ft)	667.5 (24)	2,78,958	840 (30)	3,52,667	763 (54)	3,19,907
3	Commercial land/building(Sq. Ft)	100 (1)	50,000	0	0	100 (1)	50,000
4	Cultivable land (Acres)	1.4 (24)	15,87,500	2.21 (30)	17,50,000	1.9 (54)	16,77,778
5	Cattle sheds/Farm houses Area sq. ft. (No)	120.8 (13)	80000	174.6 (11)	52000	145.4 (24)	67,167
6	Pond/Tank (No.)	0	0	0	0	0	0
7	Storage house (No)	0	0	0	0	0	0
8	Any others (Specify) Sheep and Goat Shed (No.)	0	0	0	0	0	0

Note: Figures in parenthesis show absolute numbers

4.5 Sells Transactions by Households during 2017 to 2021

The Table 4.4, detailing sale transactions by households, during the period 2017-2021 show that among all i.e., 25 revisiting, 30 new and 55 total households in the sample only one had sale transaction of 800 square feet of residential land and amounting to value of Rs. 2,50,000.

Table 4.4
Details of Sale Transactions by Households During 2017 to 2021

(Values in Lakh)

Sl. No.	Ownership	Revisiting Household		New Household		All Household	
		Area	Values	Area	Values	Area	Values
1	Residential land (SqFt)	800 (1)	250000	0	0	800 (1)	250000
2	Residential house (SqFt)	0	0	0	0	0	0
3	Commercial land/building (SqFt)	0	0	0	0	0	0
4	Cultivable land (Acres)	0	0	0	0	0	0
5	Cattle sheds/Farm houses (No)	0	0	0	0	0	0
6	Pond/Tank (No)	0	0	0	0	0	0
7	Storage house (No)	0	0	0	0	0	0
8	Any others (Specify)	0	0	0	0	0	0

4.6 Purchase Transactions by Households during 2017 to 2021

The details of the purchase transactions by the households during the entire period 2017, 2021 as displayed in the Table 4.5, shows that no transaction was made at all during the entire period to 2017 to 2021; by any of the household whether revisiting or even new.

Table 4.5
Details of Purchase Transactions by Households During 2017 to 2021

(Values in Lakh)

Sl. No.	Ownership	Revisiting Household		New Household		All Household	
		Area	Values	Area	Values	Area	Values
1	Residential land (SqFt)	0	0	0	0	0	0
2	Residential house (SqFt)	0	0	0	0	0	0
3	Commercial land/building(SqFt)	0	0	0	0	0	0
4	Cultivable land (Acres)	0	0	0	0	0	0
5	Cattle sheds/Farm houses (No)	0	0	0	0	0	0
6	Pond/Tank (No)	0	0	0	0	0	0
7	Storage house (No)	0	0	0	0	0	0
8	Any others (Specify)	0	0	0	0	0	0

Source: Field Survey

4.7 Distribution of Households by Types of Residence

The data of the Table 4.6, showing distribution of households by type of residence, records that

- i. In case of new households i.e., 30 all of them possess pucca or kutcha type of residences. Among these 66.7 per cent are pucca houses and 33.33 per cent kuccha houses.
- ii. None of the new households had kutcha or khapra (thatched) type house.
- iii. In case of revisiting households, among total 25 households; 48 per cent have pucca type residence, 8 per cent kutcha type, 10 per cent other type, while 4 per cent have no house at all.
- iv. On overall basis, this distribution turns to be as 58.2 per cent pucca type, 21.8 per cent kutcha type, 18.2 per cent other type and 1.8 per cent 'no house'.

Table 4.6
Distribution of Households by Types of Residence

Sl. No.	Type of residence	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Pucca	12	48.0	20	66.7	32	58.2
2	Kutcha	2	8.0	10	33.3	12	21.8
3	Khapra (thatched hut)	0	0.0	0	0.0	0	0.0
4	Any other (Shed)	10	10.0	0	0.0	10	18.2
5	No house	1	4.0	0	0.0	1	1.8
	Total	25	100.0	30	100.0	55	100.0

4.8 Livestock Inventory of Sample Households

The details of livestock inventory as shown in the Table 4.7, results to that

- i. The total livestock animals owned by 'revisiting households' consist of 16 milch cattle/buffalo, values at the rate of Rs. 30,531.25 per animal and four sheep and goats valued at the rate of Rs. 7785.71 per animal.
- ii. Among 'new households', the total animals owned by them, consist of 15 milch cattle/buffalo valued at the rate of Rs. 41,000 per animal, 13 young stock valued at the rate of Rs. 8617.65 per animal and 8 sheep and goats valued at the rate of Rs. 6538.46 per animal.

- iii. On an overall ‘all household’ basis of the total animals owned by them, i.e. 56; 31 are milch cattle/buffalo at the rate of average of rupees 34909.09 per animal 13 young stock with value at the rate of rupees 8617.65 per animal and 12 sheep and goats valued at the rate of Rs. 7185.19 per animal.
- iv. Relatively, on overall basis new households, have better livestock inventory compared to ‘revisiting households’.

Table 4.7
Livestock inventory of sample households

(Present Values Rs./Animal)

Sl. No	Particulars	Revisiting Household		New Household		All Household	
		No	Present Values	No	Present Values	No	Present Values
1	Working cattle/buffalo	0	0	0	0	0	0
2	Milch cattle/buffalo*	16	30531.25	15	41000	31	34909.09
3	Young stock	-	-	13	8617.65	13	8617.65
4	Sheep and goats^	4	7785.71	8	6538.46	12	7185.19
5	Pigs	0	0	0	0	0	0
6	Poultry & Duck	0	0	0	0	0	0
	Total	20		28		56	

4.9 Ownership of Agriculture Assets

The details of the Table 4.8 in respect of ownership of agriculture assets (other than land) show that

- i. New households have more assets as compared to revisiting households, which clearly depicts higher prosperity of new households.
- ii. Among 25 revisiting households only five had an asset in the form of water pump values at Rs. 17,000; though other farm machines amounting to Rs. 868 were possessed by all.
- iii. As compared to revisiting households, the new households possessed more assets in the form of Tractor, water pump and sprayer as well in addition to other farm machineries.
- iv. Among 30 new households; two had tractors worth Rs. 3,40,000; three had water pumps worth Rs. 18,000, two had sprayer costing Rs. 17,500, while one had other farm machineries, worth Rs. 38,000.

- v. No other farm machinery like power tiller, bullocks, thresher, weeder, etc. was possessed by the household.

Table 4.8
Details of Ownership of Agriculture Assets (Other than land)

(Values in Rs)

Sl. No.	Ownership of Assets	Revisiting Household		New Household		All Household	
		No.s	Values	No.s	Values	No.s	Values
1	Tractor / trolley	0	0	2	340000	2	340000
2	Power tiller	0	0	0	0		0
3	Bullock cart	0	0	0	0		0
4	Wood/iron plough	0	0	0	0		0
5	Water pump	5	17000	3	18000	8	17375
6	Threshers	0	0	0	0	0	0
7	Sprayers	0	0	2	17500	2	17500
8	Land leveler	0	0	0	0	0	0
9	Weeder	0	0	0	0	0	0
10	Seed drill/ Hoes	0	0	0	0	0	0
11	Other farm machines	25	868	1	38000	26	2296.15

4.10 Ownership of Non-Agricultural Assets

The details of ownership of the non-agricultural assets (other than land) as displayed in the Table 4.9, result to that

- New households have slightly better Non-Agriculture Assets structure as compared to Revisiting households.
- The assets possessed by revisiting households considered of 10 bicycles (each valued at the rate of Rs. 1581 per bicycle), 16 two wheelers(each valued at the rate of Rs. 43,500 per two wheeler), and five TVs (costing at the rate of Rs. 6700 per TV) while
- Those possessed by new Households comprised of 14 bicycles (at the rate of Rs. 2,636 per bicycle), 11 two wheelers (value at the rate of Rs. 52,455 per two wheeler), 10 TVs (value at the rate of Rs. 6,550 per TV), 28 LPG with cooking

set (value at the rate of Rs. 3154 per LPG with cooking set) and 10 steel/wooden furniture (value at the rate of Rs. 591.5 per furniture item).

- iv. On ‘All Household’ basis, the details of non-agriculture assets being as 14 bicycles (valued at the rate of Rs. 2,646 per bicycle), 27 two wheelers (valued at the rate of Rs.47,148 per two wheeler); 15 TVs (valued at the rate of Rs. 6,600 per TV), 28 LPGs with cooking set (valued at the rate of Rs. 3154 per LPG) and 10 wooden/steel furniture items (valued at the rate of Rs. 591.50 per item).

Table 4.9
Details Ownership of Non- Agriculture Assets (Other than land)
(Values in Rs/Asset)

Sl. No.	Ownership of Assets	Revisiting Household		New Household		All Household	
		No.s	Values	No.s	Values	No.s	Values
1	Bicycle	10	1581	14	2636	14	2636
2	Rickshaw/Auto	0	0	0	0	0	0
3	Two Wheeler	16	43500	11	52455	27	47148
4	Four wheeler	0	0	0	0	0	0
5	Any other vehicle	0	0	0	0	0	0
6	Sewing machine	0	0	0	0	0	0
7	Radio	0	0	0	0	0	0
8	TV	5	6700	10	6550	15	6600
9	Computer / Laptop	0	0	0	0	0	0
10	Refrigerator	0	0	0	0	0	0
11	Washing Machine	0	0	0	0	0	0
12	Electricity Connection & material cost	0	0	0	0	0	0
13	LPG with cooking set	0	0	28	3154	28	3154
14	Air Conditioner	0	0	0	0	0	0
15	Jewellery (Grams) etc.	0	0	2	23333	2	23333
16	Furniture steel / wooden	0	0	10	591.5	10	591.5
17	Functional Sanitary Toilet in the house	0	0	0	0	0	0
18	Others	0	0	0	0	0	0

Note: The figures of No.s under different assets are derived on “non-mutually exclusive basis”

4.11 Chapter Summary

The key analytical points, as desired on the basis of recorded observations of this chapter are presented as under:

- i. For both the categories of households, i.e. 'revisiting and new' as well as for total households, majority (over 90 per cent) of them are engaged in 'primary occupation'.
- ii. New households dominated Revisiting households with respect to period (number of days) and also distance of 'migration place' from the place of residence.
- iii. In case of ownership status of land/assets, the major assets had been residential land, residential house and cultivable land; along with cattle sheds/ farm houses to some extent; household category wise i.e. revisiting and new, as well as on the total household basis.
- iv. While none of the household had access to pond/tank, storage house etc.; only single revisiting household possessed commercial land/building of 100 square feet valued at Rs. 50,000.
- v. During the entire period of 2017 to 2020, "only one" transaction was made of 800 square feet residential land for 2,5,000; by a revisiting farmer; while there had not been even a single purchase transaction during this 2017-20 period by any of the household.
- vi. Regarding possession of type of residences, majority of the households had "pucca or kutchra" houses; which when taken together works out as 56 per cent for revisiting, 100 per cent for new and 80 per cent on overall basis. This definitely results towards enhanced prosperity of new households over that of the revisiting households.
- vii. In respect of livestock inventory, 'new households' are much better off to have more animals in terms of number and their respective present values compared to revisiting households.
- viii. With regard to ownership of Agricultural assets (other than land) as well new households as better off are 'compared to revisiting households. This records

‘positive change’ overtime.

- ix. In respect of non-agricultural assets, the status of both the types of households, i.e., new and revisiting, is almost the same; without any marked or significant change, overtime; except for availability of LPG cylinders with cooking set to new households, which of course is a sign of prosperity in one way or the other.
- x. In most of the cases, new households are found to be better off, compared to revisiting ones.

Chapter-5

Cropping Pattern and Net Returns

5.1 Introduction

The existing cropping pattern plays the most vital role to assist a farmer in adoption and cultivation of a crop as an enterprise; for the simple reason that the crops to be grown by the farmers must be as per soil fertility and its allied environmental conditions, in order to minimize crop failures, as other than crop losses/damages due to natural calamities like droughts, floods, hail storms etc. This, in turn enables the farmer to get desired crop produces and saving him/her from being pushed down to the state of being in utter depression and financial constraints to result into suicide. Further, taking cognizance of the fact that soil suited grown crops, in general always result to better crop produces; a few empirical studies have also shown that the main consideration in specifying cropping pattern by major section of the farming community i.e., “marginal and small farmers” has been “family requirement and that they cannot practically ignore this aspect. As such, due care has also to be taken by our national planners and policy makers in this regard, towards well-being and welfare of marginal and small farmers who are at subsistence level of farming and the worst sufferers in this regard, where so ever; of this most tragic event i.e. the “farmer suicide”. It may also be well mentioned at this point that the recently started ‘SHC (Soil Health Card)’scheme by our national government, is the most welcome move in this direction; in the general interest of the entire farming community and with special reference to marginal and small farmers group.

The present chapter, displaying the main characteristic features in respect of cropping pattern and corresponding crop produces thereof; of the sample households comprising of revisiting (2015-16 study) and the new households; is towards serving a useful purpose, in providing data base in adoption of cropping pattern at the household (farm) level.

5.2 Operational Land Holdings

The details of land holdings by households as shown in the Table 5.1, displays that:

- i. While, the entire land holdings are owned by households themselves on cent per cent (100 per cent) basis; in case of ‘Revisiting’, ‘New’ and as well as on ‘All Households’ basis,
- ii. The area of land holdings as held by 24 revisiting households, 30 new households and on overall basis 54 households; being respectively as 33.45 acres, 66.25 acres and 99.70 acres.
- iii. The land holding area owned by New Households is almost double of that of revisiting households.
- iv. There has been no leased in, leased out or uncultivated fallow land, in either case; whether new or revisiting.

Table 5.1: Details of Operational land holdings by Household
(Land Holding in Acres)

Sl. No.	Particulars	Revisiting Household	New Household	All Household
1	Owned	33.45	66.25	99.70
2	Leased in	0.00	0.00	0.00
3	Leased out	0.00	0.00	0.00
4	Uncultivated / Fallow land	0.00	0.00	0.00
5	Rental value of leased in land (Rs/acre)	0.00	0.00	0.00
6	Rental value of leased out land (Rs/acre)	0.00	0.00	0.00
7	Net operated area (1+2-3-4)	33.45 (1.39)	66.25 (2.21)	99.70 (1.85)

Source: Field Survey

Note: Figures in parenthesis refer to per household land ownership

5.2 (a) Crop Wise Adoption

Prior to studying detailed “cropping pattern” as respectively adopted by the revisiting and the new households; it is a must to have an idea of ‘crop-wise’ number of households in each category i.e. ‘revisiting’ and ‘new’ and thus, in overall sample of households; as displayed in the Table 5.1 (a)

Table 5.1A: Crop-wise Growers by Households

S. No	Name of the Crop	No. of Household					
		Revisiting crop growers	Total (Revisiting)	New Crop Growers	Total (New)	All Household Crop Growers	Total (All H.H)
1	Wheat	18	24*	27	30	45	54
2	Gram	1		6		7	
3	Mustard	2		5		7	
4	Pea	-		7		7	
5	Paddy	18		10		28	
6	Arhar	1		-		1	
7	Jowar	1		-		1	
8	Urd	-		24		24	
9	Seasame	-		7		7	
10	Groundnut	-		5		5	
11	Sugarcane	15		-		15	

Note: In case of 'revisiting households', only 24 households were engaged in farming activities as one farmer out of total 25 households had become completely landless and not involved in farming activities Therefore, in all tables for farming activities, the no. of revisiting households is 24 while for the rest it is 25. For more details refer Case no. 2 for detailed information.

5.3 Cropping Pattern

The detailed comprehensive cropping pattern followed by sample farm households, as shown in the Table 5.2, results to that:

- Among Rabi crops the most prominent one has been wheat for each category of households i.e. 'revisiting', 'new' or on the 'all households'; while among 'kharif', paddy has been the most dominating crop in case of revisiting and all the households with urd dominating in case of new households and sugarcane as perennial crop. Apart from this; sugarcane (as a perennial crop) also occupies a significant place in cropping pattern, but only in case of revisiting household.
- The respective percentages of area under wheat and rice to gross cropped area, have been as 29.50 per cent and 33.37 per cent in case of revisiting households; 35.28 per cent and 11.70 per cent in case of new households and as 33.70 per cent and 17.80 per cent in case of 'all households'; respectively with Urd occupying 23.96 per cent of Gross Cropped Area in case of new households.

- iii. While revisiting households had no area under the crop Urd; new households adopted Urd to the extent of 23.96 per cent of the Gross Cropped Area; being even higher than that of paddy.
- iv. The perennial crop sugarcane was sown only by revisiting households to the extent of 25.53 per cent of gross cropped area.
- v. As a sign of prosperity and crop intensification overtime, the intensity of cropping is recorded much higher in case of new households compared to that of revisiting households; with respective intensities as 200 per cent for new households against that of 154.56 per cent for revisiting households; while on overall sample basis, the intensity, being recorded as 184.75 per cent.

Table 5.2
Cropping Pattern Followed by Sample Farm Households (n=54)

Sl. No.	Season /Crops	Revisiting Household		New Household		All Household	
		Area (ac)	% of GCA	Area (ac)	% of GCA	Area (ac)	% of GCA
I	Rabi						
	1. Wheat	15.25	29.50	46.75	35.28	62	33.7
	2. Gram	1	1.93	6.5	4.91	7.5	4.1
	3. Mustard	2	3.87	7	5.28	9	4.9
	4. Pea	0	0	6	0.05	6	3.3
	Sub Total	18.25	35.30	66.25	50	84.5	45.9
II	Kharif						
	5. Paddy	17.25	33.37	15.5	11.70	32.75	17.8
	6. Arhar	1	1.93	0	0.00	1	0.5
	7. Jowar	2	3.87	0	0.00	2	1.1
	8. Urd	0	0	31.75	23.96	31.75	17.2
	9. Sesame	0	0	9.5	7.17	9.5	5.2
	10. Groundnut	0	0	9.5	7.17	9.5	5.2
	Subtotal	20.25	39.17	66.25	50.00	86.5	47.0
III	Summer						
	Subtotal	0.0	0.0	0.0	0.0	0.0	0.00
IV	Perennials						
	11. Sugarcane	13.2	25.23	0.00	0.00	0.00	0.00
	Subtotal	13.2	25.53	0.0	0.00	13.20	7.2
IV	Gross Cropped Area	51.7		132.5		184.2	
V	Net Cropped Area	33.45		66.25		99.70	
VI	Cropping Intensity (%)	154.56		200.00		184.75	

Source: Field Survey

5.4 Crop-wise Expenditure and Income of Major Crops

The recorded observations of the Table 5.3, depicting crop-wise expenditure and income of major crops (in Rs./acre), result to as under:

- i. In case of revisiting households; the highest 'per acre' expenditure among food grain crops, has been recorded in case of Paddy (Rs. 18,318.84) followed by Wheat (Rs.15,213.11), Gram (Rs. 13,000), Arhar (Rs.12,500), Mustard (Rs.10,000) and Jowar (Rs.6500); respectively, while in case of sugarcane it has been recorded as Rs. 43,234.85 on per acre basis.
- ii. As a change over time, the 'new households' did not cultivate Arhar and Jowar and instead adopted the crops Sesame, Urd, Groundnut and Pea.
- iii. In case of new households as well, the highest 'per acre' expenditure among food grains, being recorded in case of Paddy (Rs. 16,961.29), followed by wheat (Rs. 15,272.73), Gram (Rs.14,153.85), Groundnut (Rs.13,789.47), Pea (Rs.11,000), Mustard (Rs. 9571.43), Urd (Rs. 6330.71) and sesame (Rs.3526.32), respectively; and to note that over a change of time, the new households did not cultivate the crop 'sugarcane' as well for one reason or the other; while it was grown by revisiting farmers.
- iv. On 'All household' basis among food grains, the highest 'per acre' expenditure was recorded as Rs.17,676.34 for crop Paddy and lowest as Rs. 3526.32 for sesame; while for sugarcane it has been as Rs. 43,234.85; respectively.
- v. The per acre expenditure incurred under various crops; have been 'almost' in the same vicinity for both the categories of the households i.e. revisiting and new.
- vi. The crop sugarcane, which was grown only by revisiting households, resulted to 'per acre' income of Rs. 97,208.33; while among food grains (a)The highest per acre income was obtained as Rs.37,927.87 from the crop wheat and lowest as Rs.18,000 from crop Jowar, in case of revisiting households (b)the highest and lowest per acre incomes, in case of new households being as Rs.33,255.61 from crop wheat and lowest as Rs. 12,526.32 from crop sesame (c) on overall sample basis, the highest and the lowest per acre incomes being Rs.37,000 from Arhar and Rs. 12,526.32 from sesame respectively.

Table 5.3
Crop-wise Expenditure & Income of Major Crops (Rs/Acre)

Sl. No.	Name of Crop	Revisiting Household		New Household		All Household	
		Exp*	Income	Exp*	Income	Exp*	Income
1.	Paddy	18318.84	31362.32	16961.29	21238.71	17676.34	33814.95
2.	Arhar	12500.00	37000.00	-	-	12500.00	37000.00
3.	Jowar	6500.00	18000	-	-	6500.00	18000
4.	Wheat	15213.11	37927.87	15272.73	33255.61	15248.88	35124.51
5.	Gram	13000	37500.00	14153.85	28692.31	13335.17	29950.55
6.	Mustard	10000.00	37000.00	9571.43	21942.86	9693.88	26244.90
7.	Sesame	-	-	3526.32	12526.32	3526.32	12526.32
8.	Urd			6330.71	17559.06	6330.71	17559.06
9.	Groundnut	-	-	13789.474	27368.42	13789.474	27368.42
10.	Pea	-	-	11000	34500	11000	34500
11.	Sugarcane	43234.85	97208.33	-	-	43234.85	97208.33

Source: Field Survey

Note: *Exp= Expenditure

5.5 Disposal of Major Farm Produces and Prices Realization by Households

The data of the Table 5.4, in respect of disposal of Major Farm Produces and Price Realization by households, along with the marketing cost, display that:

- i. Among ‘revisiting households’; the maximum disposal (300 quintals) has been in case of crop Paddy and minimum (4.5 quintals) in case of Arhar; while the maximum price (Rs.7,000 per quintal) corresponds to crop Arhar and minimum (Rs. 1200 per quintal) for Jowar, while in the case of gram and mustard, no marketing charges were incurred by any household, it was recorded as Rs.38/quintal for wheat, Rs.30/quintal each for Arhar and Jowar and Rs.22/per quintal for the crop wheat.
- ii. Among the new households, the maximum disposal (608 quintals) has been recorded for the crop wheat and minimum (17 quintals) for the crop sesame; while the maximum price Rs. 6971 per quintal corresponds to the crop sesame and minimum (Rs.1445) per quintal to crop paddy. While the marketing charges have been reported as Rs.25 per quintal for mustard; Rs.20 per quintal each for paddy, sesame, urd, groundnut and pea; Rs.13 per quintal, each for wheat and gram.
- iii. In case of ‘sugarcane’; the farm disposal has been of the order of 3410 quintals, subject to price of Rs.323 per quintal and marketing cost of Rs.20 per quintal.

- iv. On 'all household' basis; among food grains, the maximum farm disposal (801 quintal) refer to the crop wheat, and minimum (4.5 quintals) to the crop Arhar; while the highest price (Rs.7000 per quintal) corresponds to the crop Arhar and minimum Rs.1200 per quintal to crop jowar; respectively.
- v. In respect of marketing cost of all households, the details have been as; Rs. 30 per quintal, each for Paddy, Arhar & Jowar; Rs. 25 per quintal for mustard; Rs. 20 per quintal each for Sesame, Urd, Groundnut, Pea and Sugarcane; Rs.18 per quintal for wheat and Rs. 13 per quintal for gram; respectively.

Table 5.4
Disposal of Major Farm Produces and Price Realization by households (Quantity in Qtl and Price and marketing cost Rs/Qtl)

Sl. No.	Crops	Revisiting Household			New Household			All Household		
		Qty	Price	Mkt. Cost	Qty	Price	Mkt. Cost	Qty	Price	Mkt. Cost
1	Paddy	300	1480	38	203	1445	20	503	1463	30
2	Arhar	4.5	7000	30	-	-	-	4.5	7000	30
3	Jowar	11	1200	30	-	-	-	11	1200	30
4	Wheat	193	1912	22	608	1902	13	801	1907	18
5	Gram	5.5	6000	0	31.5	6000	13	37	6000	13
6	Mustard	9	6450	0	18.5	6060	25	34	6255	25
7	Sesame	-	-	-	17	6971	20	17	6971	20
8	Urd	-	-	-	85.1	5896	20	85.1	5896	20
9	Groundnut	-	-	-	46.75	6200	20	46.75	6200	20
10	Pea	-	-	-	27.5	6667	20	27.5	6667	20
11	Sugarcane	3410	323	20	-	-	-	3410	323	20

5.6 Disposal pattern of Major Farm Produce by Markets

The market-wise disposal of major farm produces as detailed in the Table 5.5, depict that:

- i. Among 'revisiting households' (24 in number); (a) disposal of paddy in village market; and in APMC mandis by 9; (b) Arhar as well as Jowar, both were disposed of by one each to APMC Mandi; (c) while wheat was marketed to village market by 8 and to APMC Mandi by 9 households while, (d) 'sugarcane' was disposed off to sugarcane mills by 15 households.
- ii. In case of new households (30 in number); (a) paddy was marketed to village market by three households, to the APMC Mandi by 6, and to private wholesale markets by 1

respectively; (b) wheat was disposed-off to village market by 8, to APMC Mandi by 18 and private wholesale markets by 1; (c) mustard was marketed only to the village market by 5 households; (d) while the rest of the crops like Urd, Groundnut and Pea were also disposed of by concerned households', either in village market or the APMC Mandi.

- iii. On the whole; majority of the crops produces were in general disposed of by households either in the village market or the APMC Mandi.

Table 5.5
Disposal pattern of Major Farm Produces by Markets

(Number of farmers)

Sl. No.	Crops	Revisiting Households				New Households			All Household			
		1	2	3	4	1	2	3	1	2	3	4
1	Paddy	9	9	0	0	3	6	1	12	15	1	0
2	Arhar	0	1	0	0	0	0	0	0	1	0	0
3	Jowar	0	1	0	0	0	0	0	0	1	0	1
4	Wheat	8	10	0	0	8	18	1	16	28	1	0
25	Gram	1	0	0	0	2	4	0	3	4	0	0
6	Mustard	2	0	0	0	5	0	0	7	0	0	0
7	Sesame	0	0	0	0	6	1	0	6	1	0	0
8	Urd	0	0	0	0	9	15	0	9	15	0	0
9	Groundnut	0	0	0	0	2	3	0	2	3	0	0
10	Pea	0	0	0	0	2	4	0	2	4	0	0
11	Sugarcane	0	0	0	15	0	0	0	0	0	0	15

Source: Field Survey.

Note: Village market-1, APMC Mandi-2, Private wholesale market-3; 4- sugar mills

5.7 Disposal Pattern of Major Farm Produces by Market Agencies

The disposal patterns of major farm produces by the market agencies, as shown in the table 5.6 displays that:

- In the disposal of the major farm produces (with wheat being the major crop) by the households, among the five agencies; only two, i.e. government agency and private traders have been involved.
- The pattern of the disposal has been almost the same, in all the three cases, that is revisiting households, new households and all households, with private traders dominating over the government agency.

- iii. The respective per cent distribution of these two i.e. private traders and government agency in disposing of major farm produce by households have been as (a) 70.6 per cent and 29.4 per cent in case of revisiting households (b) 59.3 per cent and 40.7 per cent in the case of new households and (c) 63.6 per cent and 36.4 per cent in case of all households; respectively.

Table 5.6
Disposal pattern of Major Farm Produces by Market agencies

Sl. No.	Particulars	Revisiting Household		New Household		All Household	
		Number	%	Number	%	Number	%
1	Commission agent	0	0.0	0	0.0	0	0.0
2	Govt. agency	5	29.4	11	40.7	16	36.4
3	Processing plant	0	0.0	0	0.0	0	0.0
4	Private company	0	0.0	0	0.0	0	0.0
5	Private trader	12	70.6	16	59.3	28	63.6
6	Any other	0	0.0	0	0.0	0	0.0
	Total	17	100.0	27	100.0	44	100.0

Source: Field Survey

Note: major crop wheat

5.8 Net Income from Framing Activity

The details of gross income from farming activities i.e. crop produces of various crops, by sample households as recorded in the Table 5.7 shows that:

- i. For the 'revisiting households' (24 in number), gross income for the whole year (i.e. per annum basis) as derived from crop produces of various crops including 'sugarcane', works out as Rs.2,25,279.00 i.e.; while percentage contribution of various crops to this gross income being as paddy (10.8 per cent), Arhar (14.00 per cent), Jowar (5.9 per cent), Wheat (9.1 per cent), gram (14.6 per cent), mustard (12.9 per cent), and sugarcane (32.7 per cent).
- ii. In case of 'new households' (30 in number), the gross income for the whole year as obtained from various crops is recorded as 2,51,838; while the percentage contribution of various crops to this gross income being as Paddy (11.8 per cent), Wheat (17.00 per cent), Gram (12.6 per cent), Mustard (8.9 per cent), Sesame (6.9 per cent), Urd (7.4 per cent), Groundnut (23.2 per cent) and Pea (12.2 per cent).
- iii. In case of 'revisiting households' the major contributing crops to the gross income

being sugarcane (32.7 per cent), followed by Gram (14.6 per cent), Arhar (14.0 per cent), Mustard (12.9 per cent, and Paddy (10.8 per cent) which altogether accounting for 85.00 per cent of the gross income, while in case of 'new households' the major contributing crops to gross income have been groundnut (23.2 per cent), wheat (17.0 per cent), gram (12.6 per cent), pea (12.2 per cent) and paddy (11.8 per cent), altogether accounting for 76.8 per cent of gross income.

- iv. On the total 'all households' basis (54 in number), the gross income for the whole year has been as Rs. 4,47,117; in which the major contributing crops have been sugarcane (15.4 per cent), gram (13.6 per cent), wheat (13.3 per cent, groundnut (12.3 per cent), paddy (11.3 per cent) and mustard (10.8 per cent) which altogether accounting for 76.7 per cent of the gross income. Other crops like Arhar, pea, urd, sesame and jowar which altogether contributing to the extent of 23.3 per cent to the gross income.

Table 5.7
Gross Income from Farming activity by households

(Income Rs. /annum)

Sl. No	Crops	Revisiting Household		New Household		All Household	
		Income	%	Income	%	Income	%
1	Paddy	24356	10.8	29720	11.8	54076	11.3
2	Arhar	31500	14.0	0	0.0	31500	6.6
3	Jowar	13200	5.9	0	0.0	13200	2.8
4	Wheat	20506	9.1	42804	17.0	63310	13.3
5	Gram	33000	14.6	31833	12.6	64833	13.6
6	Mustard	29050	12.9	22500	8.9	51550	10.8
7	Sesame	0	0.0	16971	6.9	16971	3.6
8	Urd	0	0.0	18718	7.4	18718	3.9
9	Groundnut	0	0.0	58475	23.2	58475	12.3
10	Pea	0	0.0	30817	12.2	30817	6.5
11	Sugarcane	73667	32.7	0	0.0	73667	15.4
	Total	225279	100.0	251838	100.0	477117	100.0

5.9 Chapter Summary

The chapter summary in respect of cropping pattern and net returns thereof has been presented as under:

- i) While, the entire land holdings were owned by households themselves on cent per cent basis; in case of 'Revisiting', 'New' and as well as on 'All Households' basis. The area of land holdings as held by 24 revisiting households, 30 new households and on overall basis 54 households; being respectively as 33.45 acres, 66.25 acres and 99.70 acres and that the land holding area owned by New Households was almost double of that of revisiting households.
- ii) Among Rabi crops the most prominent was wheat for each category of households i.e. 'revisiting', 'new' or on the 'all households'; while among 'Kharif', paddy has been the most dominant crop in case of revisiting and all the households with Urd dominating in case of new households and sugarcane as perennial crop in the revisiting household district (especially Lakhimpur Khiri)..
- iii) As a sign of prosperity and crop intensification overtime, the intensity of cropping was recorded much higher in case of new households compared to that of revisiting households
- iv) In case of revisiting households; the highest 'per acre' expenditure among food grain crops, has been recorded in case of Paddy followed by Wheat, Gram, Arhar, Mustard and Jowar respectively. As a change over time, the 'new households' did not cultivate Arhar and Jowar and instead adopted the crops like Sesame, Urd, Groundnut and Pea. In case of new households as well, the highest 'per acre' expenditure among food grains, was recorded in case of Paddy, followed by Wheat, Gram, Groundnut, Pea, Mustard, Urd and Sesame, respectively;
- v) The crop sugarcane, which was grown only by revisiting households, resulted to 'per acre' income of Rs. 97,208.33; while among food grains (a) The highest per acre income was obtained from the crop wheat and lowest from Jowar, in case of revisiting households (b) the highest and lowest per acre incomes, in case of new households from wheat and lowest from sesame. Among 'revisiting households', the maximum disposal was in case of Paddy and minimum in case of gram. Among the new households, the maximum disposal has been recorded for the crop wheat and minimum for the crop sesame. On 'all household' basis; among food grains, the

maximum farm disposal refers to wheat, and minimum to Arhar.

- vi) On the whole; majority of the crops produces were in general disposed of by households either in the village market or the APMC Mandi.
- vii) In the disposal of the major farm produces (with wheat being the major crop) by the households, among the five agencies; only two, i.e. government agency and private traders have been involved. The pattern of the disposal has been almost the same, in all the three cases, i.e. revisiting households, new households and all households, with private traders dominating over the government agency.
- viii) For the 'revisiting households', gross income for the whole year derived from crop produces of various crops including 'sugarcane', works out as Rs.2,25,279; in case of 'new households', the gross income for the whole year as obtained from various crops is recorded as 2,51,838. In case of 'revisiting households' the major contributing crops to the gross income was sugarcane followed by Gram, Arhar mustard, and paddy while in case of 'new households' the major contributing crops to gross income were from groundnut, wheat, gram, pea and paddy.

Chapter-6

Credits and Sources of Income

6.1 Introduction

Credits and the sources of income are both equally important and play a most vital role in running any programme or performing an activity towards development process. Credits have to be searched for easy access and terms and conditions thereof, while various sources have to be probed towards the main objective of enhancing the income. The present chapter has been designed to highlight various sources of loan to households along with the purpose of their loan borrowing; as also various sources which contribute to income; which may be off form, nonfarm as well as farming activity.

6.2 Loans Borrowed

The details of source-wise borrowing of loans by 55 households, comprising of 25 revisiting and 30 new; during last five years, are shown in the Table-6.1. The observed data of this table depicts that:

- (i) Among various sources of borrowing, mainly three sources, i.e., Commercial Banks, RRBs, and Friends and Relatives; have provided loans of varying amounts to the sample households and among these, the most dominating has been Commercial Banks followed by RRBs and the 'Friends and Relatives'; in order.
- (ii) The pattern of loaning has been almost the same in both the categories, i.e., revisiting households and new households; as well as on 'All households,' while loan amount borrowed by new households being comparatively "lower" than that of revisiting households.
- (iii) The respective amounts borrowed by 'revisiting', 'new' and 'all households', during this period of last 5 years; has respectively been as Rs. 4,67,000 by revisiting and Rs. 3,90,000 by new resulting to Rs. 8,57,000 for all households; respectively.
- (iv) The percentage contribution of loaning by Commercial Banks, RRBs and 'Friends and Relatives' have respectively being as 51.4 per cent, 26.8 per cent and 21.8 per cent in case of revisiting households; 53.8 per cent, 25.6 per cent and 20.6 per cent in case of new households and as 52.5 per cent, 26.3 per cent and 21.2 per cent on overall households basis; respectively.

Table 6.1
Loans Borrowed by households during last 5 years

(Rs. in lakh)

Sl. No.	Sources of borrowing	Revisiting Household		New Household		All Household	
		Amount	%	Amount	%	Amount	%
1	Commercial Banks	240000	51.4	210000	53.8	450000	52.5
2	RRBs	125000	26.8	100000	25.6	225000	26.3
3	Co-operative Banks	0	0.0	0	0.0	0	0.0
4	Traders & Commission agents	0	0.0	0	0.0	0	0.0
5	Money lenders	0	0.0	0	0.0	0	0.0
6	Friends and relatives	102000	21.8	80000	20.5	182000	21.2
7	Others (SHG, etc)	0	0.0	0	0.0	0	0.0
8	Total	467000	100.0	390000	100.0	857000	100.0

Source: Field Survey

6.3 Loans Outstanding

The data of the Table-6.2, which shows the details of ‘outstanding amounts’ of loans to households, as per different sources of borrowing and on the whole total basis; shows that:

- (i) In case of (a) “revisiting households”, out of total borrowed loan of Rs. 4,67,000 the outstanding loan is still Rs. 4,18,050 i.e., 89.52 per cent of the total, (b) “new households”; out of total borrowed loan of Rs. 3,90,000 the outstanding loan amount is Rs. 2,41,200 i.e., 61.85 per cent of the total (c) “all households”, of the total borrowed loan of Rs. 8,57,000 the outstanding loan amount is Rs. 6,59,250 i.e., 76.92 per cent of the total.
- (ii) It is noteworthy, to find that as a sign of progress and prosperity over time, new households are better financially off, as compared to revisiting households; in the sense that, they have lesser amount of total borrowed loan as well as they also have smaller percentage of outstanding loan, in comparison to those of revisiting households.
- (iii) Of the “total outstanding loan amount”, the respective percentages to be paid to Commercial Banks, RRBs and ‘friends and relatives’ are reported as 47.0 per cent, 32.0 per cent and 21.0 per cent in case of revisiting households; 26.6 per cent, 44.4 per cent and 29.0 per cent for new households and as 39.5 per cent, 36.5 per cent and 24.0 per cent as on all households basis.

Chart 6.1
Distribution of Households by Loans Borrowed and Outstanding



Table 6.2
Loans Outstanding Amounts by households during last 5 years
(Rs. in lakh)

Sl. No.	Particulars	Revisiting Household		New Household		All Household	
		Amount	%	Amount	%	Amount	%
1	Commercial Banks	196300	47.0	64200	26.6	260500	39.5
2	RRBs	133750	32.0	107000	44.4	240750	36.5
3	Co-operative Banks	0	0	0	0	0	0
4	Traders	0	0	0	0	0	0
5	Commission agents	0	0	0	0	0	0
6	Money lenders	0	0	0	0	0	0
7	Friends and relatives	88000	21.1	70000	29.0	158000	24.0
8	Others (Specify)	0	0	0	0	0	0
9	Total	418050	100.0	241200	100.0	659250	100.0

Source: Field Survey

6.4 Purpose of loan Borrowed by Victim Households

The details of the Table-6.3, showing purpose-wise borrowing of loans, by revisiting and new households, results to that:

- (i) Among 25 revisiting households, only 13 had borrowed loans and among them (loan borrowers) 53.8 per cent had been for crop production and infrastructure development, while 46.2 per cent for others like house construction, purchase of vehicles etc.
- (ii) In case of new households the “proportion” of households taking loans has been lowest as compared to revisiting and overall basis. Among total of 30 new households; only eight had borrowed loans and that among borrowers; 62.5 per cent loans had been for crop production and infrastructure development, while 37.5 per cent towards house construction and vehicles purchase.
- (iii) Finally, on ‘all household’ basis; of the total 55, only 21 had borrowed loans; which comprised of as 57.1 per cent for crop production and infrastructure development and 42.9 per cent towards house construction and vehicles purchase.
- (iv) For each category, i.e., revisiting as well as new and also on total households basis, the main purpose of loan being towards, “crop production and infrastructure development”.

Table 6.3
Purpose of loan Borrowed by Victim Households (No. of Respondents and %)

Sl. No.	Purpose of savings	Revisiting Household		New Household		All Household	
		Nos	%	Nos	%	Nos	%
1	Children's education & Marriage	0	0	0	0	0	0
2	Family expenditure	0	0	0	0	0	0
3	Crop production and Infrastructure development	7	53.8	5	62.5	12	57.1
4	Business and health	0	0.0	0	0	0	0
5	Others (House construction, purchasing of vehicles, etc)	6	46.2	3	37.5	9	42.9
6	Total	13	100.0	8	100.0	21	100.0

Source: Field Survey data-2021

6.5 Composition of annual off farm and nonfarm Net income

The livelihood group-wise composition of annual off farm and nonfarm income of households, i.e., 25 revisiting and 30 new, resulting to total 55; shown in the Table-6.4; displayed that:

- (i) The “total annual off farm and nonfarm Net Income” of households in the village, as sum up from all livelihood sources, works out to be as Rs. 11,77,000 in case of revisiting households (25 in number); Rs. 30,09,000 in case of new households (30 in number); and as Rs. 41,86,000 corresponding to all households (55 in number); respectively. These respective figures on ‘per household basis’, reduce to Rs.47,080 for revisiting households; Rs. 1,00,300 for new households; and Rs.76,109 on all households; respectively.
- (ii) It is most encouraging, to note that on per household basis; the total annual off-farm and non-farm income of a new household is even ‘more than double of that of a revisiting household’.
- (iii) The various constituents of total off-farm and non-farm income of a household has been; in order as
 - a) Agriculture labour (37.38 per cent), PM-Kisan (28.89 per cent, Non-Agriculture labour (14.78 per cent), self-business (10.62 per cent) and dairy/fishery/poultry keeping (8.33 per cent); in case of revisiting households.
 - b) Non-agricultural labour (28.52 per cent) Private salaried (23.66 per cent) Dairy/Fishing/Poultry Keeping (17.45 per cent), PM-Kisan (12.76 per cent), Agriculture labour (10.20 per cent), self-business (7.08 per cent) and non-agricultural labour (0.33 per cent); in case of new households; while as
 - c) Non-agricultural labour (24.65 per cent), agriculture labour (17.85 per cent), P.M-Kisan (17.30 per cent), Private Salaried (17.01 per cent), Dairy/Fishing/Poultry Keeping (14.88 per cent), self-business (8.07 per cent) and non-agricultural labours (0.24 per cent) on all household basis.
- (iv) The three main constituents of the total off-farm and non-farm household income has been as agriculture labor, PM-KISAN and Non-Agriculture labour; in case of revisiting households; non agriculture labour, private salaried and dairy/ fishing/poultry keeping in case of new households and as ‘non-agriculture labour, agriculture labour and PM-KISAN” on all household basis.

Table 6.4
Composition of Annual Off-Farm and Non-farm Net Income Of Households in the
Village by Livelihood Groups

Sl. No.	Sources of income	Revisiting Household		New Household		All Household	
		Income	%	Income	%	Income	%
1	Agricultural labour	440000 (6)	37.38	307000 (14)	10.20	747000 (20)	17.85
2	Dairy/Fishing/Poultry/keeping	98000 (4)	8.33	525000 (13)	17.45	623000 (17)	14.88
3	Govt Salaried	0	0.0	0	0.0	0	0.0
4	Private Salaried	0	0.0	712000 (8)	23.66	712000 (8)	17.01
5	Pensioner	0	0.0	0	0.0	0	0.0
6	Caste based profession	0	0.0	0	0.0	0	0.0
7	Trade & business	0	0.0	0	0.0	0	0.0
8	Entrepreneur	0	0.0	0	0.0	0	0.0
9	Self-business	125000 (2)	10.62	213000 (3)	7.08	338000 (5)	8.07
10	Casual labour	0	0.0	0	0.0	0	0.0
11	Non-agriculture labour	174000 (10)	14.78	858000 (15)	28.52	1032000 (25)	24.65
12	PM-KISAN	340000 (23)	28.89	384000 (20)	12.76	724000 (43)	17.30
13	Others (non-agricultural labourers)	0	0.00	10000 (1)	0.33	10000 (1)	0.24
14	Total	1177000 (25)	100.00	3009000 (30)	100.00	4186000 (55)	100.00

6.6 Net Income from Framing Activity

The data of the Table 6.5, showing details of Net Income from the farming activity by households; results to that:

- i. The 'per household' net income from farming activity is reported as Rs.1,66,741 in case of revisiting; Rs.1,52,484 in case of new and Rs.1,58,820 for all households; respectively.
- ii. In case of the revisiting households, the main contributing crops to the total farm activity income have been respectively, in order as sugarcane (28.5 per cent), mustard (16.2 per cent), Gram (14.7 per cent), Arhar (14.7 per cent) and wheat (11.5 per cent); while remaining i.e. (14.4 per cent) contributed by crops Paddy and Jowar.
- iii. In case of new households; the main constituent crops to total farm activity income being as wheat (20.4 per cent), groundnut (16.9 per cent), pea (13.3 per cent), gram

(12.8 per cent) and Mustard (11.4 per cent); while remaining i.e. 25.2 per cent contributed by crops paddy, sesame and urd.

- iv. On all household basis, the main crops attributing to total farm activity income have been respectively in order as wheat (36.5 per cent), sugarcane (21.8 per cent), urd (11.0 per cent), paddy (8.9 per cent), pea, gram and mustard each (4.3 per cent), while remaining 8.9 per cent of total net income contributed by crops Arhar, jowar, sesame and groundnut.

Table 6.5
Net Income from Farming activity by households

(Income lakh/annum)

Sl. No	Crops	Revisiting Household		New Household		All Household	
		Income	%	Income	%	Income	%
1	Paddy	12500	7.5	6630	4.3	10404	8.9
2	Arhar	24500	14.7	0	0.0	24500	0.8
3	Jowar	11500	6.9	0	0.0	11500	0.4
4	Wheat	19244	11.5	31137	20.4	26380	36.5
5	Gram	24500	14.7	19500	12.8	20214	4.3
6	Mustard	27000	16.2	17320	11.4	20086	4.3
7	Sesame	0	0.0	17100	11.2	17100	3.7
8	Urd	0	0.0	14854	9.7	14854	11.0
9	Groundnut	0	0.0	25800	16.9	25800	4.0
10	Pea	0	0.0	20143	13.3	20143	4.3
11	Sugarcane	47497	28.5	0	0	47497	21.8
12	Total	166741	100	152484	100	158820	100.0

6.7 Chapter Summary

- i. Among various sources of borrowing mainly three sources, i.e., Commercial Banks, RRBs and Friends and Relatives have provide loans of varying amounts to the sample households and among these, the most dominating has been Commercial Banks followed by RRBs and the 'Friends and Relatives'; in order
- ii. The pattern of loaning has been almost the same in both the categories, i.e., revisiting households and new households; as well as on 'All households' while loan amount borrowed by new households being comparatively "lower" than that of revisiting households.
- iii. It is noteworthy, to find that as a sign of progress and prosperity over time, new households are better financially off, as compared to revisiting households; in the sense that, they have lesser amount of total borrowed loan as well as they also have smaller percentage of outstanding loan, in comparison to those of revisiting households.
- iv. Of the total borrowed loan, the outstanding loan is 89.52 per cent in case of revisiting households, 61.85 per cent in case of new households and 76.92 per cent in case of all households.
- v. For each category, i.e., revisiting as well as new and also on total households basis, the main purpose of loan being towards, "crop production and infrastructure development".
- vi. The three main constituents of the total off-farm and non-farm household income has been as agriculture labor, PM-KISAN and Non-Agriculture labour; in case of revisiting households; non agriculture labour, private salaried and Dairy/ Fishing / Poultry keeping in case of new households and as 'non-agriculture labour', agriculture labour and PM-KISAN on all household basis.
- vii. The topmost three crops in respect of contribution to total farm activity income, income have been; sugarcane, mustard and gram/Arhar in case of revisiting households; wheat, groundnut and pea, in case of new households; and as wheat, sugarcane and urd, on all households basis; respectively.

Adequacy of the Current Income Levels to Meet Current Expenditure of Victims Households

7.1 Background

Consequent upon the farmer's suicide; the orphanage stage of victim farmers family, causes the entire family members to be under very critical situations of almost being on crossroads, in respect of the very basic livelihood problems like social, economic, elderly patronage, and like that; among which the main being the financial constraints; even towards the basic subsistence level of living. As such, towards general welfare and to take care of all such farmer suicides victims', 'family member groups' towards the adequacy of the income level in meeting out their current expenditure; bears its own significance and importance. The present chapter in this direction, is an attempt to highlight the main characteristic features of sample households in respect of source of income, composition of income-expenditure pattern, on food and non-food items, crop income-expenditure ratio etc., to throw a general light on the status of victims farmers 'family members' during post suicide periods.

7.2 Source of Household Income

The source wise detail of household income (Rs per annum) of revisiting (25) and new (30) households, thereby all (55) households; as shown in the Table 7.1 results to that:

- i. The total per capita income works out to be Rs. 1,04,174 per annum for 'revisiting household', Rs.1,52,653 per annum for new households; and Rs.1,30,617 per annum on all household basis.
- ii. As evidently seen, new households have higher per capita annual income than that of the revisiting farmers; which beyond any doubt is a sign of enhanced prosperity, over the period of time.
- iii. In each category of household i.e., revisiting and new as well as all households; the highest contributor to the total income has been 'farm income', covering more than 50 per cent of total income, in each case; followed by non-farm income respectively.

Table 7.1
Sources of Household Income (Rs./Annum)

Sl. No.	Sources of income	Revisiting Household		New Household		All Household	
		Income	%	Income	%	Income	%
1	Farm Income	1427350	54.8	232660	50.8	375395	52.3
2	Off-farm Income	538000	20.7	877000	19.2	1415000	19.7
3	Non-farm Income	639000	24.5	137600	30.0	201500	28.0
4	Total income	2604350	100.0	4579600	100.0	7183950	100.0
Total	Per capita income (Rs/Annum)	104174		152653		130617	

7.3 Composition of Annual Income by Castes

The various observations of the Table 7.2, in respect of caste-wise composition of Annual Income, results to as under:

- i. Caste-wise, dominant contributor to Annual Income has been (a) Scheduled Caste (S.C.) (35.8 per cent), followed by General (GM) (32.6 per cent) and OBC (31.6 per cent) in case of revisiting households. (b) OBC (58. per cent) followed by SC (34.1 per cent) and GM (7.9 per cent) incase of new households; and (c) OBC (48.5 per cent), followed by SC (34.7 per cent) and GM (16.8 per cent) on over households; respectively. Thus, in case of ‘New Households’ as also ‘All households’, ‘OBC’ and ‘SC’ have been main contributors to Annual Income, while in case of revisiting households, the contribution of ‘all the three’ i.e. GM, SC, and OBC has been almost the same.
- ii. On ‘all household’ basis, out of total 55 households; there have been 9 General caste, 28 OBC and 18 SC; with no household of Scheduled Tribe; while in each category as well no ST household is reported.
- iii. On overall basis, caste-wise ‘per capita annual income’ has been reported as Rs.1,33,986 for General caste (GM); Rs.1,24,120 for OBC and Rs. 1,38,374 for Scheduled Caste (SC); against overall per capita annual income of Rs.1,30,399

Table 7.2
Composition of Annual Income by Castes

Sl · N o.	Particulars	Revisiting Household		New Household		All Household		Per capita income (Rs/Annum)
		Income	%	Income	%	Income	%	Income
1	General(GM)	845675	32.6	360200	7.9	1205875	16.8	133986
2	OBC	819350	31.6	2656000	58.0	3475350	48.5	124120
3	Scheduled Caste(SC)	927325	35.8	1563400	34.1	2490725	34.7	138374
4	Scheduled Tribe (ST)	0.0	0.0	0.0	0.0	0.0	0.0	0
5	Average	103694	100.0	152653	100.0	130399	100.0	130399

7.4 Expenditure on food Items

The details of expenditure incurred on various food items (Rs/year) by different categories of households, i.e. revisiting (25), new (30) and all households (55), as shown in the Table 7.3; result to that:

- i. The total food expenditure incurred by various categories of households on per year basis has been of the order of Rs.1,33,730 for revisiting Rs.1,72,547 for new and Rs.3,06,277 for all households ;respectively.
- ii. (a) In case of revisiting households ; The five major items of expenditure have been in order as Cereals , Milk and Milk products , vegetable , Edible oil, and Pulses ; when taken all together accounting for 79.4 per cent of total; while remaining expenditure being towards fruits, spices, sugar and jiggery, processed foods etc. (b) in case of new households, the five major items being cereals, milk products, vegetables, fruits and pulses; altogether accounting for 79.4 per cent of total; while other items being as edible oils, processed food etc. (c) On all household basis as well; the pattern being the same as in each of category of households.
- iii. In respect of food items each category i.e. revisiting and new household as well as on all household level; the five major items of expenditure on

food items have been as ‘cereals’, ‘milk’ and ‘milk products’; ‘vegetables’, ‘edible oils’ and ‘pulses’ which all together accounting for above 74 per cent of total expenditure on food items.

Table 7.3
Expenditure Incurred on Food Items (Rs/year)

Sl. No .	Expenditure on Food Items	Revisiting Household		New Household		All Household	
		Exp	%	Exp	%	Exp	%
1	Cereals	41510	31.0	45752	26.5	87262	28.5
2	Pulses	11500	8.6	15900	9.2	27400	8.9
3	Vegetables	15000	11.2	20000	11.6	35000	11.4
4	Fruits	8000	6.0	18500	10.7	26500	8.7
5	Sugar and jaggery	3680	2.8	6080	3.5	9760	3.2
6	Spices etc	2840	2.1	3240	1.9	6080	2.0
7	Meat, fish and egg	4070	3.0	5120	3.0	9190	3.0
8	Milk and milk products	25730	19.2	36900	21.4	62630	20.4
9	Edible oil	12600	9.4	13900	8.1	26500	8.7
10	Beverages and intoxicants	-		-			
11	Processed foods	6850	5.1	5100	3.0	11950	3.9
12	Other Foods	1950	1.5	2055	1.2	4005	1.3
	Total food expenditure	133730	100.0	172547	100.0	306277	100.0

7.5 Expenditure and Non-Food

The details of the total expenditure of various non-food items by revisiting (25) households, new (30) households and all (55) households as depicted in the Table 7.4, shows that:

- i. The pattern of the expenditure on various non-food items as made by households has been almost the same in each category i.e. revisiting and new households as well as all households.
- ii. The major share of total non-food items expenditure; has been accounted for by “clothing, medical, electricity, petrol/diesel and education” which when taken together account for more than 80 per cent of total in each of revisiting and new category and also all households as a whole.

Table 7.4
Expenditure on Non-Food

(Rs./year)

Sl. No.	Sources of Expenditure on Non-Food Items	Revisiting Household		New Household		All Household	
		Exp	%	Exp	%	Exp	%
1	Clothing	102600	24.6	125700	24.7	228300	24.7
2	Education	39700	9.5	35600	7.0	75300	8.1
3	Medical	95500	22.9	113100	22.2	208600	22.5
4	LPG Gas	23300	5.6	27500	5.4	50800	5.5
5	House rent / repairs	-					
6	Electricity	77100	18.5	96400	18.9	173500	18.8
7	Phone and Entertainment	-	-	-	-		
8	Cleaning & personal care	15800	3.8	14700	2.9	30500	3.3
9	Ceremonies	22000	5.3	23500	4.6	45500	4.9
10	Remittances / transfers	0	0.0	0	0.0	0	0.0
11	Taxes, litigation and other Charges	0	0.0	0	0.0	0	0.0
12	Repairs of machinery, house, etc.)	7400	1.8	10400	2.0	17800	1.9
13	Petrol/diesel for two/four Wheeler	33500	8.0	62000	12.3	95500	10.3
14	Other non-food Expenditure	-	-	-	-	-	-
	Total non-food expenditure	416900	100.0	508900	100.0	925800	100.0

7.6 Total Expenditure Incurred on Food and Non-Food Items

The details of the total expenditure incurred by households on food and non-food items, as shown in the Table 7.5; result to that:

- i. The total amount of expenditure spent on food and non-food items, by revisiting (25), new (30) and all the households (55) on 'Rs. per year' basis has been recorded as Rs. 5,50,630 in case of revisiting, Rs. 6,81,447 for new and Rs.12,32,077 in case of all households; which on per household basis comes as Rs.22,025 for revisiting, Rs. 22,715 for new and Rs. 22,401 for all households, respectively.
- ii. Compared to expenditure on food items; expenditure on non-food items; have been much more; to the extent that of the total expenditure non-food items expenditure account for 75.7 per cent in case of revisiting, 74.7 per cent for new households and 75.1 per cent for all households; against respective food items, percentage of just 24.3 per cent, 25.3per cent and 24.9 per cent.

Table 7.5
Total Expenditure Incurred on Food and Non-Food Items (Rs/Year)

Sl. No.	Sources of Expenditure	Revisiting Household		New Household		All Household	
		Exp	%	Exp	%	Exp	%
1	Total food expenditure	133730	24.3	172547	25.3	306277	24.9
2	Total non-food expenditure	416900	75.7	508900	74.7	925800	75.1
	Total expenditure	550630	100.0	681447	100.0	1232077	100.0

7.7 Adequacy of Income to Meet the Expenditure on the Part of farm and Non-Farm Households

The detail of the Table 7.6 which depicts Average Annual Household Expenditure and Adequacy of Crop income, along with crop income/expenditure ratio, records that:

- i. The crop income/expenditure ratio is reported to be as 4.72 for revisiting, 4.22 for new and as 4.44 on all households basis, respectively.
- ii. The crop income/expenditure ratio of greater than 4, in case of every category as well as households, is a clear cut indication of the adequacy of income to meet out various farm and non-farm household expenditure of households. But; in spite of this; care has to be taken and maintained still more, to further improve this ratio in the overall interest and general welfare of victim farmer's family members, especially during victims' post-suicidal periods.

Table7.6
Adequacy of Income to Meet the Expenditure of Farm and Non-Farm Households' Expenditure (Rs/Annum)

Sl. No.	Household category	Avg. annual household expenditure	Adequacy of crop income	
			Crop Income	Crop income –expenditure ratio
1	Revisiting Household	22025	103922	4.72
2	New Household	22715	95883	4.22
3	All Household	22401	99537	4.44

7.8 Chapter Summary

The chapter summary is briefed as under:

- i. The total per capita income works out to be Rs.1,04,174.00 per annum for ‘revisiting household’, Rs. 1,52,653.00 per annum, for new households; revisiting to Rs.1,30,617.00 per annum on all household basis.
- ii. In each category of household that is, revisiting and new as well as all households; the highest contributor to the total income has been ‘farm income’, covering more than 50 per cent of total income, in each case; followed by non-farm income respectively.
- iii. As evidently seen, new households have higher per capita annual income than that of the revisiting farmers which beyond any doubt, is a sign of enhanced prosperity, over the period of time.
- iv. Caste-wise, dominant contributor to Annual Income has been (a) Scheduled Caste (S.C.) (35.8 per cent), followed by General (GM) (32.6 per cent) and OBC(31.6 per cent) in case of revisiting households. (b) OBC (58.0 per cent) followed by SC (34.1 per cent)and GM (7.9 per cent) in case of new households; and (c) OBC (48.5 per cent), followed by SC (34.7 per cent) and GM (16.85) on over households; respectively. Thus, in case of‘New Households’ as also ‘All households’, ‘OBC’ and ‘SC’ have been main contributors to Annual Income, while in case of revisiting households, thecontribution of ‘all the three’ i.e. GM, SC, and OBC has been almost the same.
- v. The total food expenditure incurred by various categories of households on per year basis has been of the order of Rs.1,33,730.00for revisiting ,Rs.1,72,547.00 for new and Rs.3,06,277.00 for all households ; respectively.
- vi. In respect of food items each category i.e. revisiting and new household as well as on all household level; the five major items of expenditure on food items have been as ‘cereals’, ‘milk’ and ‘milk products’, ‘vegetables’, ‘edible oils’ and ‘pulses’ which all together accounting for above 74 per cent of total expenditure on food items.
- vii. The major share of total non-food items expenditure; has been accounted for by “clothing, medical, electricity, petrol/diesel and education” which when taken together account for more than 80 per cent of total in each of revisiting and new category and also all households as a whole.

- viii. As compared to expenditure on food items; expenditure on non-food items; have been much more; to the extent that of the total expenditure, non-food items expenditure account for 75.7 per cent in case of revisiting, 74.7 per cent or new households and 75.1% for all households; against respective food items, percentage of just 24.3 per cent, 25.3 per cent and 24.9 per cent.
- ix. The crop income/expenditure ratio of greater than 4, in case of every category as well as households, is a clear cut indication of the adequacy of income to meet out various farm and non-farm household expenditure of households. But; in spite of this; care has to be taken and maintained still more, to further improve this ratio in the overall interest and general welfare of victim farmer's family members, especially during victim post-suicidal periods.

Chapter-8

Causes and Ways to Tackle the Root Cause

8.1 Introduction

Probing into the various causes and ways to tackle the “root cause for the farmers suicides”, is the main theme of this entire study report; which is conducted in the state of Uttar Pradesh, along with it being conducted in twelve other states of the country as well. The ultimate aim has been to work out the real cause and accordingly implement as well, the corresponding remedial measures in curbing the most unfortunate event of farmer’s suicide, in the country. The present chapter in this regard, may thus, be considered as the ‘gem’ among all the chapters of this study report, to hit at the ‘cause of causes’, leading a farmer to opt for this suicidal act.

The present chapter, aiming at ‘data mining’ to hit at the root cause; attempts to highlight main symptomatic factors, through sample enquiry of victim farmers family members, with regard to (i) behaviour of victim farmer before suicide (ii) methods and place of committing suicides (iii) social/farming/indebtedness, causes of farmers suicide; as well as (iv) the impact of suicidal incident on victims household and consequent changes thereof.

8.2 Symptoms of suicides noticed by the victim households

The recorded data of the Table-8.1 in respect of symptoms of the victim farmer before the suicidal act as noticed by the victim households (family members); results to that:

- (i) Among 25 revisiting households (a) maximum (92 per cent) reported that victim was mingling with his own family members, followed by 72 per cent of victims mingling with his/her own community and 48 per cent stating of victims mingling with neighbouring households/friends (b) 48 per cent reporting about regular consuming of food by victim farmer; while only 16 per cent told that victim was sleeping adequately during nights.
- (ii) Among 30 new households (a) 90 per cent reported as corresponding to each of the

three symptoms, i.e., victim farmers mingling with his/her own family members; own community as well as neighbouring households/friends (b) 50 per cent reported about victim farmer taking regular food while (c) only 40 per cent of his/her taking regular and adequate sleep during nights.

- (iii) On the whole, i.e., all household basis (55) (a) majority (90.9 per cent) reported victim farmers mingling with his/her own family member; 81.8 per cent with own community and 70.9 per cent with neighbouring households/friends; respectively (b) 49.1 per cent of his taking food regularly, while only 29.1 per cent of victim farmer sleeping adequately during nights.
- (iv) This resulting to that 'victim farmers' not sleeping adequately during nights has been the main pre suicidal symptom of his/her suicidal act, followed by his/her not consuming food regularly; as per reporting of victim farmers family members.

Table 8.1
Symptoms Observed by the Family Members before the Suicide Incident

Sl. No.	Symptoms notice in victim	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
1.	Was victim mingling with his/her own family member?	23	92.0	27	90.0	50	90.9
2.	Was victim mingling with his/her own community?	18	72.0	27	90.0	45	81.8
3.	Was victim mingling with his/her neighbouring households/friends?	12	48.0	27	90.0	39	70.9
4.	Was victim consuming food regularly?	12	48.0	15	50.0	27	49.1
5.	Was victim sleeping adequately during nights?	4	16.0	12	40.0	16	29.1
6.	Others (specify)	-		-			

Note: Number of Victim HHs (no.) refer to those who said yes

The total no. of victims will not add upto total, because of multiple responses

8.3 Method of Suicides by the Victim

The observations of the Table-8.2 displaying various methods/types of suicide by the victim farmer, like poison consuming, hanging, jumping in river/well, current shock, railway track, self-immolation, show that:

- (i) The various methods attempted for committing suicide show 'Hanging' and 'Poison Consumption' as primary methods of suicide; as on the whole 98 per cent farmers chose these methods. Only one farmer from the 'Revisiting Household' chose

‘other’ suicide mode.

- (ii) Taking together, these two methods, i.e., “poison consuming and hanging” accounted for 96 per cent in case of revisiting households, 100 per cent (cent per cent) in case of new households and 98.2 per cent on the overall all households basis.

Table 8.2
Method/Types of Suicides by the victim

Sl. No.	Method/types of Suicides	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
1.	Poison consumption	8	32.0	2	6.7	10	18.2
2.	Hanging	16	64.0	28	93.3	44	80.0
3.	Jumping in river/well	-	-	-	-	-	-
4.	Current shock	-	-	-	-	-	-
5.	Self-immolation	-	-	-	-	-	-
6.	Railway track	-	-	-	-	-	-
7.	Others (specify)	1	4.0	-	-	1	1.8

Note: Number of Victim HHs (no.) refer to those who said yes

8.4 Place of Suicide by the Victim

The data of the Table-8.3, displaying details of place of committing suicide by victim farmers record that:

- (i) Majority of victim farmers committed suicide either in their respective houses or in farm houses. Taken together these two, i.e., “victim farmers house and farm house”, accounted for 88 per cent of total farmer suicides in case of revisiting households; 90 per cent in case of new households and 89.1 per cent on all households basis; respectively.
- (ii) Apart above, category-wise a few farmers among total households, i.e., 3 (12 per cent) in case of revisiting and 3 (10 per cent) in case of new households; resulting to 6 (10.9 per cent) on allhouseholds basis, committed suicide at some ‘other’ place.

Table 8.3
Place of Suicide by the victim

Sl. No.	Place of Suicide	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
1.	House	12	48.0	25	83.3	37	67.3
2.	Farm /farm house	10	40.0	2	6.7	12	21.8
3.	Lodge/Hotel	0	0.0	0	0.0	0	0.0
4.	Road side	0	0.	0	0.0	0	0.0
5.	Others (specify)	3	12.0	3	10.0	6	10.9

* Number of Victim HHs (no.) refer to those who said yes

8.5 Social Causes of Farmers Suicides

The observed findings of the Table-8.4, in respect of social causes of farmers' suicides like poverty, property dispute, marriage and family problems, show that:

- (i) In respect of 'poverty' as a social cause among revisiting households 44 per cent are reported as Above Poverty Level (APL) and 28 per cent Below Poverty Level (BPL); while the respective percentages of APL and BPL have been as 56.7 per cent and 12.3 per cent in case of new households and as 50.9 per cent and 20.0 per cent on overall households; respectively, showing majority of APL over BPL, with not even a single household corresponding to AAY.

Table 8.4
Social Causes of Farmers suicides

Sl. No.	Social Causes	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
I.	Poverty						
	1.APL	11	44.0	17	56.7	28	50.9
	2.BPL	7	28.0	4	12.3	11	20.0
	3.AAY	0	0.0	0	0.0	0	0.0
II	Property Dispute						
	1.Partition of land	0	0.0	0	0.0	0	0.0
	2.Partition of house	0	0.0	0	0.0	0	0.0
	3.Partition of income	0	0.0	0	0.0	0	0.0
	4.Partition of Jewellery	0	0.0	0	0.0	0	0.0
	5. Others (specify).....	0	0.0	0	0.0	0	0.0
III	Marriage						
	1.Dowry related issues	0	0.0	0	0.0	0	0.0
	2.Extra marital affairs	0	0.0	1	3.3	1	1.8
	3.Divorce	0	0.0	0	0.0	0	0.0
	4.Love failure	1	2.5	3	10.0	4	7.3
	5. Others (specify)...	0	0.0	0	0.0	0	0.0
IV	Family Problems						
	1.Social functions	0	0.0	0	0.0	0	0.0
	2.Daughter's marriage	0	0.0	0	0.0	0	0.0
	3.Son's marriage	0	0.0	0	0.0	0	0.0
	4.Frequent quarrel among the family members	6	24.0	11	36.7	17	30.9
	5.Fall in social reputation	0	0.0	0	0.0	0	0.0
	6.Illness*	4	16.0	8	26.7	12	21.8
	7.Drug abuse/Alcoholic addiction	2	8.0	6	2.0	8	14.5
	8.Gambling/Betting /Chit fund	0	0.0	1	3.3	1	1.8
	9. Others (specify)...	0	0.00	0	0.0	0	0.0

Note: *APL= Above Poverty Line, BPL= Below Poverty Line, AAY= Antyodaya, AIDS= 1; Cancer=2; Paralysis=3; Insanity/Mental illness=4; Other prolonged illness=5; Prolonged illness/AIDS/STD/Cancer of family member/s=6; Others (specify)=7

- (i) No farmer suicide is reported on account of “property dispute”; while in respect of various other “social causes like dowry, divorce, love failure etc. related to marriage”, only a few or every very limited suicides are reported with a total of only one case due to extra marital affairs and 4 on account of love failure.
- (ii) In respect of family problems resulting to farmer suicide among many like social functions, daughters/son’s marriage, fall in social reputation etc. the main considerable factors as reported have been (a) “Frequent quarrels” among family members and (b) “Illness”; which are respectively observed in 17 (30.9 per cent) and 8 (14.5 per cent) cases, on overall. Apart above “drug abuse” and “gambling” too find a place to be reported as a social cause, but very nominally, being reported in 8 cases and just a single case, overall.

8.6 Farming Causes of Farmers Suicides

The recorded observations of the Table-8.5, in respect of farming causes of farmers’ suicides, show that:

Among various specified “farming” causes, of farmers suicides, on account of various factors like (a) crop failure, (b) crop losses due to natural calamities and (c) desired expectations towards higher output, higher prices, loan waiving, institutional/non-institutional credit (d) Inability to sell output, lack of extension services, delayed payments of sold output, insurance for cultivated crop; etc.

- Not even a single farmers was affected in case of revisiting farmers, while
- Out of 30 new households only 1 farmer (3.3 per cent) household reported problem related to institutional credit and 2 farmers (6.7 per cent) households reported problem in respect of non-institutional credit.

On the whole, towards various specified “farming causes” leading to farmers suicide; only single factor, i.e., Institutional/non-institutional credit has come-up and that too, only on the reporting of just 5.4 per cent of total 55 households.

Table 8.5
Farming Causes of Farmers suicides

Sl. No.	Social Causes	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
I	Failure of Crops						
	1.Pests & diseases	0	0	0	0	0	0
	2.Lack of access to irrigation water	0	0	0	0	0	0
	3.Cultivation of high commercial crops	0	0	0	0	0	0
	4.Adoption of high cost technology	0	0	0	0	0	0
	5.Others (specify)...	0	0	0	0	0	0
II	Due to Natural Calamities						
	1.Cyclone effect	0	0	0	0	0	0
	2.Crisis of rainfall/drought	0	0	0	0	0	0
	3.Accidental fire	0	0	0	0	0	0
	4.Others specify	0	0	0	0	0	0
III	Expectations of:						
	1.Higher output	0	0	0	0	0	0
	2.Higher prices	0	0	0	0	0	0
	3.Loan waiving	0	0	0	0	0	0
	4.Institutional credit	0	0	1	3.3	1	1.8
	5.Non-institutional credit	0	0	2	6.7	2	3.6
	6.Inability to sell output	0	0	0	0	0	0
	7.Well failures	0	0	0	0	0	0
	8.Quarrel between the victim & others	0	0	0	0	0	0
	9.Lack of extension services	0	0	0	0	0	0
	10.Delayed payment/ payment in instalments for the sold output	0	0	0	0	0	0
	11.Insurance for the cultivated crop	0	0	0	0	0	0
	12. Others (specify)...	0	0	0	0	0	0
	13. Others (specify)...	0	0	0	0	0	0

Note: Number of Victim HHs refer to those who said yes

8.7 Indebtedness Causes

The details of the Table-8.6, in respect of various causes related to 'Indebtedness' responsible for farmers suicide, like crop loan, farm equipment's loan, non-agricultural loan etc., shows that:

- (i) Debt for Crop loan was noticed in 1 household each in revisiting and new households, resulting to a total 2 households (i.e. 3.6 per cent) of total 55 households.
- (ii) In case of 'new households' 20 per cent reported non-agricultural loan 6.7 per cent reported non-institutional loan among indebtedness causes; resulting on the

whole as 10.9 per cent towards non-agricultural loan and 3.6 per cent towards non-institutional loan, of the total 55 households.

- (iii) Among various ‘indebtedness’ causes of farmers suicides; the three causes coming-up have been crop loan, non-agricultural loan and non-institutional loan, but all with very meagre reporting’s of just 3.6 per cent of total households (55) in case of crop loans, 10.9 per cent of total in case of non-agricultural loan and 3.6 per cent in case of non-institutional loan. This indicates that in the region of study, “Indebtedness” is not at all posing a threat to farmers towards being in critical condition to go for suicide.

Table 8.6
Indebtedness Causes of Farmers suicides

Sl. No.	Indebtedness Causes	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
I	Indebtedness – Institutional & Non-Institutional						
	1.Due to crop loan	1	4.0	1	3.0	2	3.6
	2.Due to farm equipment’s’ loan	0	0	0	0	0	0
	3.Due to non-agricultural loan	0	0	6	20.0	6	10.9
	4.Due to non-institutional loan	0	0	2	6.7	2	3.6
	5.Due to pressure from institutional Sources	0	0	0	0	0	0
	6.Due to pressure from non-institutional sources	0	0	0	0	0	0

Note: Number of Victim Households refers to those who said yes.

8.8 Impact on Victims Household after the Suicide Incident

The details of “Impact” of farmer’s suicide in one form or the other; on the victim farmers’ household, during the post suicidal event, as shown in the Table-8.7 displayed that:

- (i) The major “five factors” being affected the most, as a result of Impact of Farm Suicide Incident; during post suicide period, have been in order as “Insecurity in the family”, “Family members being under depression”, “Family members serious illness”, “There being no earning member” and “Asking for food from neighbours and guests”; under each category as well as all households.
- (ii) Apart above mentioned factors; the other factors being affected, though to a lower extent as compared to these, have been as agricultural activities stopped; schooling

of children stopped; out-migration of family members followed by a few factors more, like.

- (iii) Land/House sold, postponement of son's/daughter's marriage; inability of purchase clothes; but to a very merger extent.

Table 8.7
Impact on Victims' Household after the Suicide Incident

Sl. No.	Effect after Suicide Incident	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
1	Agricultural activities stopped	2	8.0	6	20	8	14.5
2	No earning member	4	16.0	4	13.3	8	32.7
3	Schooling of the children stopped	1	4.0	5	16.7	6	10.90
4	Land sold	1	4.0	0	0.0	1	1.8
5	House sold	1	4.0	0	0.0	1	1.8
6	Postponement of son's/ daughter's Marriage	2	8.0	0	0.0	2	3.6
7	Family member/s fell seriously ill	9	36.0	7	28.0	16	29.1
8	Family member/s under depression	11	44.0	19	63.3	30	54.6
9	Insecurity in the family	19	76.0	15	50	34	61.8
10	Out-migration of Family members	1	4.0	5	16.7	6	10.9
11	In-migration of Family members	0	0.0	2	6.7	2	3.6
12	Due to poverty went a whole day and night without food?	0	0.0	0	0.0	0	0.0
13	Inability to purchase food and non- food materials?	0	0.0	0	0.0	0	0.0
14	Anxious that the households would not have enough food?	0	0.0	0	0.0	0	0.0
15	Ate some poor quality foods that you really did not like?	0	0.0	0	0.0	0	0.0
16	Was not able to eat the kind of food you preferred?	0	0.0	0	0.0	0	0.0
17	Did you ask food from your neighbours and guests?	7	28.0	5	16.7	12	21.8
18	Went for outside eating like in temple/ other places?	0	0.0	0	0.0	0	0.0
19	Inability to purchase clothes	0	0.0	2	6.7	2	3.6
20	Other assets sold (specify)	0	0.0	0	0.0	0	0.0

Note: *Number of Victim HHs (no.) refers to those who said yes

8.9 Perceptions about Changes of Farmers Suicide Household

The details of perceptions about changes of farmer's suicide households, as presented in the Table-8.8, show that:

- (i) In majority of cases (i.e., over 90 per cent) change is recorded in “social condition of the family”; with respective percentages as 92.0 per cent in case of revisiting, 90.0 per cent in case new and 90.9 per cent in case of all households, respectively.
- (ii) With respect to ‘change in employment pattern’, 56.0 per cent of ‘revisiting households’, 66.7 per cent of ‘new households’ and 61.8 per cent on ‘all households basis’ reported to register this change. It was empirically observed that in most of the households the victim of suicide was mostly the prime bread earner of the family. Due to this the economic and employment status of the concerned families were definitely affected.
- (iii) Apart these two, changes have also been recorded under each category and corresponding on “all households basis”, to varying extent in respect of “farm structure” and “agriculture condition”.
- (iv) In respect of change in farm infrastructure and agricultural conditions (by adopting new technology) the respective recording have been as 56.0 per cent and 48.0 per cent in case of revisiting; 40.0 per cent and 30.0 per cent in case of new household and as 47.3 per cent and 56.4 per cent on all household basis.
- (v) These result to that; in respect of per perceptions about changes of Farmer Suicide Household; all the four factors, i.e. social condition of family, farm infrastructure, agriculture condition and employment pattern are affected accordingly to varying extents.

Table 8.8
Perceptions about Changes of Farmers Suicide Household

Sl. No.	Perceptions	Revisiting Household		New Household		All Household	
		No	%	No	%	No	%
1	Change in Social condition of your Family	23	92.0	27	90.0	50	90.9
2	Change in farm infrastructure	14	56.0	12	40.0	26	47.3
3	Change in Agriculture condition (by adopting new technology)	12	48.0	9	30.0	31	56.4
4	Change in employment pattern	14	56.0	20	66.7	34	61.8

Note: Number of Victim HHs (no.) refer to those who said yes

8.10 Perceptions about Changes of Farmers Suicide Household

The details of perceptions about changes of farmer suicide household in terms of recording

as “Increase/Decrease/No Change”, shown in the Table-8.9 result to as under:

- (i) In respect of economic condition of household; 24 out of 25 revisiting; 26 out of 30 new and 50 out of 55 all households; i.e. majority of them reported ‘declination’.
- (ii) In respect of incidence of ‘disease and medical expenditure’ majority of them report increase i.e. enhanced incidence of disease and medical expenses; while a few have also reported no change or decrease.
- (iii) Regarding family status as well, majority of them i.e. 13 out of 25 revisiting, 19 out of 30 new, and 32 out of all 55 households; shows declination.
- (iv) Likewise, in respect of change in ‘income generation service and family standards of living’, as well majority of households report fall or declination, under each category, as well as on all households basis.
- (v) With regard to changes in ‘family expenditure’; majority of household report ‘no change’, in case of new household and all household, while in case of revisiting households majority report increase in family expenditure.
- (vi) The recorded perception about changes of farmer suicides households as: (a) deterioration in economic condition, family status, income generation sources (b) increase in incidence of disease and illness (c) no change or increase in family expenditure; are all subject to utter need and prime consideration and care thereof accordingly; in the general interest and welfare of victims farmer’s households during post-suicidal act period.

Table 8.9
Perceptions about Changes of Farmers Suicide Household (Numbers)

Sl. No.	Perceptions	Revisiting Household			New Household			All Household		
		1	2	3	1	2	3	1	2	3
1	Economic condition of your Family	1	24	0	1	26	3	2	50	3
2	Incidence of disease and medical expenditure in your family	14	6	5	11	9	10	25	15	15
3	Changes of your family status in the village	11	13	1	8	19	3	19	32	4
4	Change in income generation Sources	10	12	3	6	18	6	16	30	9
5	Changes in family standard of Living	9	12	4	4	12	14	13	24	18
6	Changes in family expenditure	15	4	6	4	8	18	19	12	24

Note: Increase-1, Decrease-2, No Change-3

8.11 Key Result Factor toward Farmer Suicide and Consequences Thereof:

As already highlighted in this chapter, a few symptomatic factors and consequences of the farmer suicide to respective victims i.e. “family members, the main sufferers and being treated as nothing more than down trodden” by the majority of present day society; except a few most generous ones in the society have been in ‘nutshell’ as:

- i. As per suicide symptoms ‘victims disturbed sleep during nights’ and ‘not taking food regularly and as required’, noticed as the main ones accordingly.
- ii. While the two most common methods of suicides have been hanging and poison consuming.
- iii. The most common places of suicides have been “victim farmer’s house and farm houses”.
- iv. Poverty: As reflected from the study, many of the farmer victims were BPL card holders. However, no case has been reported on account of property disputes.
- v. In respect of marriage problems as well, only a single or just very finger countable cases being reported on account of extra-marital affairs or love failures.
- vi. Among family problems, the main being frequent quarrels among family members; illness and to some extent drug abuse/ addiction.
- vii. Farming cause has been observed negligibly as accounting for farmer suicides. While, just 5.4 per cent related to institutional / non-institutional credit.
- viii. Indebtedness too as a factor is insignificantly reported in the study; except for 3.6 per cent each reporting crop loan/ non-institutional loan as a cause and 10.9 per cent as non-agricultural loan.
- ix. As an impact of farmer suicide on victim’s households mainly recorded have been insecurity and depression of family member; no earning member; schooling of children and agricultural activities stopped.

8.12 Ways to Tackle the Root Causes

Rising farmer suicides have been mostly reported on account of erratic monsoon, outstanding loans, rising debt, low crop yield, poor procurement rate of crops and successive crop failure. But the ground realities with respect to the empirical observations of study conducted in four districts of Uttar Pradesh, it is evident that such farmer suicides are not only due to economic catalysts. While natural factors like erratic monsoon,

hailstorm, drought and floods adversely affect crop yield, the manmade factors, i.e. pricing policies and inadequate marketing facilities apart from non-repayment of loans etc. account to such extreme steps. The empirical results and presentations in the case studies also reflect that more often loans were taken on account of productive purposes were not spent judiciously on productive account. Consequently the debt repayment remained in question. The condition of marginal and small farmers remained even more precarious.

It is therefore, pertinent to introduce parallel alternative income opportunities apart from agriculture, so that crop losses do not account to severe loss of income and sustenance of farmers becomes a question. Non-farming agricultural allied activities like fishery, poultry and dairy apart from small or petty trades and self-employment needs to be promoted. Further, promotion of Organic farming may be taken up to curb expenses on artificial fertilizers and pesticides. Institutionalized Credit System needs to be made simpler and also awareness on productive spending of loans needs to be made. The village support network including Gram Panchayats should evolve mechanism to identify the indebted and suicide prone farmers and provide due aid to overcome the crisis. It is important to state here that many of the farmers showed symptoms of suicide and emotional breakdown before resorting to taking dire suicidal steps.

- i. Improving farming conditions of farmers mainly of marginal and small farmers who form the bulk of farming community and are the worst sufferers in this regard on account of their being at the subsistence level of farming or even below it.
- ii. Though as per findings of the present study in the state of Uttar Pradesh, a moderate/ low farmer suicide prone state reporting a total of just 87 farmer suicides 2020 as per the records of NCRB; the farming conditions and indebtedness are not in a way to affect the farmers to such an extent that he/she being pushed into the critical state resulting to 'suicide'; but inspite of this care and consequent measures thereof are needed in the same way as in high farmer suicide prone states; to the farmers of this state as well, to improve upon their social, economic, cultural, agricultural, farming/non-farming infrastructural conditions still more towards upliftment in the general context and the living conditions in improving upon the status of these two categories, i.e., marginal and small farmers in particular and all farmers in general with special care in respect of all the concerned aspects of sufferings of the victim farmer households (family members) who are subject to a

number of problems during ‘post-suicidal’ periods of the concerned farmer suicides. This will pave a strong base and put forward a progressive path towards their overall upliftment and welfare; to ultimately result into improving upon India’s agriculture and its reflecting image.

8.13 Chapter Summary

The Chapter Eight caters to understand the root cause of farmer suicides in context of both revisiting households as well as current new households. The chapter is divided into 13 sub sections and thematically discusses on the various dimensions of farmer suicides. The symptoms observed prior to commitment of suicides show renouncing food and not taking adequate sleep as major signs of depression and deviation from normalcy. Most of the farmers committed suicides by consuming poison or by hanging. Similarly, the chapter also elucidates the place of committing suicides. Among the various social causal factors for farmers’ suicides like poverty, property dispute, marriage and family problems show that 20 per cent of the suicide victims were from BPL families and about 30 per cent of victims were reported to have had frequent quarrels with family members. There were also cases where victims resorted to extreme suicidal attempts due to prolonged ailments. Further, drug and alcoholism was also an important cause of suicide. Indebtedness and incapability to repay loans was not a major cause or driving factor for suicides as only 3 cases on the whole were reported to have taken non-institutional or institutional credit in the last five years. Explicitly probing into the cause of farmers’ suicides consequent upon indebtedness, shows, 8 cases in new households that reported to have cited indebtedness due to non-agricultural loan and non-institutional loans as cause of suicide. There was only one suicide in the revisiting households due to crop loan. The chapter also delves to understand the impact of victims’ household after suicide incident. The study empirically shows that such loss of lives has led to insecurity in the family, psychological distress and depression of family members, there has also been loss of earning member of the family, etc. by sequence of importance. Further, it is important to state here that such untimely loss of lives due to suicide by farmer families has definitely psychologically, socially and economically impacted the victim families. Grappling with such unwarranted conditions is definitely a harsh reality. Consequently, victim families perceived that there had been a change in social condition of family. Not only this, the victim families also reported that there had been change in employment pattern (61.8 per cent), agriculture condition (56.4 per cent) and also farm infrastructure (47.3 per cent).

Effectiveness of Different Government Programmes/ Interventions on Farmers Suicide

9.1 Preamble

A government, whether of India, USA or Russia is always aware of its countrymen's welfare and as such is in launching various public welfare and development schemes at time to time, accordingly and as per need. As such India too, being a prime agriculture country has been launching various agriculture developments cum welfare programmes/schemes in matching with time and in the interest of 'farming community', who are the entire feeders of the countrymen. But, apart from launching various development programmes; 'equally important' is its 'intervention' 'in respect of proper utilization and implementation of such schemes and in turn their effectiveness on the farming and cultivation practices towards enhancing farmers' incomes, which in turn will definitely contribute to the ultimate aim of the present study, i.e. reducing 'farmer suicide' to all possible minimum.

The present chapter in its attempt highlights the various, not only one, but 16 schemes/programmes related to agriculture development in various forms and farmer's participation in getting benefits of the programmes along with constraints faced by them in respect of time (man days), rents, transaction cost etc. in getting full benefits of such programme implementations.

9.2 Benefits from Government Programmes

The details of the Table 9.1, displaying various benefits from participation in government programmes like, Soil Health Card, Farm Loan Waiver Schemes and credit through KCC Cards, show that:

- i. Among 16 specified Government programmes, towards welfare of farming community and rural folks, the sample household have benefited themselves to

varying extents; from ‘seven’ programmes which in order of extent of benefits to households have been as under.

Table 9.1
Benefits from Participation in Government Programmes

Sl. No	Name of the Scheme/ Programme	No. of farmers benefited out of total sample (30)	Annual benefit availed per beneficiary family (Rs)
1	Farmers Suicide Scheme	0	0
2	Pradhan Mantri Krishi Sinchayee Yojana (PMKSY, Irrigation)	0	0
3	Pradhan Mantri Fasal Bhima Yojana (PMFBY, Crop Insurance)	4	1200
4	Pradhan Mantri Kisan Samman Nidhi (PM-KISAN, Central Government Farm Income Support)	21	18286
5	Pradhan Mantri Kisan Samman Nidhi (PM-KISAN State Government Farm Income Support)	0	0
6	Pradhan Mantri Kaushal Vikas Yojana (PMKVY/Organic Farming)	0	0
7	Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA/ MSP Scheme)	0	0
8	Soil Health Card	0	0
9	Credit through KCC Card	4	77500
10	Farm Loan Waiver Scheme	0	0
11	Farm machinery or implements	0	0
12	Seed Minikit scheme	0	0
13	Food through BPL/APL/AAY Card	10	779
14	Employment through MGNAREGA	6	14408
15	Housing Scheme (IAY/PMAY)	1	180000
16	PM UJJALA (LPG scheme)	12	0
17	Others(Specify)	0	0

- ii. Out of the total 30 sample households, all in the categories of new households; (a) 21 benefitted themselves through ‘PM-KISAN Samman Nidhi’ with an annual benefit availed per beneficiary at the rate of Rs.18,286; 10 by ‘Food through BPL/APL/AAY CARD’ at the rate of Rs. 771 per beneficiary per annum; 6 by ‘employment through MGNREGA’ with annual assistance at the rate of Rs. 14,408 per beneficiary; 4 getting ‘credit through KCC Card’ at the rate of Rs.77,500 per beneficiary on per year basis; also 4 benefitted under ‘Pradhan Mantri Fasal Bima Yojana’, with an assistance of Rs. 1200 per year per beneficiary; with 1 lone case being benefitted by ‘Housing Scheme’ with an amount of Rs. 1,80,000 availed per beneficiary and 12 benefitted themselves through ‘PM UJJALA’ (LPG Scheme) (b) The highest number of beneficiaries in availing benefits from participating in

Government programmes being in case of ‘PM-KISAN Samman Nidhi’, i.e. 21 out of total 30; while lowest (i.e. a single beneficiary among total 30) corresponding to “IAY/PMAY”, a housing scheme.

- iii. The above results to that; there is no doubt at all that, sample households have taken benefits through their participating in various Government Sponsored Welfare Programmes in the upliftment of the farming community. However, the extent of their participation has not been substantial and upto desired or expected level. But, inspite of this, their participation in various Government sponsored welfare programmes has been a ‘sign of positivity’ towards agricultural development.

9.3 Transaction Cost incurred by farmers in Availing Benefits

The details of the ‘transaction cost’ in terms of time, cost, rent, other expenses (if any) being spent by the farmers in availing benefits of various Government sponsored welfare programmes, as shown in the Table 9.2, depicts that:

Among various schemes; the sample households (farmers) incurred transaction under five schemes; which they availed for their benefits/welfare as detailed under:

(a) PM-KISAN

Among 30 households; 21 availing the benefits of this scheme, spent a time of 47 days, with an overall expenditure of Rs.2420 i.e., Rs. 115 per household, towards obtaining documents; Rs.1620 @ Rs.77 per household as ‘rent’ paid for programme benefits and thus resulting to total transaction cost towards this programme as Rs. 4040, which worked-out to be Rs.192 per household farmer.

(b) Credit through KCC Card

Among all, 4 farmers (household) availed benefits under this scheme; spending a time of 14 days and paying ‘rent’ of Rs. 750 for getting benefits of this programme which worked out @ Rs. 188 per farmer; and ultimately this amount itself i.e., Rs. 188 per farmer equated the ‘whole transaction cost’ as Rs. 750 that is as @ Rs. 188 per farmer.

Table 9.2
Transaction cost incurred by farmers in availing the benefits

Sl. No	Name of the Scheme/ Programme	Time spent in availing the benefits (mandays)	Transaction cost			Total Transaction cost per program (Rs)
			Opportunity cost of labour in availing benefits (Rs)	Expenditure involved in obtaining documents(Rs)	Rent paid exclusively for receiving prog. benefits (Rs)	
1	Farmers Suicide Scheme	0	0	0	0	0
2	PradhanMantriKrishiSinchayeeYojana (PMKSY, Irrigation)	0	0	0	0	0
3	PradhanMantriFasal BhimaYojana (PMFBY, Crop Insurance)	0	0	0	0	0
4	PradhanMantri Kisan Samman ((Nidhi (PM-KISAN, Central Government Farm Income	47 (21)	0	2420 (115)	1620 (77)	4040 (192)
5	PradhanMantri Kisan SammanNidhi (PM-KISAN State	0	0	0	0	0
6	PradhanMantriKaus halVikasYojana	0	0	0	0	0
7	PradhanMantriAnna dataAaySanrakshan	0	0	0	0	0
8	Soil Health Card	0	0	0	0	0
9	Credit through KCC Card	14 (4)	0	0	750 (188)	750 (188)
10	Farm Loan Waiver Scheme	0	0	0	0	0
11	Farm machinery or implements	0	0	0	0	0
12	Seed Minikit scheme	0	0	0	0	0
13	Food through BPL/APL/AAY Card	10 (10)	0	240 (24)	0	240 (24)
14	Employment through MGNREGA	0	0	0	0	0
15	Housing Scheme (IAY/PMAY)	10 (1)	0	500	500	1000
16	PM UJJALA (LPG scheme)	23 (12)	0	1000 (83)	600 (50)	1600 (133)
17	Others(Specify)	0	0	0	0	0

(c) Food through BPL/APL/AAY Card

Among total 30 households, 10 availed the benefits of this scheme; who spent 10 days for this benefit to materialize with an expenditure of Rs. 240 that is Rs.24 per head towards obtaining documents; which ultimately worked-out to be “transaction cost” as Rs. 240 that is @ Rs. 24 “per household”.

(d) Housing Scheme (IAY/PMAY)

In this scheme “only one” farmer (household) had taken benefit and that he spent 10 days of time, incurring Rs. 500 towards obtaining documents and Rs. 500 towards ‘rent’ paid for receiving programme benefits and thus incurring “transaction cost” of Rs.1000 i.e. cost as per beneficiary/head.

(e) PM UJJALA (LPG Scheme)

Under PM UJJALA (LPG) scheme, out of total 30 households, 12 availed benefits of all this scheme, all together spending a time of 23 days for getting benefit and paying expenditure of Rs.1000 i.e. Rs. 83 ‘per head’ towards obtaining documents; Rs.600 i.e. Rs 50 ‘per head’ as ‘rent’ for receiving programme benefits; resulting to ‘total transaction cost’ of Rs.1600 i.e. Rs.133 ‘per head’.

9.4 Chapter Summary

The summarized points on the basis of results of this chapter are that

1. Among 16 government sponsored programmes, the sample households have benefitted from seven programmes, which are namely, the PM-KISAN; foodgrains through BPL, APL cards, employment through MNREGA, credit through KCC cards; Pradhan Mantri Fasal Bima Yojana, Pradhan Mantri Housing Scheme, and PM Ujjawala (LPG) scheme.
2. The highest beneficiaries (21) have been in case of PM-KISAN Samman Nidhi, while lowest i.e. only 1 in case of housing scheme.
3. The ‘transaction cost’ have been i.e., @ Rs. 1000 per head in case of Housing scheme (PMAY) and lowest, i.e., Rs. 24 per head in case of foodgrains allocation through BPL/APL cards.

Chapter-10

Summary and Conclusions

10.1 Introduction

Our national government is well aware of this tragic fact of farmer's suicide in the country and accordingly well 'in action' also, through conducting /undertaking and launching various development and welfare schemes for farmers in the country like Farmers Suicide Scheme; Pradhan Mantri Krishi Sinchayee Yojana; Fasal Bima Yojana (crop insurance); Kisan Samman Nidhi Yojana (Farm Income Support) (Central/State government Farm Income Support); Kaushal Vikas Yojana; Anndata Aay Sanrakshan Yojana Abhiyan; Soil Health Card; Farm Loan Waiver Scheme; Seed Mini-kit Scheme and like that. But, in spite of all such farmer schemes/programs by the government farmer suicide is not coming to halt and continuing in varying magnitude in different states of the country like Maharashtra, Karnataka as relatively high prone and Uttar Pradesh, Punjab as low prone farmer suicide states. Moreover, National Crime Record Bureau (NCRB) does not cover the causes of the farmer suicides and ways to tackle the same. This makes the conduct of such studies most contemporary for, the simple reason that for a country like India, even a single farmer suicide is a great blot on the country.

All these lead us to probe out and hit at the "cause of all such causes", i.e. the root cause which is generating a number of causes leading farmers under humiliating distress and take the drastic action of suicide and it is in this very direction that our national government has initiated and conducting this study.

The present study also serves as an endeavour to specify causes of farmers' suicides in the state of Uttar Pradesh; in the light of "the rising pressure of indebtedness, escalating costs of cultivation, declining returns from agriculture, adverse impact of economic liberation etc. which are commonly identified as prime causes for agrarian distress in India."

10.2 Main Findings

The main findings in respect of Farmers' Suicide and consequences thereof, as based on the conduct of the present study in the State of Uttar Pradesh, covering two new districts (Banda and Hamirpur) and two revisiting districts i.e. districts of previous conducted study (2015-16) viz. Fatehpur and Lakhimpur; through a sample enquiry of 55 sample households comprising of 25 revisiting (i.e. old) and 30 new (i.e. current) with a total of 55 households are highlighted as under:

1. While no definite trend is recorded in all suicide rates (on per 1,00,000 basis) in the state of Uttar Pradesh during the whole period 2012-2020 with oscillations on either side in between ; the farmer suicides as percentage of all suicides records a clear cut declining trend on overall whole period 2012-2020 basis in the state of Uttar Pradesh;
2. The farmer suicides as percentage of all suicides fell down from 16.84 per cent in 2012 to 3.58 per cent in 2020; while the all suicide rates on per 1,00,000 population have been moving along between 1.6 to 2.5 per 1,00,000 all along this period. To add with during 2012-20 period, the annual compound growth rates of number of farmer suicides have been (-) 15.03 per cent in comparison to that of 0.92 per cent in per cent age of number of all suicides.
3. The declining trend in per cent age of male farmer suicide to all male suicides and per cent age of female farmer suicides to all female suicides is a clear cut sign of checking farmer suicides, whether males or females in the State of Uttar Pradesh, over the period of time 2012 to 2020. As a percentage of all farmer suicides male farmers have been dominating over their counterpart female farmers during the entire period of 2012- 2020.
4. As a sign of positivity; in the state of Uttar Pradesh annual compound growth rates have been reported as 'negative' in case of 'number of farmers suicide' whether males or females.
5. Among major districts of Uttar Pradesh the negative annual compound growth rate of male farmers in Banda, Budaun and Bahraich and that of female farmers in Kanpur Dehat, indicate proper and most effective applicability of various programmes/ schemes of our national/ state government in the checking and controlling farmer's suicides.

6. In respect of district wise variations in the state of Uttar Pradesh, a greater variations are found in compound growth rate to the extent of (+) 56.05 per cent to (-) 46.16 per cent, resulting to overall reflection that while some districts are showing quite encouraging results in respect of lowering down farmer suicides in others, still much has to be done to control and curb this act of farmer suicide.
7. Majority of respondents consisted of spouse or heir of victim, in three districts out of four; while in one district majority of respondents have been 'others' like parents, brothers/sisters.
8. In case of revisiting households 68 per cent are males and 32 per cent females and in case of new households 80 per cent are males and 20 per cent females. Majority of respondents belonged to old age (> 47 years) followed by young (<40 years) and middle age (40-47 years) in case of 'new' as well as revisiting households and thereby on overall basis as well for All respondents.
9. Majority of victim household families have been "nuclear" families, with respective percentages as 80 per cent for revisiting, 93.33 per cent for new and 87.27 per cent for all households.
10. Majority of families have been small (upto 4 members) followed by medium (5-8 members), with no large size (>8) family at all; in case of 'revisiting', 'new' as well as 'total' households.
11. The dependency percentage has been lowest for 'males' as compared to females and children, for 'revisiting', 'new' as well as 'total households' while caste wise highest proportion was recorded in case of 'OBC' followed by SC and General, with none in the ST.
12. On marital status basis, majority had been married, followed by widow/widower and unmarried; household category-wise and for total sample as well; with no one as separated or divorced.
13. Occupation-wise, farmers/cultivators dominated over all the other groups of livelihood; accounting for over 90 per cent of the total respondents in case of revisiting, new as well as Total households.
14. The possession of higher percentage of APL type, PDS Card by New households, compared to Revisiting ones; is beyond any doubt, a sign of prosperity and increased awareness of farming community with advancement of time.

15. For both the categories of households, i.e. 'revisiting and new' as well as for total households, majority (over 90 per cent) of them are engaged in 'primary occupation'.
16. In case of ownership status of land/assets, the major assets had been residential land, residential house and cultivable land; along with cattle sheds/ farm houses to some extent; household category wise i.e. revisiting and new, as well as on the total household basis.
17. During the entire period of 2017 to 2020, "only one" transaction was made of 800 square feet residential land for Rs. 2,50,000; by a revisiting farmer; while there had not been even a single purchase transaction during this 2017-20 period by any of the household.
18. Regarding possession of type of residences, majority of the households had "pucca or kutcha" houses; which when taken together works out as 56.0 per cent for revisiting, 100.0 per cent for new and 80.0 per cent on overall basis. This definitely results towards enhanced prosperity of new households over that of the revisiting households.
19. In most of the cases, new households are found to be better off, compared to revisiting ones.
20. The entire land holdings were owned by households themselves on cent per cent basis; in case of 'Revisiting', 'New' and as well as on 'All Households' basis; while the area of land holdings as held by 24 revisiting households, 30 new households and on overall basis 54 households; being respectively as 33.45 acres, 66.25 acres and 99.70 acres and that the land holding area owned by New Households was almost double of that of revisiting households.
21. Among Rabi crops the most prominent was wheat for each category of households i.e. 'revisiting', 'new' or on the 'all households'; while among 'Kharif', paddy has been the most dominant crop in case of revisiting and all the households with urd dominating in case of new households and sugarcane as perennial crop in the revisiting household district (especially LakhimpurKhiri).As a sign of prosperity and crop intensification overtime, the intensity of cropping was recorded much higher in case of new households compared to that of revisiting households.
22. Among the new households, the maximum disposal has been recorded for the crop wheat and minimum for the crop sesame. On 'all household' basis; among food grains, the maximum farm disposal refers to wheat, and minimum to Arhar.

23. In the disposal of the major farm produces (with wheat being the major crop) by the households, among the five agencies; only two, i.e. government agency and private traders have been involved. The pattern of the disposal has been almost the same, in all the three cases, i.e. revisiting households, new households and all households, with private traders dominating over the government agency.
24. Among various sources of borrowing; mainly three sources, i.e., Commercial Banks, RRBs and 'Friends and Relatives' provided loans of varying amounts to the sample households and among these, the most dominating has been Commercial Banks followed by RRBs and the 'Friends and Relatives'; in order
25. It is noteworthy, to find that as a sign of progress and prosperity over time, new households are better financially off, as compared to revisiting households; in the sense that, they have lesser amount of total borrowed loan as well as they also have smaller percentage of outstanding loan, in comparison to those of revisiting households.
26. For each category, i.e., revisiting as well as new and also on total households basis, the main purpose of loan being towards, "crop production and infrastructure development".
27. The three main constituents of the total off-farm and non-farm household income has been as agriculture labor, PM-Kisan and Non-Agriculture labour; in case of revisiting households; non agriculture labour, private salaried and Dairy/ Fishing / Poultry keeping, in case of new households and as 'non-agriculture labour', agriculture labour and PM-Kisan on all household basis.
28. The topmost three crops in respect of contribution to total farm activity income, have been; sugarcane, mustard and gram/Arhar in case of revisiting households; wheat, groundnut and pea, in case of new households; and as wheat, sugarcane and urd, on all households basis; respectively.
29. The total per capita income works out to be Rs. 1,04,174 per annum for 'revisiting household', Rs. 1,52,653 per annum, for new households; and Rs.1,30,617 per annum on all household basis.
30. In each category of household i.e., revisiting and new as well as all households; the highest contributor to the total income has been 'farm income', covering more than 50 per cent of total income, in each case; followed by non-farm income respectively.

31. As evidently seen, new households have higher per capita annual income than that of the revisiting farmers which beyond any doubt, is a sign of enhanced prosperity, over the period of time.
32. Caste-wise, dominant contributor to Annual Income has been (a) Scheduled Caste (S.C.) (35.8 per cent) followed by General (GM) (32.6 per cent) and OBC (31.6 per cent) in case of revisiting households. (b) OBC (58.0 per cent) followed by SC (34.1 per cent) and GM (7.9 per cent) in case of new households.
33. The total food expenditure incurred by various categories of households on per year basis has been of the order of Rs.1,33,730 for revisiting ,Rs.1,72,547 for new and Rs.3,06,277 for all households ; respectively.
34. In respect of food items each category i.e. revisiting and new household as well as on all household level; the five major items of expenditure on food items have been as ‘cereals’, ‘milk and milk products’, ‘vegetables’, ‘edible oils’ and ‘pulses’ which all together accounting for above 74 per cent of total expenditure on food items.
35. As compared to expenditure on food items; expenditure on non-food items; have been much more; to the extent that of the total expenditure, non-food items expenditure account for 75.7 per cent in case of revisiting, 74.7 per cent for new households and 75.1 per cent for all households; against respective food items, percentage of just 24.3 per cent, 25.3 per cent and 24.9 per cent.
36. The crop income/expenditure ratio of greater than 4, in case of every category as well as all households, is a clear cut indication of the adequacy of income to meet out various farm and non-farm household expenditure of households. But; in spite of this; care has to be taken and maintained still more, to further improve this ratio in the overall interest and general welfare of victim farmer’s family members, especially during victim’s post-suicidal periods.
37. As per suicide symptoms ‘victims disturbed sleep during nights’ and ‘not taking food regularly and as required’, are noticed as the main ones accordingly.
38. While the two most common methods of suicides have been hanging and poison consuming; the most common places of suicides have been “victim farmer’s house and farm houses”.
39. While in respect of poverty; as reflected from the study, many of the farmer victims were BPL card holders, and that no case has been reported on account of property disputes.

40. In respect of marriage problems as well, only a single or just very finger countable cases being reported on account of extra-marital affairs or love failures. Among family problems, the main being frequent quarrels among family members; illness and to some extent drug abuse/ addiction.
41. Farming cause has been observed negligibly as accounting for farmer suicides. While, just 5.4 per cent related to institutional / non-institutional credit.
42. Indebtedness too, as a factor is reported insignificantly in the study; except for 3.6 per cent each reporting crop loan/ non-institutional loan as a cause and 10.9 per cent as non-agricultural loan.
43. As an impact of farmer suicide on victim's household, mainly recorded have been insecurity and depression of family member; no earning member left schooling of children and agricultural activities stopped.
44. Farmer suicides have been mostly reported on account of erratic monsoon, outstanding loans, rising debt, low crop yield, poor procurement rate of crops and successive crop failure. But, as per the ground realities with respect to the empirical observations of study conducted in four districts of Uttar Pradesh, it is evident that such farmer suicides are not only due to economic catalysts. While natural factors like erratic monsoon, hailstorm, drought and floods adversely affect crop yield, the manmade factors, i.e. pricing policies and inadequate marketing facilities apart from non-repayment of loans etc. also account to such extreme steps.
45. The empirical results and presentations in the case studies also reflect that more often loans taken on account of productive purposes were not spent judiciously on productive account. Consequently the debt repayment remained in question. The condition of marginal and small farmers remained even more precarious.
46. It is important to state here that many of the farmers showed symptoms of suicide and emotional breakdown before resorting to taking dire suicidal steps.

10.3 Conclusion and Policy Implications

The various main findings based conclusions and the corresponding recommended policy implications towards due consideration of policy makers and national planners in controlling this erratic menace of farmer suicide even from moderate to still minimum or even to nil if so possible; are presented under:

- i. Improving farming conditions of farmers mainly of marginal and small farmers who form the bulk of farming community and are the worst sufferers in this regard on account of their being at the subsistence level of farming or even below it.
- ii. As per findings of the present study in the state of Uttar Pradesh, a. moderate/ low farmer suicide prone state reporting a total of just 87 farmer suicides in 2020 as per the records of NCRB; the farming conditions and indebtedness are not in a way to affect the farmers to such an extent that he/she being pushed into the critical state resulting to 'suicide'; but inspite of this care and consequent measures thereof\ are needed in the same way as in high farmer suicide prone states; to the farmers of this state as well, to improve upon their social, economic, cultural, agricultural, farming/non-farming infrastructural conditions still more towards upliftment in the general context and the living conditions in improving upon the status of these two categories, i.e., marginal and small farmers in particular and all farmers in general.
- iii. Special care in respect of all the concerned aspects of sufferings of the victim farmer households (family members) who are subject to a number of problems during 'post-suicidal' periods of the concerned farmer suicides. This will pave a strong base and put forward a progressive path towards their overall upliftment and welfare; to ultimately result into improving upon India's agriculture and its reflecting image.
- iv. To introduce parallel alternative income opportunities apart from agriculture, so that crop losses do not account to severe loss of income and sustenance of farmers becomes a question. Non-farming agricultural allied activities like fishery, poultry and dairy apart from small or petty trades and self-employment needs to be promoted.
- v. Promotion of Organic farming may be taken up, to curb expenses on artificial fertilizers and pesticides. Institutionalized Credit System needs to be made simpler and also awareness on productive spending of loans needs to be made. The village support network including Gram Panchayats should evolve mechanism to identify the indebted and suicide prone farmers and provide due aid to overcome the crisis.
- vi. Continuing and even intensifying more to all possible extent; the already existing and in action various development/ welfare schemes in the general interest of the farming community and thus in turn, the entire rural population apart from those living in urban areas, towards still better reflection of Indian Agriculture.

Chapter-11

Case Studies

Case 1

Household Type of Sample: Revisiting

Name: Rajnarain Shukla S/o Sri Kamal Kishore

Age: 32 years

Place: Village – Kusumbhi, Police Station – Sadar, District - Fatehpur

Raj Naraian belonged to a middle class farmer family. He lived in a joint family alongwith



his elder brother's family. His livelihood was mostly dependent on agriculture though his family was also supported by petty business as well. Raj Naraian toiled hard to sustain his

family. His entire 6 acre land was irrigated in which crops like wheat, mustard, paddy, til, urd and Arhar were sown. He had very high aspirations to uplift his family to better standards of living. Though this family was agriculturally very prosperous yet it was not ready for any type of shocks. Raj Naraian had recently bought a bike on loan and had planned to settle the loan in instalments from the earnings from farm.

But destiny had planned differently for him. It was monsoon season and it rained so heavily that all his standing Rabi crop ready for harvesting was all devastated in submerged waters. Unable to accept this shock, he was totally in despair. He had taken hefty loan from RRB. He was so tensed that he renounced food intake and was indifferent with his family members. He had been a loan defaulter and had no means to repay his loan. This nightmare

consumed him mentally and he had become psychologically very fragile. Finally, he got so distressed that he decided to commit suicide, hanging himself in his own house. Though agrarian distress has been widely covered by government schemes yet they fail to percolate down to the target groups. There are visible gaps between farmers' aspirations of productivity increases from small landholdings and actual productivity losses are evidently responsible for such drastic steps.

During our revisiting study we found that the family of Raj Naraian had been gradually reeling to normalcy. Even though their economic condition had become very precarious they failed to attract any state support. The loan amount was a huge burden on the family. But Raj Naraian's family stood strong. His wife decided not to sell the motor bike he had bought and his mother continued to support the family with her petty shop. Now, his family has paid back the outstanding loan, his son is going school and family is living a normal life. Raj Naraian's wife decided not to remarry and continued to stay with her in-laws. She assertively states, "*Sir, I will at no cost sell the bike my husband bought, it was his wish. One day when my son grows up, he will ride it.*" Raj Naraian's son, 'Naraian' now is six years old and has started going school. He hardly realises anything and is a happy child with a strong mother. As Raj Naraian's elder brother (who stays in the same family) did not have any issues, they consider his son as their own child.

Case 2

Household Type of Sample: Revisiting

Name: Sukhratan, w/o Brijesh

Age: 29 years

Place: Village – Bahgoo, Tehsil- Rath, District - Hamirpur

Sukhratan was a 29 years old lady from a poor agricultural household. She along with her



husband earned her living from agriculture. A mother of three daughters aged 10 years, 8 years and 6 years was a very hardworking and laborious woman. She used to toil hard from dawn to dusk to meet ends of her family. Her economic condition was very precarious and she used to be continuously under pressure to meet the family needs. With nominal one acre agricultural land in their possession and no other source of dependable income, this family really met all the hardships. Brijesh though also worked as cultivator in his own land and also as agricultural labourer in other fields, could not earn enough

to suffice even the basic needs of the family. With three daughters in line, Sukhratan was always under pressure for not having a male child who could share family responsibility. Girls were considered only as responsibilities in her family. Brijesh had taken to drinking and ill habits which resulted in frequent quarrels and tensions.

Reeling under pressure of poverty, poor agricultural produce (land size was not enough to produce sustainable income) and husband's vices, Sukhratan eventually gave up and committed suicide. She was found hanging in her room in the house. By the time it was discovered it was too late to save her. She had already succumbed.

Case 3

Household Type of Sample: Revisiting

Name: Shakeel Ahmed

Age: 30 years

Place: Kabadiyan Tola, Sadar, Lakhimpur Khiri

Shakeel aged 30 years was married to Sibtn Nisha and had three children. He was motor



mechanic and had his own petty business to suffice his family needs. These children were hardly 12-14 years of age when Shakeel took this drastic step of committing suicide. Shakeel had no agricultural land and was subsisting only by means of this petty business. He used to have frequent disputes and quarrels with his wife on financial issues. Sibtn was an aspiring woman and wanted to have all the pleasures of life, but Shakeel was focused

on his children and gave them priority. His earnings were not enough to suffice her rising demands.

When such quarrels became infrequent and took violent shape, the things turned from worse to worst. Shakeel eventually gave up and stopped communicating with anyone. One day tired and frustrated, he committed suicide.

Interestingly, Sibtn had no remorse to this. After a few days of the death of her husband, she got married to her fiancé with whom she already had extra-marital affairs. In a row to get rid of her family responsibilities (children), she sold the residential property and left the village. Children who were staying with their maternal uncle then, came to now this. They were stranded completely and had nowhere to go.

Their maternal uncle who had no issues, accepted them and now all the three children stay with him. While the daughter takes care of all the household chores, the sons work as motor mechanic in a petty shop and earn their livelihood. In a way the uncle's family and these children mutually suffice the needs of each other. Sibton never turned up in these five years and preferred to stay away from her children. The research team failed to get connected with her.

Case 4

Household Type of Sample: New Household

Name: Shivnath

Age: 32 years

Place: Village-Pachnehi, n Tola, Sadar, Banda District

Shivnath a 32 years old agricultural worker/ cultivator was suicide victim case in the new



household District of Banda. He had a wife and six children (3 daughters and 3 sons). Shivnath was literate and studies upto lass 8th. Belonging to a general caste family earned his livelihood primarily from agricultural activities. His wife is illiterate and is a home maker. Shivnath is a small farmer owning 3 acres of agricultural

land and also has ownership of agricultural machinery like a tractor and cultivator as well. He was also a beneficiary under PM-KISAN Nidhi.

This family though was better off compared to other very low standard poor families in the study, yet their liabilities with six children was very high. Shivnath continuously tried to work hard and harder to suffice his family needs. But there were some land disputes with

his family members (cousin brother) due to which he was continuously under pressure.

One day when he had a bitter quarrel with his cousin brother on this issue the situation turned very grim. Reeling under pressure, Shivnath chose to end up the dispute with committing suicide. In a way though Shivnath was not indebted, had availed government benefits, and also had the urgent to work hard and do better, yet he failed to grapple with family tussles.

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FARMER SUICIDE DRAFT REPORT-UTTAR PRADESH

COMMENTS ON THIS REPORT

- In general, the report is very well structured and presented. Chapters and subsections are very clearly delineated, and tables are nicely done. One advice would be, single digit should be written in a word format e.g., 2- two. Use (%) symbol or per cent) anyone throughout the report. Avoid spaces between numericals in Rs. e.g., Rs. 3 20, 452- Rs.3,20,452. In some cases, data written in interpretation is not matching with tables data and units are not defined. Please check and update it. These are a few irregularities in the study that needs to be worked upon.
- The study also presents various policy implications that can be carried out to address the issues pertaining to the subject matter. These policy implications are an output of firsthand interaction and data collection from the people who are facing the problem themselves. Moreover, state specific solutions are provided which a good way to resolve the issues pertaining to the subject matter. In the end, the report will add significant value to the Indian agriculture and welfare of farmers.
- Page no. 32 - female farmer suicide: check the interpretation with the table 2.2 - declining trend except 2016 and 2019 mentioned, add 2017 also.
- Page no. 35 - female farmer suicide: interpretation is not matching with table 2.4
- Page no. 37 - check the last para, interpretation is not matching with table 2.6
- Page no. 42 - interpretation is not matching with table 3.3
- Page no. 43 - interpretation is missing when compared with the table 3.4
- Page no. 45 - interpretation is missing when compared with the table 3.7
- Page no. 46 - units are missing in interpretation
- Page no. 53 - in the writeup 'area' was mentioned as 'Rs.' update it.
- Page no. 57 and 58 - New hh interpretation is not matching with table 4.8 and All hh explanation is missing
- Page no. 59 – Check the Table 4.9: All hh calculation and according to that update the interpretation
- Page no. 62 – write the table number properly

- Page no. 64 - Check the table 5.2 and interpretation is not matching with table
- Page no 66 – check the interpretation and update it
- Page no. 67 – explain about marketing cost of all hh
- Page no. 67 – check the interpretation of 5.6 and uodate it
- Page no. 77 – update the interpretation
- Page no. 79 – check the percentages in interpretation
- Page no. 90 – Check the sentences in 1st and 2nd para, check the percentages in section 8.3
- Page no. 90 – Check the sentences in 1st and 2nd para
- Page no. 97 – Interpretation is not matching with table 8.8
- Page no. 104 – check the data in Interpretation which is not matching with table

Appendix 2

Adherence to the comments raised on the Draft Report via email dated 17.10.2022.

S. No.	Comments/ Suggestions	Action Taken
1	Single digit should be written in a word format e.g., 2- two. Use (% symbol or per cent) anyone throughout the report.	Due corrections made
2	Avoid spaces between numericals in Rs. e.g. Rs. 3 20, 452- Rs.3,20,452	Due corrections made
3	The study also presents various policy implications that can be carried out to address the issues pertaining to the subject matter. These policy implications are an output of firsthand interaction and data collection from the people who are facing the problem themselves. Moreover, state specific solutions are provided which a good way to resolve the issues pertaining to the subject matter. In the end, the report will add significant value to the Indian agriculture and welfare of farmers.	Action not required
4	Page no. 32 - female farmer suicide: check the interpretation with the table 2.2 - declining trend except 2016 and 2019 mentioned, add 2017 also	Interpretation duly checked and Corrected
5	Page no. 35 - female farmer suicide interpretation is not matching with table 2.4	Female suicide interpretation corrected accordingly
6	Page no. 37 - check the last para, interpretation is not matching with table 2.6	Last para duly checked and corrected
7	Page no. 42 - interpretation is not matching with table 3.3	Interpretation corrected accordingly
8	Page no. 43 - interpretation is missing when compared with the table 3.4	Interpretation added as per suggestion
9	Page no. 45 - interpretation is missing when compared with the table 3.7	Missing value incorporated accordingly
10	Page no. 46 - units are missing in interpretation	Missing units duly entered
11	Page no. 53 - in the write-up 'area' was mentioned as 'Rs.' update it.	Area unit updated accordingly
12	Page no. 57 and 58 - New hh interpretation is not matching with table 4.8 and All hh explanation is missing	'New Household' interpretation matched accordingly and also 'All Household' explanation duly inserted.
13	Page no. 59 – Check the Table 4.9: All hh calculation and according to that update the interpretation	Table 4.9 checked and updated as per suggestion
14	Page no. 62 – write the table number properly	Table 5.1A has been added to facilitate Table 5.1 and the

		subsequent tables in Chapter.
15	Page no. 64 - Check the table 5.2 and interpretation is not matching with table	Interpretation matched as per Table 5.2
16	Page no 66 – check the interpretation and update it	Interpretation duly checked and updated accordingly
17	Page no. 67 – explain about marketing cost of all hh	Marketing cost of ‘All Household’ explained as per suggestion.
18	Page no. 67 – check the interpretation of 5.6 and update it	Interpretation duly checked and updated
19	Page no. 77 – update the interpretation	Interpretation updated accordingly
20	Page no. 79 – check the percentages in interpretation	Percentages in interpretation duly checked and corrected
21	Page no. 90 – Check the sentences in 1 st and 2 nd para, check the percentages in section 8.3	Sentences in 1 st and 2 nd para and percentages in Section 5.3 duly checked and corrected
22	Page no. 90 – Check the sentences in 1 st and 2 nd para	Sentences in 1 st and 2 nd para duly checked and corrected
23	Page no. 97 – Interpretation is not matching with table 8.8	Interpretation of Table 8.8 modified accordingly
24	Page no. 104 – check the data in Interpretation which is not matching with table	Data and Interpretation duly checked as matching each other.