

# **FARMERS' SUICIDES IN INDIA: A CLOSE EMPIRICAL LOOK**

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**MUMBAI, 2019**

# INTRODUCTION

- Any conversation about agrarian crisis is not without at least a mention of farmer suicides
- Farmers' suicides have always been a sensitive issue, dealt more sentimentally than based on facts
- It is harrowing to learn that farmers' suicide numbers rose from from 10,720 in 1995 to 18,241 in 2004 (70% ↑ )
- There is, however, a debate regarding farmer suicides. At the essence of the debate are two competing narratives



# THE DEBATE

# THE DEBATE

- In the first narrative, agriculture is the victim of the 1991 liberalization policies and the subsequent banking reforms
- Changing circumstances and tightened credit is assumed to have choked off the farmers' access to institutional lending, crushing them under heavy debt burdens
- The idea is that India moved forward only to leave its farmers behind

# MOTIVATING QUESTIONS: THE DEBATE

The New York Times

NEWS

## 3 Lakh Dead In 20 Years. Here's How World's Largest Democracy Failed Its Farmers!



Maninder Dabas | Updated: Apr 12, 2016, 17:07 PM IST

15.3K SHARES



ADVERT

Since 1995, nearly three lakh farmers have committed suicide owing to agrarian crisis in the country. In Maharashtra alone nearly 60,000 farmers have ended their lives in last two decades. Last year itself, the western states recorded 3,228 farmer suicides with maximum cases coming from drought hit Marathwada and Vidharbha region.

According to the census, nearly 2,000 farmers across India are giving up agriculture daily and opting for other menial jobs since agriculture doesn't win them bread anymore.

According to 2011 census, India has 95.8 million cultivators for whom farming is the main occupation. Compared to the number of farmers we had in 1991 and 2001, there's been a sharp decline in the number of cultivators in last two and a half decades. In 2001, India had 103 million farmers whereas 1991, we had 110 million farmers for whom farming was the main occupation. Although around 600 million Indians are either directly or indirectly involved in farming, but they all aren't farmers.

OP-ED CONTRIBUTOR

## In India, Farmers Face a Terrifying Crisis

By P. Sainath

Mr. Sainath has reported on rural India for more than two decades.

April 13, 2018

MUMBAI, India — On March 6, about 40,000 subsistence farmers and landless peasants, many from impoverished indigenous tribes, marched to Mumbai from Nashik, a city 112 miles northeast of India's commercial capital. The sea of humanity flooding the highway to Mumbai captured national attention and focused it on the problems tormenting the marchers and tens of millions of other farmers in the country's two-decade-long agrarian crisis.

Most of the farmers in the protest owned less than five acres each. Many marchers who couldn't afford shoes walked barefoot in the searing heat. Some of them had wrapped their soles with sellotape to prevent blisters. They were headed for Azad Maidan, a traditional venue for political protests in South Mumbai.

On March 11, without resting from their exhausting journey, they walked the last 10 miles to the venue after midnight, in darkness and silence. Thousands of students in the city had their board examinations in the morning. The farmers did not wish to disturb them. "Our children write exams too, you know," some female farmers told me. "We didn't want to cause roadblocks and traffic jams." They reached the protest ground hours before the kids set out for their schools.

Mumbai responded to the marching farmers with heartening warmth. Middle-class employees and workers — many themselves poor — offered packets of food and water. These acts of sympathy and solidarity stood out in sharp relief against the callousness of India's governments and elites to the deepening rural distress. Taken by surprise, India's corporate-controlled

# THE DEBATE

- The second narrative in this debate is in the opposite end of the spectrum
- In this argument, farmer suicides are seen as a completely over-hyped political issue which in fact represses the hardships of the other more vulnerable sections of the population

## Opinion | Suicides of married women: A problem long-ignored

Suicides, more so of married women, will have long-term consequences on the wellbeing of families and, more broadly, society. We cannot ignore this problem anymore

Last Published: Wed, Sep 26 2018, 11:46 PM IST

Biju Dominic

When anyone speaks about suicides in India, we immediately think of farmers. About 5,650 farmers had committed suicide in 2014. In the same year, more than 20,000 housewives committed suicide. Despite four times the number of tragedies, suicides by housewives have not caught the attention of policy makers. The sheer extent of the

problem was described in the recent *Lancet* article titled *Gender differentials and state variations in suicide deaths in India: the Global Burden of Disease Study 1990–2016*.

As per the *Lancet* article there were 230,314 suicide deaths in India in 2016. This is 50% more than the number of people who died in road accidents in the country, in the same year. India's contribution to global suicide deaths increased from 25.3% in 1990 to 36.6% in 2016 among women, and from 18.7% to 24.3% among men. Alarming, this phenomenon could nullify our demographic dividend. Suicide was the leading cause of death in India in 2016 for those aged 15–39 years; 71.2% of the suicide deaths among women and 57.7% among men were in this age group.

What is more alarming is that suicide is a problem on the rise. The suicide rates in 2016 are up a whopping 40% from the rates in 1990. Suicide is already the 9th leading cause of death in India.

The study also throws up some surprises. The biggest one is that the suicide rate among Indian women is higher than that among men. This is contrary to the worldwide trend of more men committing suicide than women. The number of suicides by women in India in 2016 was 2.1 times higher than the global average.

### AGRICULTURE

## Debate: Are Some Suicides More Important Than Others?

According to NCRB data for 2014, the suicide rate for 'housewives' was more than double that of farmers, though the latter gets far more media attention. What does this really indicate?

AGRICULTURE ECONOMY GENDER WOMEN 15/MAY/2016

In 2014, National Crime Records Bureau data showed that 20,148 housewives took their own lives across the country. This amounts to approximately 18% of all suicides that year.

A recent article in the *Economic and Political Weekly* by political scientist Peter Mayer takes this data as the basis for questioning why media coverage on suicide by housewives is strikingly low. He compares coverage on farmers' suicides to that of "housewives", saying that the Indian media has a sensationalist, stereotyped approach to covering farmers' suicides that does not follow any ethical guidelines.



When talking about farmers' suicides, Mayer argues that the media almost never treats the individual suicide in question as the principal subject. Rather, it is an example to highlight the plight of a larger section of workers. He compares the vignettes from surviving family members to

# LITERATURE AND THE DEBATE

- Academia has grappled with the phenomenon of farmer suicides in multiple ways
- There are two manners of classifying the existing literature: (i) literature that depends on primary surveys for its analysis, and (ii) analyses that depend on secondary NCRB data
- The other way of classifying the literature is whether, after looking at the macro picture, the farmers' suicide remains an issue or not
- In that case, the literature is divided into two categories according to whether (i) the paper claims that farmer suicides is not a national concern but a political propaganda, or (ii) the author subscribes to the proposition that farmer suicides is a serious national issue



# LITERATURE AND THE DEBATE

| Primary Surveys                  | Secondary Analysis (Using NCRB Data) |
|----------------------------------|--------------------------------------|
| Parthasarathy and Shameem (1998) | Basu et.al (2014)                    |
| Mohanty and Shroff (2004)        | Mishra (2014)                        |
| TISS (2005)                      | Nagaraj et.al (2008, 2014)           |
| Mishra (2006)                    | Sadanandan (2014)                    |
| Mohanty (2013)                   | Ravi (2015)                          |
| Manjunatha and Ramappa (2017)    | Mayer (2016)                         |

| Determines whether Farmer Suicides is a concern: Yes | Determines whether Farmer Suicides is a concern: No |
|--|---|
| Nagaraj et.al (2008, 2014)                           | Ravi (2015)   |
| Basu et.al (2014)                                    | Mayer (2016)  |



# THE DATA

# DATA ISSUES

- The only source of countrywide data on farmer suicides is the National Crime Records Bureau's (NCRB) *Annual report on Accidental Deaths and Suicides in India* (ADSI)
- The NCRB data is an annual, state-wise (and major cities-wise), reason-wise report on accidental and suicidal deaths across the country
- The NCRB, under the Ministry of Home Affairs, Government of India, began publishing data on farm deaths from 1995, which puts a timeline on the farmer suicides issue
- The NCRB created a separate classification called 'suicides by profession' in its reports from 1995. Farmer suicides fell in this category (under the sub-classification of 'self-employed'), and no further sub-categories were defined until 2014
- **There are 4 major issues with the NCRB data**

# DATA ISSUES

1. No one is sure about the definition of a 'farmer' followed by the NCRB in its reports between 1995 and 2013 (agricultural labourers + cultivators or not)

- Suicide mortality rates of farmers are calculated as the ratio of farmer suicides per lakh of the farmer population → the definition of a 'farmer' becomes extremely important when one tries to examine farmer suicide mortality rates
- From 2014, the NCRB introduced a separate sub-category in its reports of farmer suicides: farmer suicides by cultivators and suicides by agricultural labourers .
- The recent sub-classification in 2014 therefore has far reaching impact as far as the farmer suicides literature is concerned
- Since population figures for farmers are only available from Census data, it then becomes the researcher's discretion in terms of what she would prefer using as the denominator in calculating mortality rates for 'farmer' populations

# DATA ISSUES

2. The data collection for farmer suicides is not transparent, as it happens at a local *thana* level, when a farm-related death is brought to the notice of the police

- NCRB data is administrative data, aggregated from police stations (unlike the NSSO or Census data which are collected independently, for example)
- There is no way of knowing whether local police officials are sufficiently equipped to identify a farmer suicide and correctly report it as one

# DATA ISSUES

3. The rise in the number of suicides in the “Other” category in the NCRB reports perfectly corresponds to the fall in the number of suicides in the farmer suicides category → has led to dispute regarding the data

- It has been believed that the local police officials reporting suicide figures record any ambivalent suicides by farmers or otherwise in the “Others” category
- Incidentally, it is this ‘Others’ category in the NCRB data that has seen the largest rise in terms of suicide numbers in their report of suicides by profession

# DATA ISSUES

4. There has been a phenomenon of “zero reporting” in certain states since 2011

- In 2010, no state had reported ‘zero’ farmer suicides
- In 2014, by contrast, 12 major states (including large states like Bihar, Rajasthan, Jharkhand, and West Bengal) and 6 union territories in the country reported that they had ‘zero’ farmer suicides that year

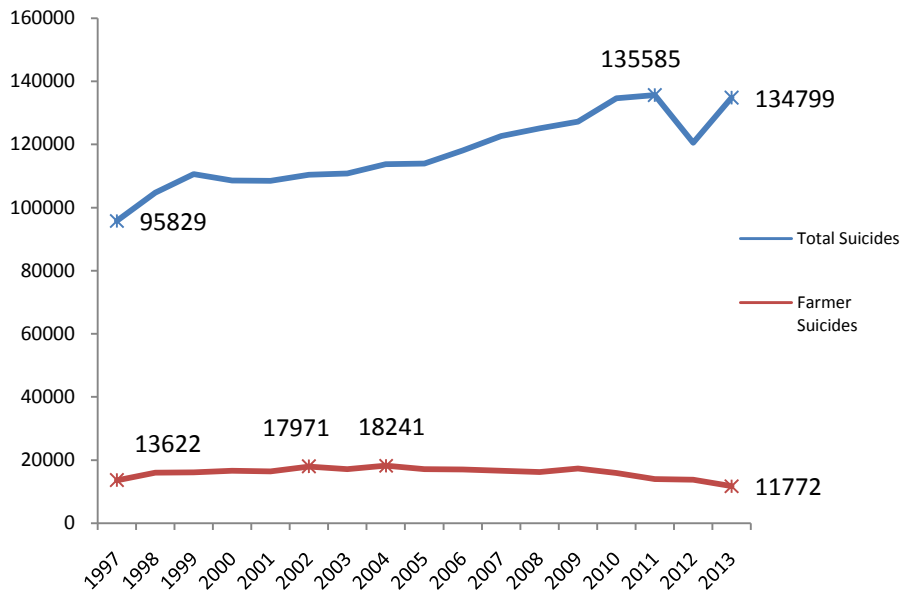
# METHODOLOGY AND DATA

- While the NCRB data is suspect, it is the only publicly available data source.
- Data from a few states were missing for some years in the beginning, and the reports included data from Jammu and Kashmir only from 1997, so complete data on suicides by profession from all states in India is available only from 1997
- For the purposes of this paper, secondary analysis is conducted on the annual data on suicides published by the NCRB for the years 1997 to 2013 (for 17 major states)
- For calculating the population adjusted suicide mortality rates, the 1991, 2001, and 2011 Census data on cultivator, agricultural labourer, and total population is used, following the work of earlier scholars

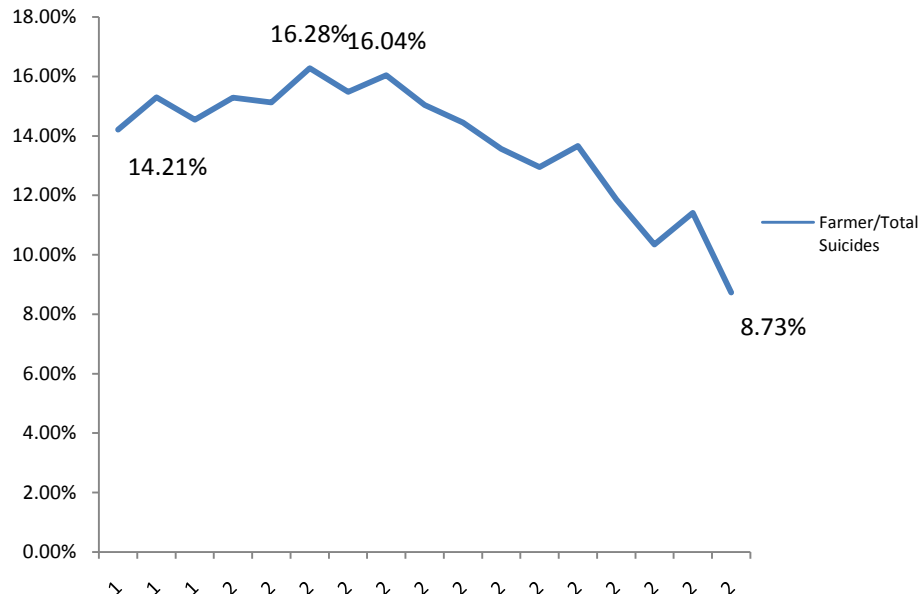


➤ FINDINGS  
(THE ALL INDIA PICTURE  
OF FARMER SUICIDES)

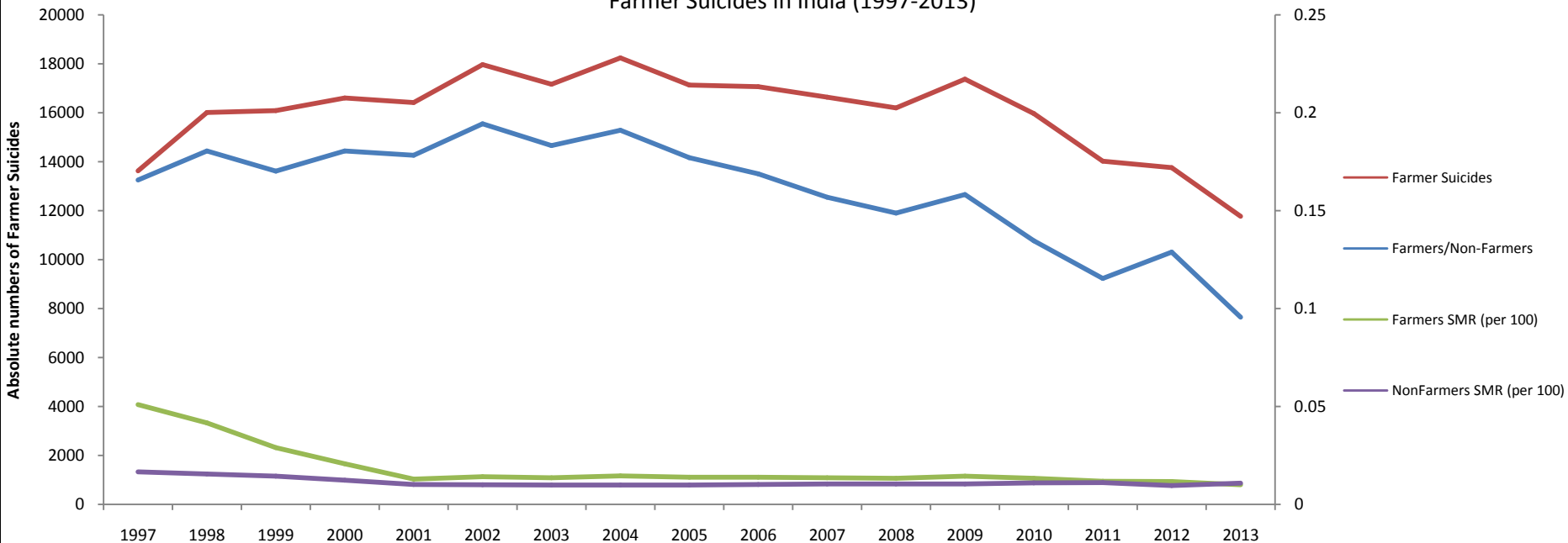
### Total vs. Farmer Suicides



### Farmer Suicides/Total Suicides



### Farmer Suicides in India (1997-2013)



# INFERENCE

- Overall farmer suicide numbers have been stable post 2004
- In terms of the farmer/non-farmer suicides ratio, we see that it increased steadily between 1997 and 2004 and declined sharply thereafter
  - The farmers' SMR has also been stable from the 2000s
- Therefore, farmers' suicide was a serious crisis for about a decade (between 1995 to 2004), but the numbers now show a declining trend

➤ REGIONAL ANALYSIS  
(TOP STATES IN TERMS OF SUICIDE  
MORTALITY RATE)

| <b>RANK</b> | <b>1997</b>                     | <b>2001</b>                     | <b>2005</b>    | <b>2009</b>    | <b>2013</b>    |
|-------------|---------------------------------|---------------------------------|----------------|----------------|----------------|
| <b>1</b>    | KERALA                          | KERALA                          | KERALA         | KERALA         | KERALA         |
| <b>2</b>    | WEST BENGAL                     | KARNATAKA                       | ANDHRA PRADESH | ANDHRA PRADESH | ANDHRA PRADESH |
| <b>3</b>    | KARNATAKA                       | MAHARASHTRA                     | MAHARASHTRA    | KARNATAKA      | MAHARASHTRA    |
| <b>4</b>    | MADHYA PRADESH+<br>CHHATTISGARH | WEST BENGAL                     | KARNATAKA      | TAMIL NADU     | KARNATAKA      |
| <b>5</b>    | MAHARASHTRA                     | MADHYA PRADESH+<br>CHHATTISGARH | TAMIL NADU     | MAHARASHTRA    | HARYANA        |

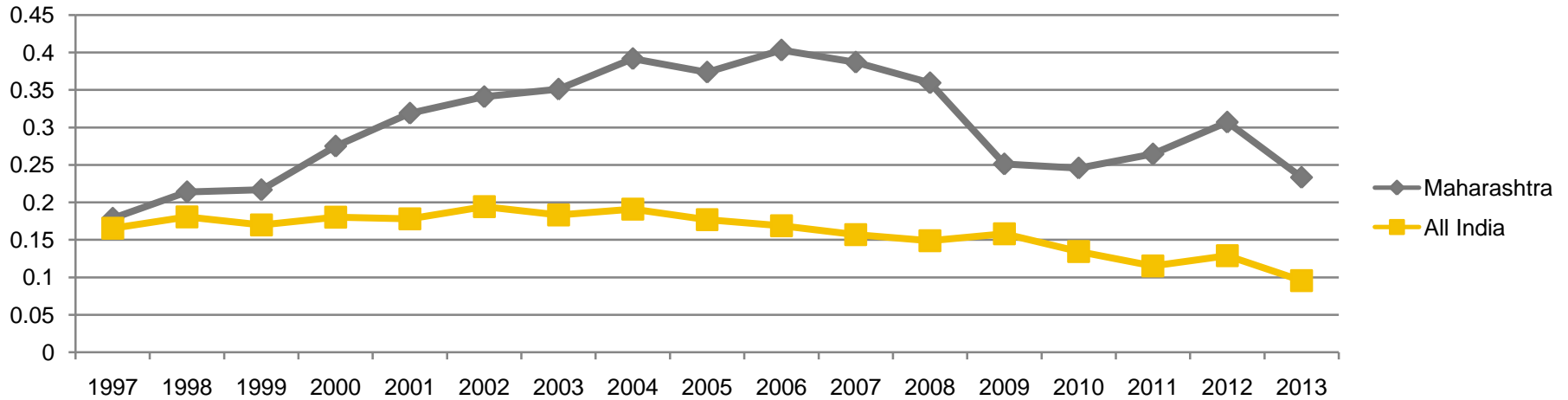
**Top 5 states in terms of Farmer Suicides (Farmers' SMR)**

| <b>Rank</b> | <b>1997</b> | <b>2001</b> | <b>2005</b>    | <b>2009</b>    | <b>2013</b>                     |
|-------------|-------------|-------------|----------------|----------------|---------------------------------|
| <b>1</b>    | KERALA      | KERALA      | KERALA         | KERALA         | KERALA                          |
| <b>2</b>    | KARNATAKA   | KARNATAKA   | KARNATAKA      | TAMIL NADU     | TAMIL NADU                      |
| <b>3</b>    | WEST BENGAL | TAMIL NADU  | TAMIL NADU     | KARNATAKA      | KARNATAKA                       |
| <b>4</b>    | ASSAM       | WEST BENGAL | WEST BENGAL    | ANDHRA PRADESH | ANDHRA PRADESH                  |
| <b>5</b>    | TAMIL NADU  | MAHARASHTRA | ANDHRA PRADESH | WEST BENGAL    | MADHYA PRADESH+<br>CHHATTISGARH |

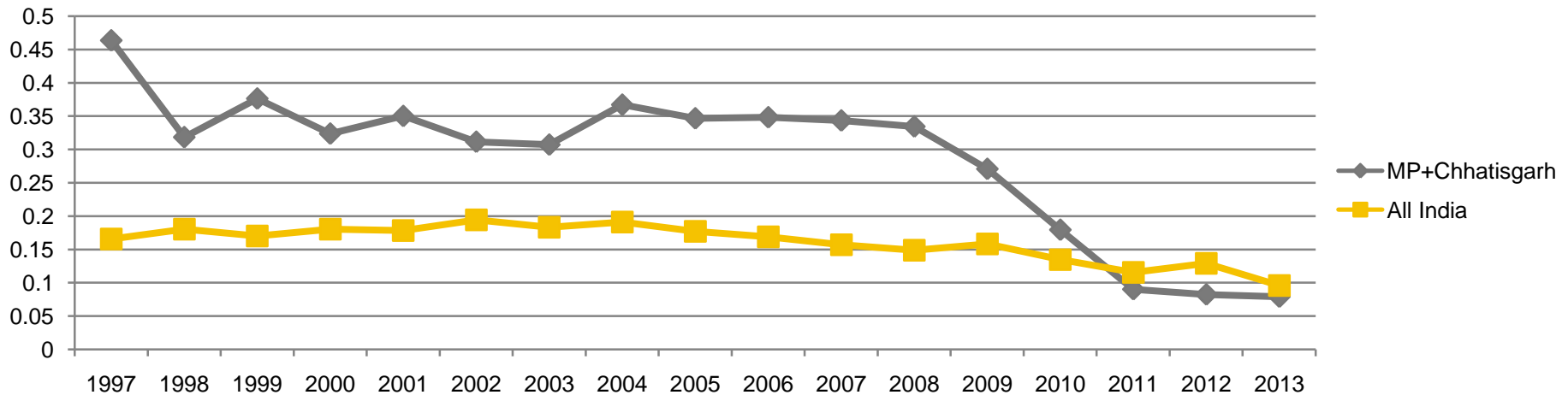
**Top 5 states in terms of Total (Non-Farmer) Suicides (Non-Farmers' SMR)**

# REGIONAL ANALYSIS AND SCOPE (FSMR/NFSMR RATIO, RELATIVE TO ALL-INDIA)

## Maharashtra



## Undivided Madhya Pradesh



# REGIONAL ANALYSIS AND SCOPE: THE TOP 7 STATES HAVE ACCOUNTED FOR 75%-80% OF THE FARMER SUICIDES

Percentage shares of states in farmer suicides (top 7 States in terms of Farmer Suicides SMR numbers)

| STATE                         | 1997          | 2001          | 2005          | 2009          | 2013          |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|
| Andhra Pradesh                | 8.05%         | 9.19%         | 14.54%        | 13.90%        | 17.11%        |
| Karnataka                     | 13.45%        | 15.26%        | 10.99%        | 13.14%        | 11.92%        |
| Kerala                        | 8.84%         | 6.31%         | 6.53%         | 5.16%         | 8.26%         |
| Madhya Pradesh + Chhattisgarh | 17.55%        | 17.20%        | 15.53%        | 18.41%        | 9.26%         |
| Maharashtra                   | 14.07%        | 21.54%        | 22.92%        | 16.54%        | 26.72%        |
| Tamil Nadu                    | 6.84%         | 6.00%         | 7.33%         | 6.10%         | 0.89%         |
| West Bengal                   | 11.30%        | 7.59%         | 5.63%         | 6.07%         | 0.00%         |
| <b>Total % shares</b>         | <b>80.10%</b> | <b>83.09%</b> | <b>83.46%</b> | <b>79.31%</b> | <b>74.16%</b> |

Percentage shares of states in total suicides (top 7 States in terms of total suicide SMR numbers)

| STATE                         | 1997          | 2001          | 2005       | 2009          | 2013          |
|-------------------------------|---------------|---------------|------------|---------------|---------------|
| Andhra Pradesh                | 9.04%         | 9.88%         | 12.02%     | 11.61%        | 11.08%        |
| Karnataka                     | 10.87%        | 11.16%        | 10.34%     | 9.77%         | 8.55%         |
| Kerala                        | 9.53%         | 8.99%         | 8.27%      | 7.01%         | 6.56%         |
| Madhya Pradesh + Chhattisgarh | 8.02%         | 10.22%        | 9.24%      | 12.01%        | 11.29%        |
| Maharashtra                   | 13.43%        | 13.73%        | 12.90%     | 11.45%        | 12.61%        |
| Tamil Nadu                    | 9.78%         | 10.60%        | 10.80%     | 11.55%        | 12.59%        |
| West Bengal                   | 14.96%        | 12.86%        | 13.43%     | 11.73%        | 9.90%         |
| <b>Total % shares</b>         | <b>75.63%</b> | <b>77.44%</b> | <b>77%</b> | <b>75.13%</b> | <b>72.58%</b> |

# INFERENCE

- Farmer suicides have been concentrated in the 5-7 major states of the country (undivided AP, Kerala, Karnataka, undivided MP, Maharashtra, Tamil Nadu, and West Bengal)
- These states have consistently been the top in terms of FSMR across the years in the study
- When we look at the non-farmer (total) SMR, the picture is similar
- The states with high farmer suicides are also the same states with high non-farmer suicides
- This suggests that farmer suicides and non farmer suicides might have similar underlying causes
- Analysis shows that there is very high and significant correlation between farmer suicides and non-farmer suicides → the reasons and issues might be similar
- However, these correlations are found to be weakened over time (from 0.8 in 1997 to 0.6 in 2013)



# CONCLUSION

- This study had three objectives:
  1. a close inspection of the NCRB data and its limitations,
  2. analyze the data to find out whether the farmer suicides issue was a national concern or a state-specific concern, and
  3. building a comprehensive analysis of state-wise farmer suicide patterns
- Factually, between 1995 and 2013, farmer suicides accounted for about 13% of total suicides on average
- It rose from 1997 (14%) to a peak in 2004 (16%), and declined thereafter
- Farmer suicides was an issue only for a decade, and is not a country-wide problem anymore

# CONCLUSION

- 7 states, however, account for the majority of the suicides and the numbers in these states have not declined (unlike the average numbers)
- These states have consistently featured in the top 5 in terms of farmers' SMR
- The fact that the suicides have persisted in these states despite the overall declining trend after 2004 suggests that there are probably state-specific reasons for farmer suicides
- The analysis reveals a high and significant correlation between farmer and non-farmer suicides in the major states of the country for all of the years studied (1997-2013)
- This indicates that the causes leading to farmer suicides and non-farmer suicides may very well be the same; and they are specific to the 5-7 major states of the country

# LIMITATIONS

- It is important to mention here that since the aggregate data on farmer suicides is suspect, it might make more sense in terms of understanding causes of agrarian distress if one collects primary data for analysis
- Primary data on farmer suicides has the dual benefit of being reliable as well as focused on the regions where the farmers' suicide issue is really a concern
- The paper is also limited in its attempt at handling as complex a psychosocial phenomenon as a suicide. It is likely that a suicide is a much more intricate event than what the data simply portrays

## SCOPE

- This paper primarily adds value to the literature by understanding that farmers' suicide is not a national concern, and has definitely not been an issue since 2004 except in a few states
- This finding is important, because farmer agitations often cite farmer suicides as an indicator of rising distress, and one needs to understand the nuanced distinction between helping the farmers who are in fact in distress as opposed to giving in to the demands of a strong political clout of a community unfairly lobbying public sentiments
- Once the issue has been correctly identified, further work can be done to find out the causes of such region-specific occurrences of farm-related deaths

DONE.

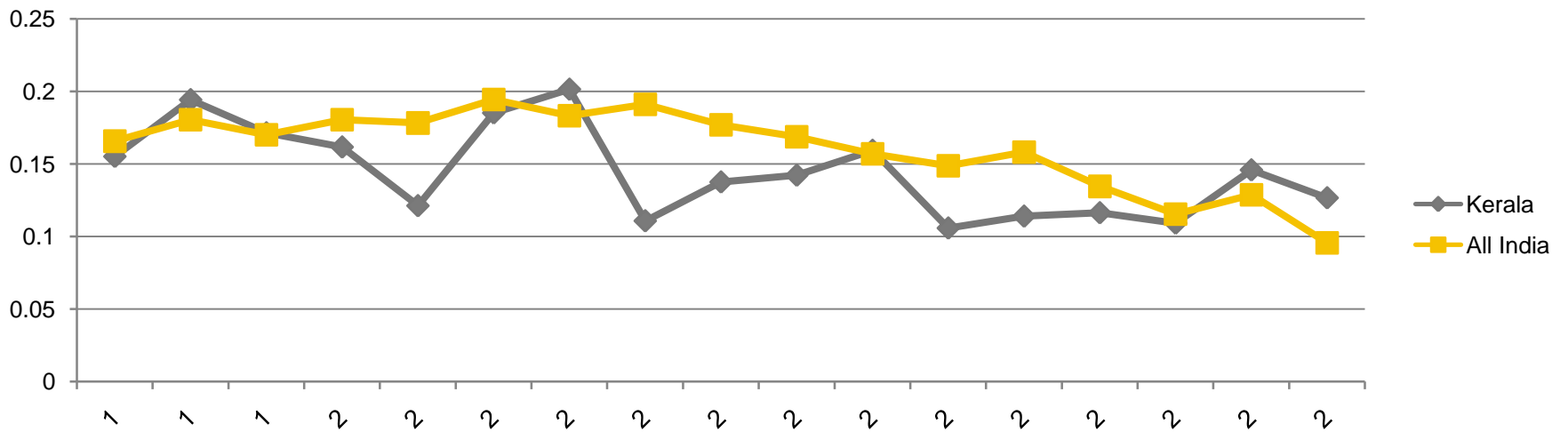
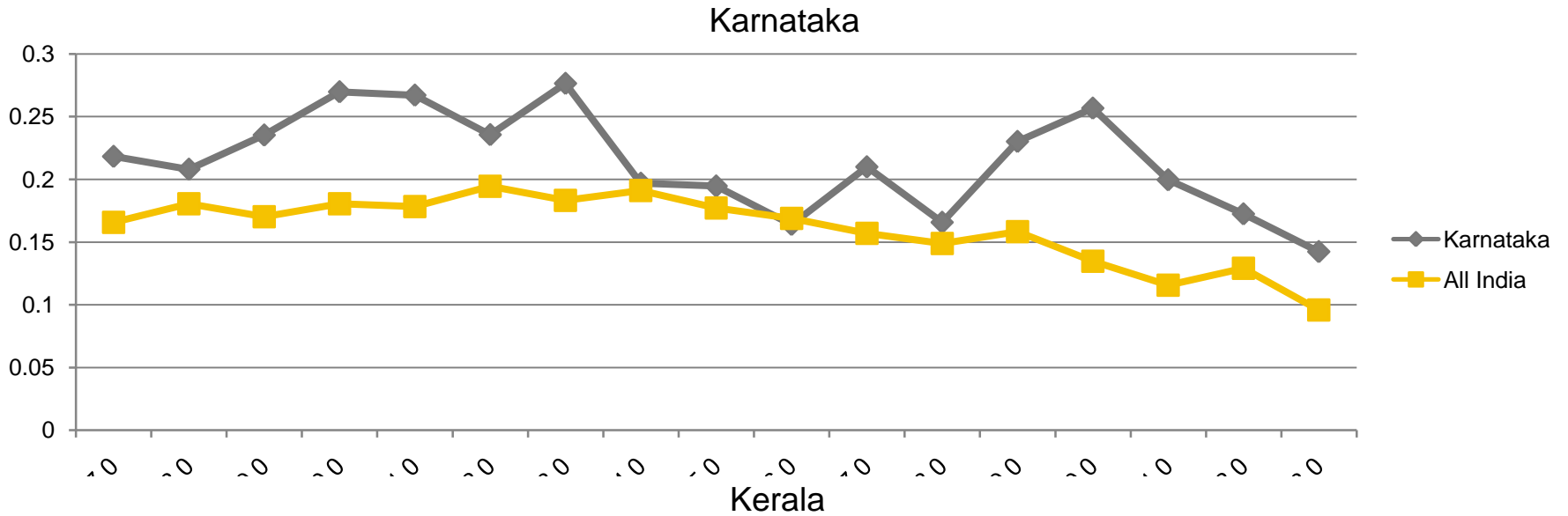


## APPENDIX

# THE 17 MAJOR STATES STUDIES IN THIS ANALYSIS

|                             |
|-----------------------------|
| ANDHRA PRADESH+TELENGANA    |
| ASSAM                       |
| BIHAR+JHARKHAND             |
| GUJARAT                     |
| HARYANA                     |
| HIMACHAL PRADESH            |
| JAMMU & KASHMIR             |
| KARNATAKA                   |
| KERALA                      |
| MADHYA PRADESH+CHHATTISGARH |
| MAHARASHTRA                 |
| ODISHA                      |
| PUNJAB                      |
| RAJASTHAN                   |
| TAMIL NADU                  |
| UTTAR PRADESH+UTTARAKHAND   |
| WEST BENGAL                 |

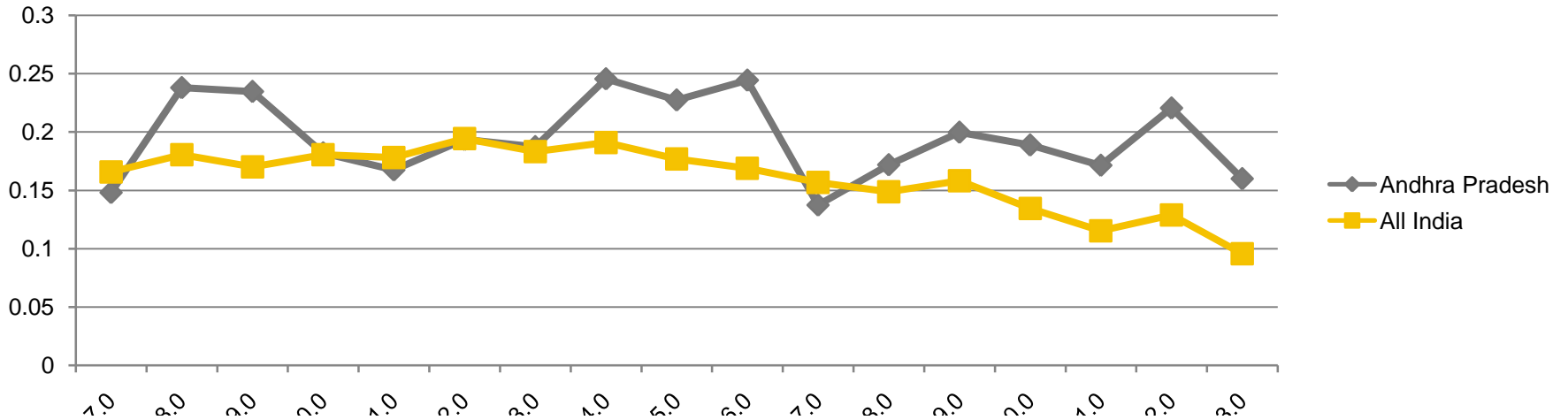
# REGIONAL ANALYSIS AND SCOPE (FSMR/NFSMR RATIO, RELATIVE TO ALL-INDIA)



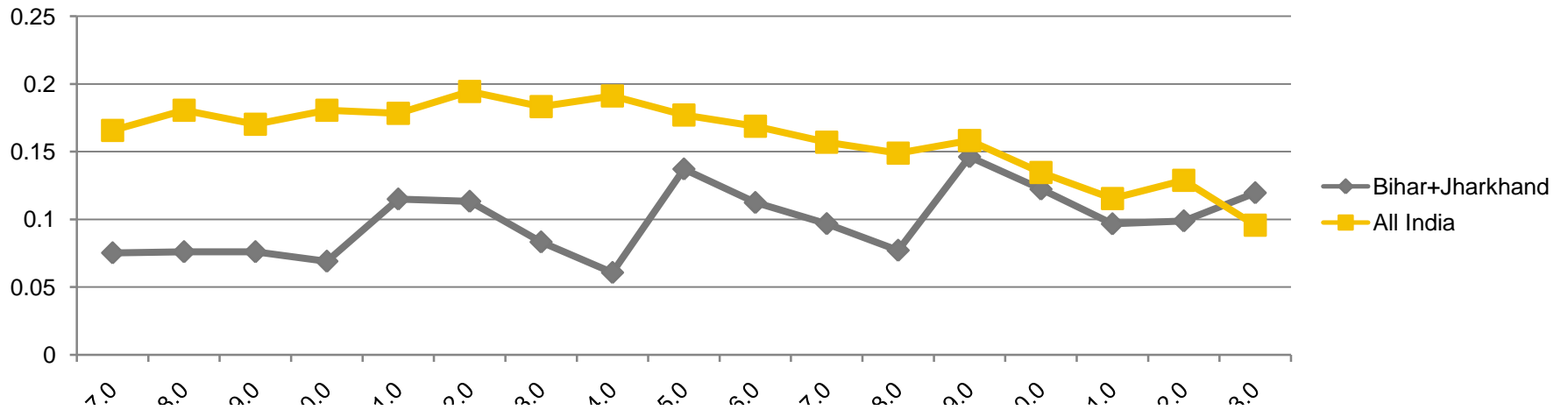


# REGIONAL ANALYSIS AND SCOPE (FSMR/NFSMR RATIO, RELATIVE TO ALL-INDIA)

## Andhra Pradesh

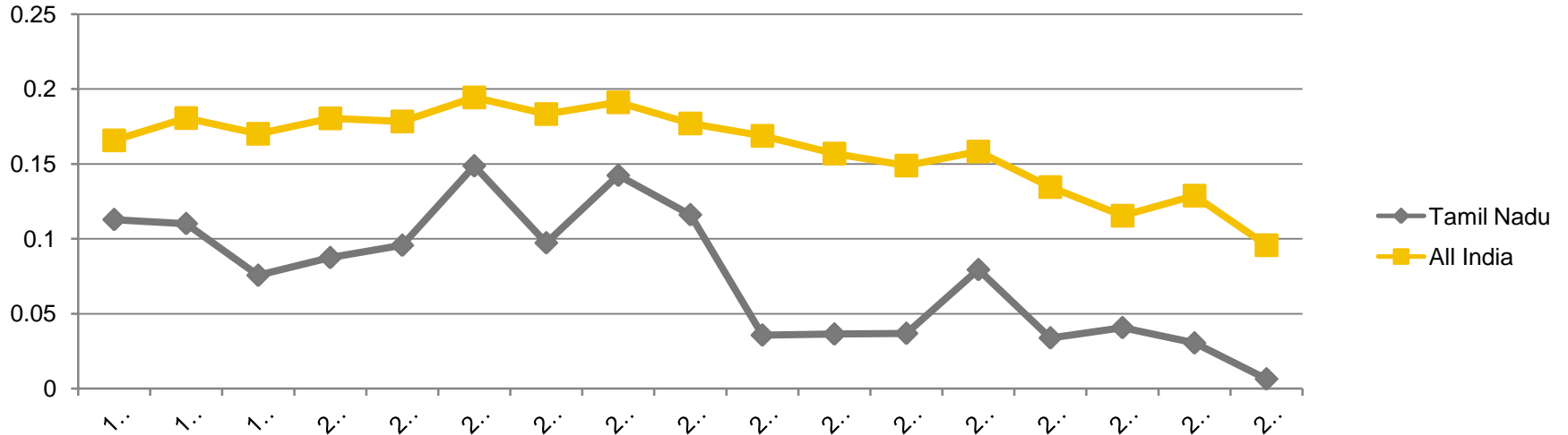


## Bihar + Jharkhand

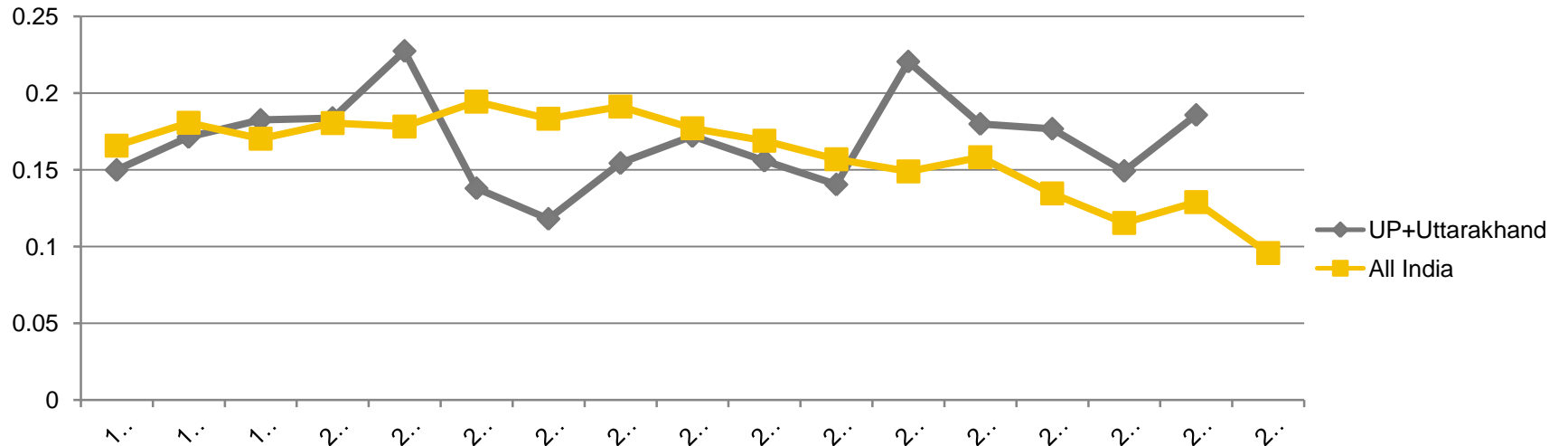


# REGIONAL ANALYSIS AND SCOPE (FSMR/NFSMR RATIO, RELATIVE TO ALL-INDIA)

Tamil Nadu

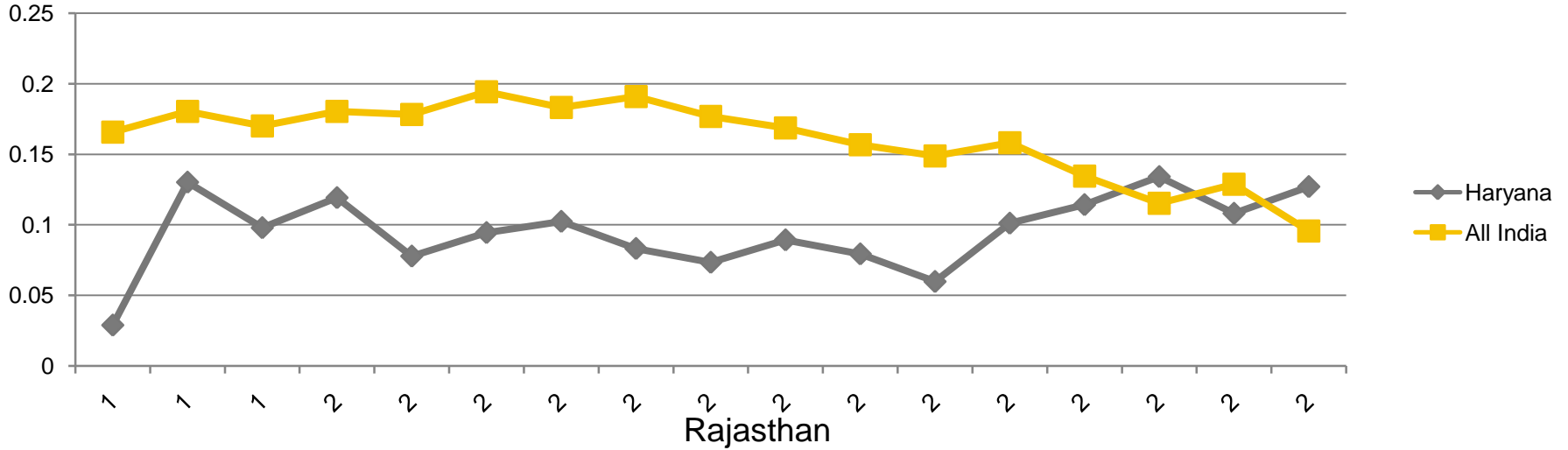


UP+Uttarakhand

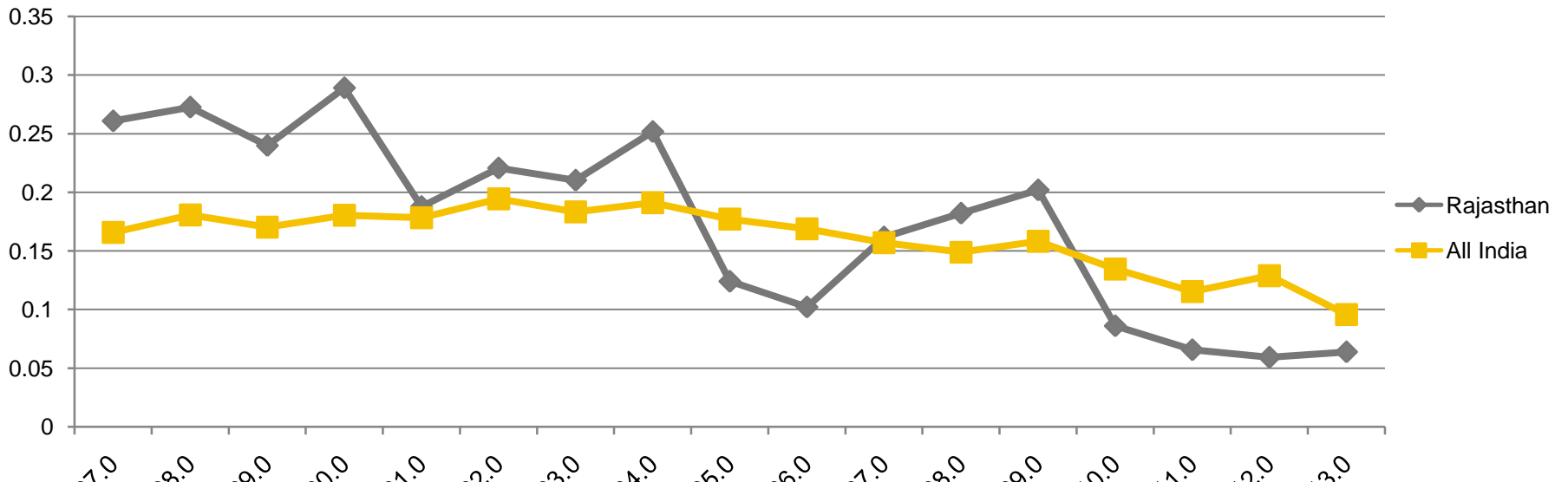


# REGIONAL ANALYSIS AND SCOPE (FSMR/NFSMR RATIO, RELATIVE TO ALL-INDIA)

Haryana



Rajasthan



# REGIONAL ANALYSIS AND SCOPE: CORRELATIONS

**Correlations between Farmers' SMR and Non Farmers' SMR ('Others' excluded) across states for each year**

| '97  | '98  | '99  | 2000 | '01  | '02  | '03  | '04 | '05  | '06  | '07  | '08  | '09  | '10  | '11  | '12  | '13  |
|--|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|
| 0.84   | 0.74 | 0.77 | 0.74 | 0.78 | 0.72 | 0.68 | 0.8 | 0.75 | 0.66 | 0.61 | 0.61 | 0.64 | 0.63 | 0.59 | 0.55 | 0.59 |
| (")  | (")  | (")  | (")  | (")  | (")  | (")  | (") | (")  | (")  | (")  | (")  | (")  | (")  | (")  | (*)  | (")  |
| <i>(*) indicates 5% level of significance</i><br><i>(") indicates 1% level of significance</i> |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |

**Fig.10b: Correlation between FSMR and NFSMR (excluding the 'Others' category) across the 17 major states for each year**