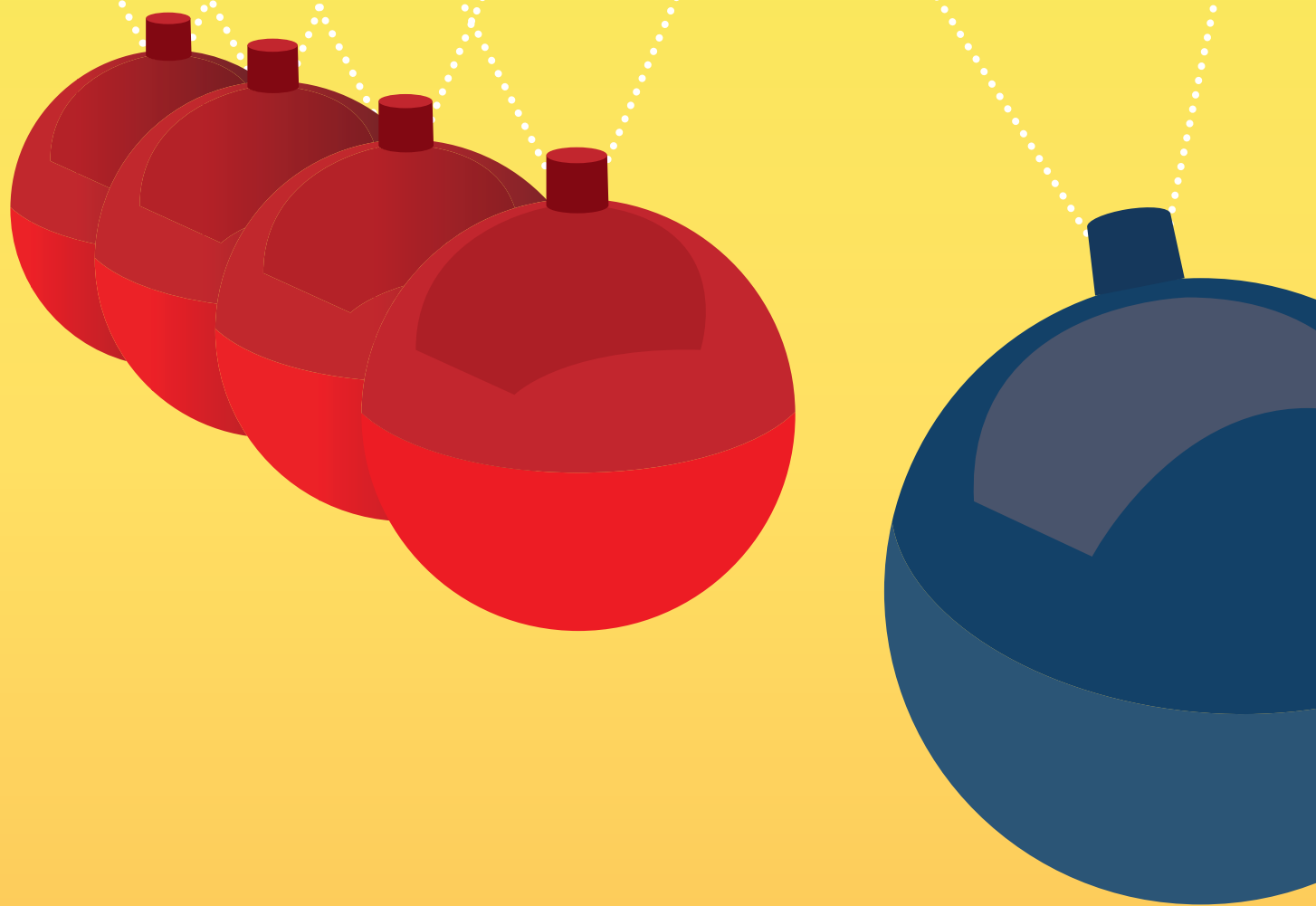


BROOKINGS INDIA IMPACT SERIES

DEVELOPMENT AND GOVERNANCE



A Reality Check on Suicides in India

DR. SHAMIKA RAVI

JUNE 2015

Editor's Note: This report was originally published with 2 sentences on page 13 that lacked proper citation of work printed in *American Behavioral Scientist*, as well as 2 sentences on page 14 that were not properly attributed to the *Encyclopedia of Suicides*. As of June 8, 2020, it has been updated to include these citations.

Brookings India IMPACT Series

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Since we began our activities in 2013, we have been active in three broad domains: Economic Development, Foreign Policy, and Energy & Environment. We have initiated research on several issues within these domains and, simultaneously, organized a regular series of conversations between various stakeholders, who bring their particular perspective to the discussions in a constructive way. These activities have helped us to understand the nature of specific problems in each domain, gauge the priority of the problem in terms of India's broad development and security agenda and develop a network of people who think deeply about these issues.

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We look forward to active engagement with readers on the diagnoses and recommendations that these papers offer. Feedback can be sent directly to the authors.

A Reality Check on Suicides in India

KEY INSIGHTS

- Health (mental and physical) concerns are the leading causes of suicides in India, accounting for over 20% of all suicides
- Bankruptcy and indebtedness account for less than 5% of all suicides
- Housewives comprise the largest share of suicides (18%); while farmers comprise 11%
- Suicides among most demographics are declining over time and farmer suicides are declining the fastest
- Suicide ‘contagion’ can occur if suicides are overly dramatized and/or played up
- Research shows that responsible media coverage of suicides can play an important role in curbing suicide contagions



Dr. Shamika Ravi’s research is in the area of Development Economics with a focus on gender inequality and democracy, and financial inclusion and health. She also serves as an Assistant Professor of Economics at the Indian School of Business, where she teaches courses on Game Theory and Microfinance. She is also a Faculty Affiliate at the Financial Access Initiative of New York University. She is part of the Enforcement Directorate of Microfinance Institutions Network in India and has served as a director on boards of several microfinance institutions. Professor Ravi has published extensively in academic journals and writes regularly in leading newspapers.

A Reality Check on Suicides in India

Dr. Shamika Ravi¹

1. Introduction

In this paper, we study the data from the National Crime Record Bureau (NCRB) of India and disaggregate across demographic and leading causes of suicides. We find that mental and physical health are the leading causes of suicides in India (20%) while the often cited factor, indebtedness, causes significantly lower number of suicides (less than 5%). Among the different demographic categories, housewives report the largest number of suicides (18%) while farmers report lower (11%). The trends over the last two decades show decline in suicides across most demographics in India, and the sharpest decline is in farmer suicides, with the most decline occurring over the last five years.

Suicide is caused by many factors and there is empirical evidence to believe that this phenomenon could be a contagion in India (Kapoor and Ravi, 2007), where farmers are committing copycat suicides. There have been a number of highly sensationalized suicide contagions in recent years across the world. Suicide contagions are typically very highly publicized suicide outbreaks. Another likely contagion in India could be the suicides of students around exam times. The farmer suicide outbreak in India is alarming. But to attribute it to debt alone is too simplistic. This phenomenon requires immediate policy interventions for which we need to have deeper understanding of factors that trigger and contribute to suicides among different demographic categories in India.

For over a decade, farmer suicides in India has been a serious public policy concern. More recently, this has also lead to shrill outcry from the media and much politicking. The government response to the crisis of farmer suicide has mostly been simplistic and in some cases perhaps aggravating. The main problem with offering ‘special packages’ to deal with such a problem is that it is reactionary rather than pre-emptive long term policy. Suicides are characterized by a prior history of difficulties and in most cases also mental illness that renders the person vulnerable to suicidal behavior. Suicide is caused by many factors even when it occurs in a cluster. Therefore it is crucial to avoid oversimplification of causes and sensationalizing the issue. This requires responsible and sensitive reporting by the media, widespread efforts to screen and support mental health ailments by the public health systems in India and appropriate instruments of insurance.

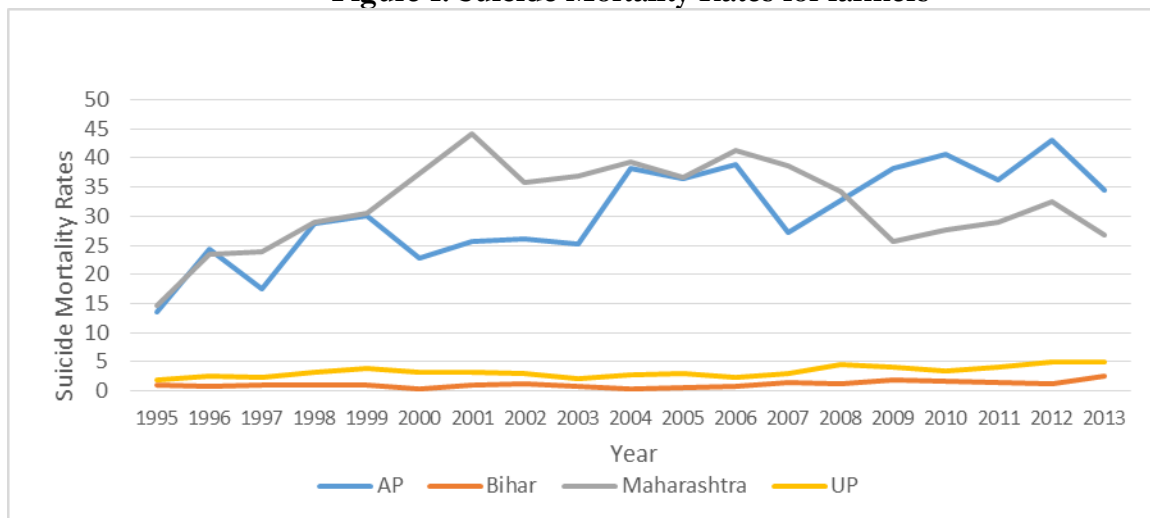
¹ Sravi@brookingsindia.org I thank Rahul Ahluwalia for excellent research assistance. I take responsibility for all remaining errors; please let me know your comments and suggestions.

2. Farmers Suicide in India – What do the data say?

We examine existing data on Suicide Mortality Rate (SMR) which reveal some interesting and insightful patterns. SMR is defined as the number of suicides reported per 100,000 population of a specific category such as farmers, housewives and students. We begin with farmer suicides and the state of Maharashtra which had the largest number of farmer suicides for over a decade from early 1990s. The SMR data for Maharashtra from Srijit Mishra (EPW April 2006a) reveals that 76 percent of all suicides in the state are concentrated within six districts. Nearly 60 percent of the farmers who committed suicide own more than four acres of land and are predominantly cotton producers. A report from the Maharashtra state government concluded that 93 percent of all these suicides are due to debt. This is a simplistic conclusion. The role of indebtedness in suicides is not as straightforward as the policy makers believe.

Let us do some inter-state analysis and start by comparing the two most farmer suicide prone states of Maharashtra and Andhra Pradesh with two of the most backward states of Bihar and Uttar Pradesh. The data for farmer Suicide Mortality Rate reveals that suicide rates in AP and Maharashtra are very high and have grown significantly over the last two decades. Farmer suicides rates in Bihar and Uttar Pradesh have been consistently low over that period. However, there are no obvious reasons to believe that farmer distress is lower in Bihar and Uttar Pradesh.

Figure 1: Suicide Mortality Rates for farmers

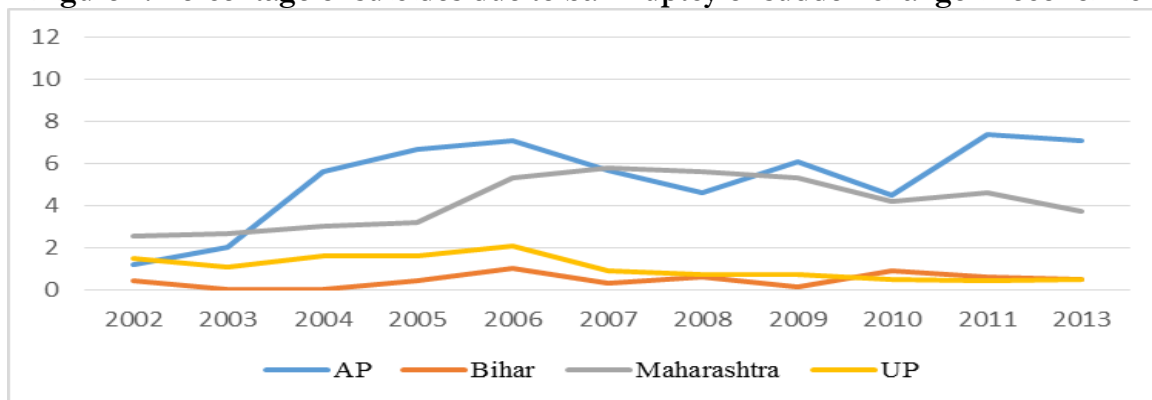


Source: Author's calculations from NCRB and census data, Srijit Mishra (EPW April 2006b)

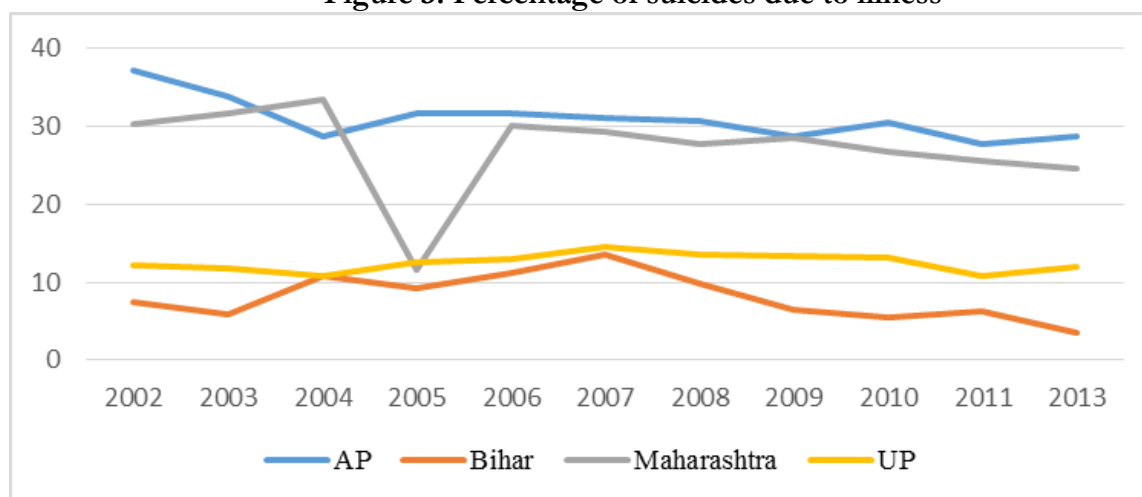
Quite remarkably, even if we look at the number of suicides for categories of professions that are completely unrelated to farming or cultivation, like government service, private service, or students, Andhra Pradesh and Maharashtra have reported significantly higher number of suicides in each category compared to UP and Bihar. So from a public policy perspective, if we are to design appropriate interventions to check the incidence of suicides, Maharashtra and AP should overall rank higher in targeting than UP and Bihar. And these interventions should be for the larger population beyond the farming community in these states.

Most policy interventions have been limited to forgiving institutional debt, so we study the leading causes for suicides in these four states. In particular, we study percentage of suicides that are due to bankruptcy or sudden change in economic status. These account for an average of for 5% of suicides in AP and Maharashtra between the years 2002-2013. In shocking contrast, illness or poor health (mental and physical) accounts for approximately 30 percent of all suicides in AP and Maharashtra. Though the basic differences between AP-Maharashtra and UP-Bihar remains consistent in all comparisons, it is worth noting that illness is leading to many more suicides in all the four states relative to debt or bankruptcy. So health reforms at the state levels and particularly in rural areas is likely to have greater impact on distress and suicides than forgiving institutional loans.

Figure 2: Percentage of suicides due to bankruptcy or sudden change in economic status



Source: Constructed from NCRB data

Figure 3: Percentage of suicides due to illness

Source: Constructed from NCRB data

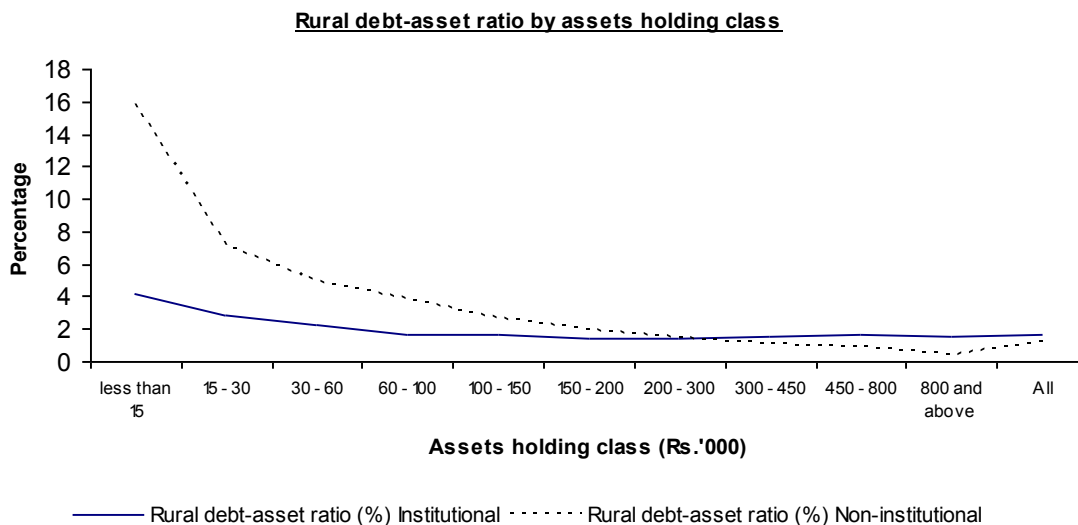
The NCRB data does not allow us to disaggregate the suicides for specific population segments into different causes. It would have been ideal to look at the exact factors that are driving farmers to commit suicides, but we can draw strong conclusions even from the aggregate numbers provided. Approximately 30 percent of all suicides in AP-Maharashtra are farmer suicides while only 5 percent of all suicides are due to debt or bankruptcy. So obviously there are other more important factors that should explain farmer suicides in this region; and the aggregate data strongly points towards poor health being the most important factor. There is an urgent need to address distress within the farming community (and overall rural areas) through major health reforms.

3. Indebtedness in Rural India

Indebtedness has been highlighted as the prime cause of farmer suicide in most relevant policy reports that have seriously studied this issue. A report from the Maharashtra state government concluded that 93 percent of all these suicides are due to debt. Dr. M. S. Swaminathan in his recent article on farmers' suicide in *The Hindu* has called for "Ending the 'debt deaths'".

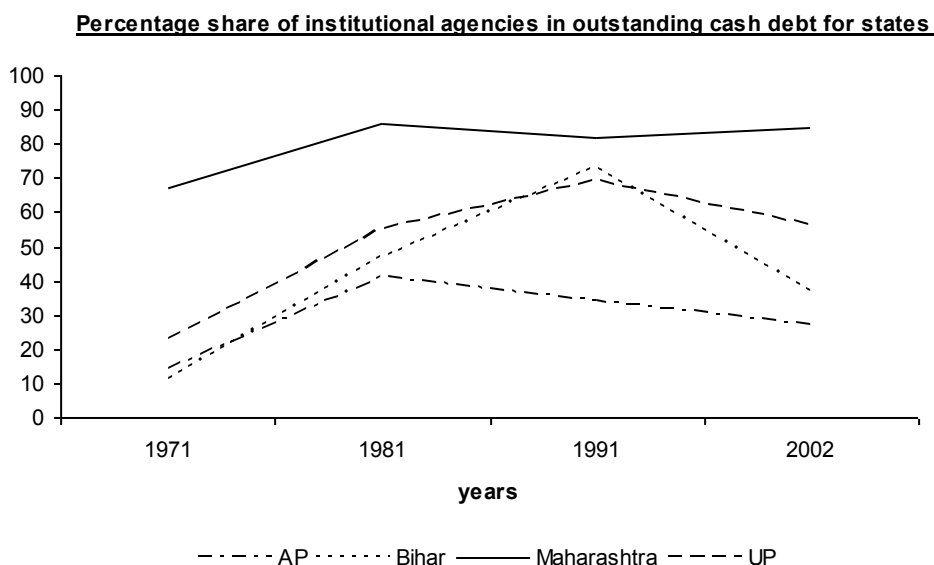
Let us now look at some data on indebtedness in rural India. We will start out by looking at Incidence of Indebtedness (IOI) which is defined as percentage of households that are in debt from institutional and non-institutional lenders. The NSS data indicates that in 2002 about 27 percent of rural Indian households were indebted and 18 percent of urban households. In 2013 the rural indebtedness in Indian households had gone up to 31 percent. There is enormous variation in IOI at the state level. Telangana has the highest IOI with 59 percent of rural households in debt while Maharashtra's IOI is 31 percent which is close to the country average. The IOI in Bihar and UP are also very close to the national average at 29.1 and 29.6 percent respectively.

Figure 4: Rural debt-asset ratio by asset holding class



Further, the NSSO data suggests that debt burden measured as debt to asset ratio declines with increase in asset holding. So it is the poorer households that have higher debt burden. This is true for both institutional as well as non-institutional debt. However the suicide data reported by the Maharashtra state government indicates that incidence of suicide is much higher for households with larger land holdings. Nearly 86 percent of all farmer suicides in Maharashtra have more than two acres of landholding and 60 percent have more than four acres.

Across many years, in several states, special packages have been designed by the state governments. In some years, the Prime Minister’s Office too has announced special interventions to deal with the severe problem of farmer suicide. They primarily highlight the role of debt and offer schemes of loan waiver, rescheduling, reduction in interest rates and moratorium on recovery of loans. There is also a promise to pump in more institutional credit into the farm sector. The Maharashtra government has doubled the annual agriculture credit plan from Rs. 1373 crores. The PM’s special package for this region has also steadily increased the credit flow from Rs.746 crores in 2006 to Rs. 2583 crores in 2010. As of 2012-13, the annual credit disbursement plan for Maharashtra state had set aside Rs. 45,655 crores as target amount to be disbursed to agriculture and allied activities and village artisans and village industries that year. This amount has been steadily increasing over years.

Figure 5: Percentage share of institutional agencies in outstanding cash debt

This brings us to the relevant issue of the share of institutional credit in overall rural debt in India. What has been the scenario until now? The percentage of institutional agencies in outstanding cash debt has declined from 64 percent to 57 percent for rural India from 1991 to 2002. But in fact, there has been a marginal increase in Maharashtra from 82 to 85 percent where the share of institutional credit was already at very high levels. During this period there has been a severe decline in the share of institutional credit in Bihar from 73 to 37 percent. And it is interesting to note that this coincides with a drop in suicide rates in the state.

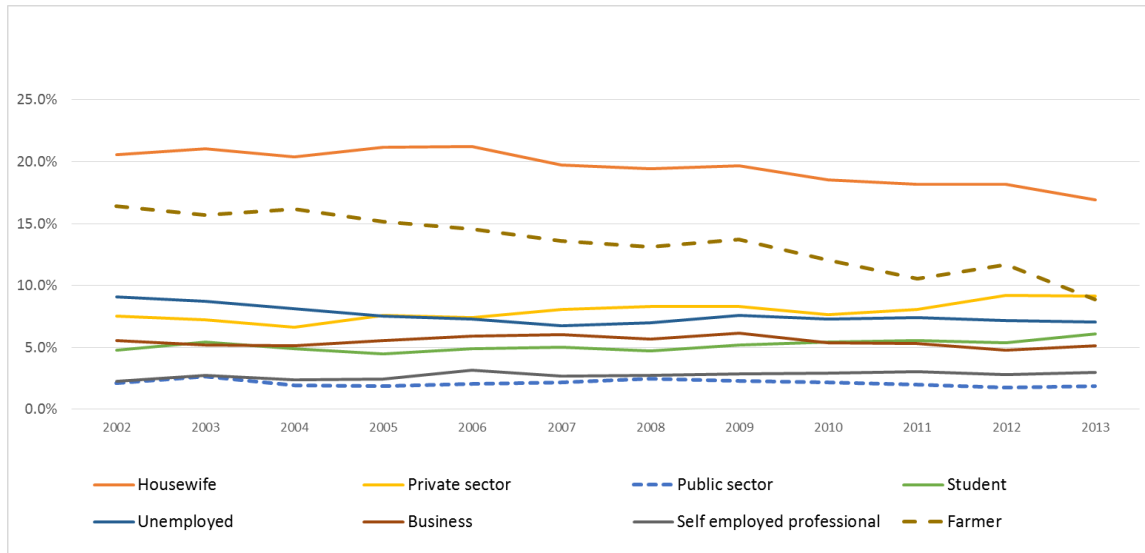
4. Suicides in India: Who and why?

Beyond the four states that we analyzed to study farmer suicides, we look at the data for all India to better understand the problem of overall suicides. Figures 6 and 7 highlight the share of population reporting suicides and the leading causes respectively. It is shocking to note that consistently over the last decades, housewives have reported significantly more suicides than any other population category in India. They account for nearly 20 percent of all suicides in India. While the overall numbers remain high, the trend shows some decline over the last five years. In comparison, farmers account for 12 percent of all suicides over last two decades, but it is heartening to see the sharpest decline within this category over the last five years. The latest data reports farmer suicides accounting for less than ten percent of all suicides in India.

Remaining distribution of suicides in India are across professional categories such as private sector employees, self-employed, public sector employees and students. If we study the trends carefully, while most categories show decline over time, private sector employees and students in India are reporting higher suicides over time. With respect to the student community in India, we have found clusters

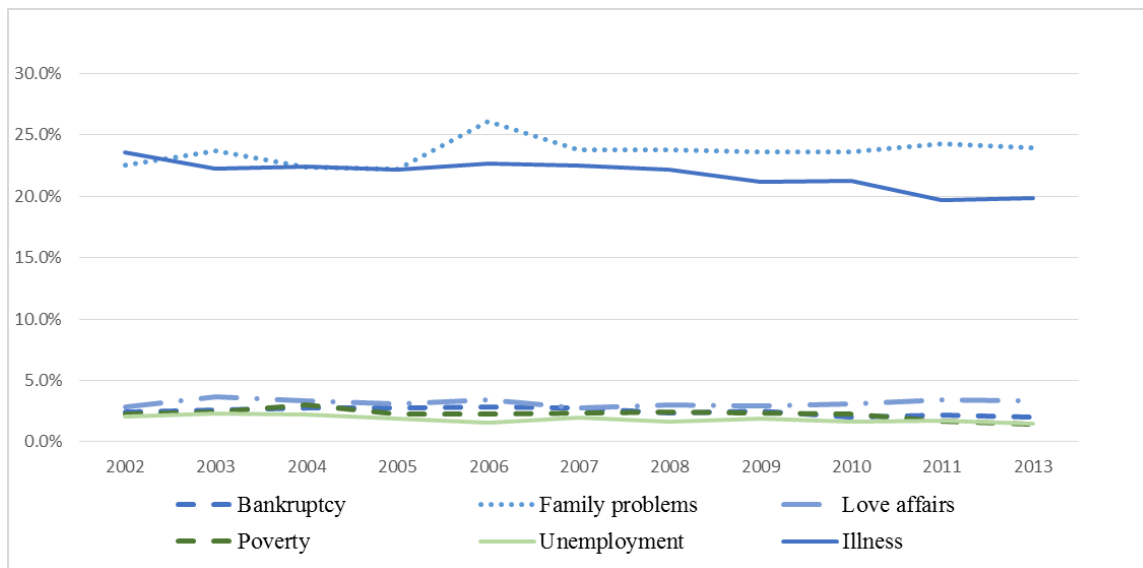
appearing which are related to examinations and results time. These are covered extensively by local and national news.

Figure 6: All India shares of suicides by profession



Source: Constructed from NCRB data

Moving to the data on causes of suicides in India, we find that consistently over last two decades, ‘family problems’ and ‘illness’ are the leading reported causes of suicides. These two factors can explain nearly half the total number of suicides in the country. Other reported reasons such as poverty, unemployment, lover affairs and bankruptcy are very insignificant reported causes of suicides. It is important to highlight here that despite an urgency from the local and national governments to counter suicide outbreaks through debt forgiveness and disbursal of credit, bankruptcy is a minor cause for such distress. Once again, the data strongly indicates that health is a major contributor to distress and suicides in India, across professional categories.

Figure 7: All- India shares of causes of suicide

Source: Constructed from NCRB data

5. Medical Research on Suicide

The cause of an individual suicide is complicated but the American Association of Suicidology reports that over 90 percent of suicide victims have a significant psychiatric illness at the time of their death (Gould, Jamieson and Romer. (2003)). These are often undiagnosed, untreated or both. Mood disorders and substance abuse are common. People, who become suicidal in response to recent events, generally have significant underlying mental problems, though they may be well hidden. The report on farmer Suicide from Maharashtra government claims that depression, illness, family disputes and addiction are common reported ‘other’ causes of suicide amongst farmers, besides debt.

Research indicates that during the period immediately after a death by suicide, grieving family members or friends have difficulty understanding what happened. Responses may be extreme and underlying causes may be oversimplified.² The main concern is that dramatizing the impact of suicide through descriptions and pictures of grieving relatives or community expressions may encourage potential victims. Suicide becomes an acceptable reaction to a situation. This is what perpetuates suicide contagion. And in the India case, this appears to be the case amongst farming and student community both of which have witnessed highly publicized suicide outbreaks.

² Gould MS, Jamieson P, Romer D (2003): Media contagion and suicide among the young. *American Behavioral Scientist* ;46(9): 1269-1284.

6. The Critical Role of Media in Avoiding/Spreading Suicide Contagion

The American Association of Suicidology defines suicide cluster (or contagion) as an occurrence in time and space of suicides, greater than the number of suicides which would be expected on the basis of statistical prediction. In this context, an ingredient which appears to facilitate a contagion is the tendency to glorify and sensationalize the deaths resulting in a highly charged emotional atmosphere that promotes further suicidal behavior. Across the world, suicide contagions have been reported by certain groups such as religious sects, troops in armed forces, prison inmates, college student and psychiatric inpatients. Research by Madelyn Gould from Columbia University shows that behavioral and psychiatric problems make cluster members more susceptible to suicide. And a significant number of these appear to be associated with suicide stories in the mass media.

Extensive research on suicides has shown that sensitive reporting of suicides by the media and commentators can play a very important role in saving lives and preventing copycat suicides. Key findings of this research (see reference section) are a) avoid glamorizing the victim, for example highly publicized politician visits and offering special packages might aggravate suicide contagion. This is probably because it suggests the appropriateness of suicide to vulnerable people; b) do not provide simplistic explanations or causes – it is important to keep in mind that suicides are typically committed by individuals with history of severe depression. Media and commentators should therefore avoid sensationalizing the final crisis as the major cause of suicide; c) avoid excessive detailing of the suicide method and d) the story should aim at presenting suicide as a bad choice to resolve crisis or deep despair.

The media provides the means by which information about a suicide is spread. There is general consensus from several studies that have researched imitation suicides that prominent newspaper or television coverage of a suicide or cluster has the effect of increasing suicide behavior within the viewer ship /readership area. The magnitude of the increase is related to the amount of publicity given to the story. Sensitive reporting by the media and community officials can minimize the risk of suicide contagion.

It is imperative that the media has a code of ethics and guidelines for reporting suicides. Major media houses like BBC (see reference section) and The Guardian have editorial guidelines for reporting suicides. It is also important to provide training to journalists who report suicides. For example, Australia has such training as a part of curriculum in journalism. It is also important that commentators on suicides work with mental health agencies and researchers in reporting such stories.

The Centers for Disease Control in the US developed guidelines for the community response to a suicide cluster. The recommendations include (1) convening a coordinating committee from all concerned sectors of the community: education, public health, mental health, local government and suicide crisis centers; (2) delivering a public response that minimizes sensationalism and avoids glorifying the suicide victims; (3) evaluating and counseling community members who may be at risk.³

³ Evans, G., Farberow, N., and Kennedy Associates (2003). "Cluster Suicides." *The Encyclopedia of Suicide*, Second Edition. Facts on File, Inc.: 50.

7. Conclusion

Evolutionary-psychology literature argues that a sense of burdensomeness towards kin/family may encourage suicide by eroding the motive of self preservation. It suggests that perceived liability towards one's family is a precursor of suicide. Renowned psychologist, Cialdini points out that people, by committing suicide, believe that they are helping others to counteract their own negative affective state. In the Indian farmer's context, policy makers are arguing that this negative state is that of indebtedness. But then loan waivers and cash supports are aggravating this problem because they provide the farmers with the incentive to make this 'rational' decision. Perhaps these short sighted measures are having the exact opposite effect. They are probably sending out the wrong signal to millions of distressed farmers who are struggling to make ends meet.

The government response to the crisis of farmer suicide has been simplistic and in some cases perhaps aggravating. The main problem with offering 'special packages' to deal with such a problem is that it is reactionary rather than pre-emptive long term policy. Suicides are characterized by a prior history of difficulties and perhaps also mental illness that renders the person vulnerable to suicidal behavior. Suicide is caused by many factors even when it occurs in a cluster. Therefore it is crucial to avoid oversimplification of causes and sensationalizing the issue. This requires responsible and sensitive reporting by the media. In the Indian case, the data clearly shows that even among the farming community, health is the largest reported cause for suicides, not debt or bankruptcy.

The NCRB very clearly outlines that poor mental and physical health is a leading cause of suicides in India, not indebtedness. And amongst population groups, the largest share of suicides in India is committed by housewives whose concerns can also be addressed through improved access to mental and physical healthcare. It is imperative for policy makers in India to take note and design interventions that can address distress amongst various population groups and not aggravate by misjudging and focusing on indebtedness alone.

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