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# Investigating the Impact of Economic Policies on Farmer Suicides in India

A Research Paper presented by:

# PRIYA MIRIAM NORONHA

(India)

in partial fulfilment of the requirements for obtaining the degree of MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

**Economics of Development** 

Members of the Examining Committee:

Lorenzo Pellegrini John Cruzatti Constantine

The Hague, The Netherlands December 2024

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# Inquiries:

International Institute of Social Studies P.O. Box 29776 2502 LT The Hague The Netherlands

t: +31 70 426 0460 e: info@iss.nl w: www.iss.nl

fb: http://www.facebook.com/iss.nl

twitter: @issnl

#### Location:

Kortenaerkade 12 2518 AX The Hague The Netherlands

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# List of Acronyms

BNS Bharatiya Nyaya Sanhita
GM Genetically Modified
GoI Government of India
IPC Indian Penal Code
MHCA Mental Healthcare Act

NCRB National Crime Records Bureau
NRLM National Rural Livelihoods Mission
PMFBY Pradhan Mantri Fasal Bima Yojana
PM-KISAN Pradhan Mantri Kisan Samman Nidhi
SAP Structural Adjustment Programme

WTO World Trade Organisation

# Acknowledgements

My deep gratitude to all those who have supported me in this journey.

To my supervisor, Lorenzo Pellegrini, thank you for your guidance, insight, and for always challenging me.

To my mentor and second reader, John Cruzatti C.- thank you for your support through the year.

To all my wonderful friends, thank you for the laughter, the solidarity, and for teaching me something new every day.

And my thanks to my parents. Thank you for all your love and immense support, advice, and time.

Although once, after hearing me drone on about this thesis for the umpteenth time, Dad did mention preferring a lobotomy to hearing me talk about it *again*.

You did it Dad, you survived. It's all over now.

# **Abstract**

Farmer suicides in India- often characterised as symptomatic of a larger agrarian 'crisis' in India- has persisted since the 1990s. This paper investigates the impact that the design and implementation of economic policies has on farmer suicides. It does so by identifying a set of economic 'risk' factors that impact farmers' vulnerability to committing suicide, and consequently, examining the interaction of policies with these risks.

Using an Agrarian Political Economy framework, and a longitudinal analysis from 2011 to 2024, this paper scrutinizes national and state-level policies that purportedly address agricultural productivity and resilience. However, these policies (in practice) often reinforce existing inequalities by privileging elites.

This paper finds that the appropriation of surplus value, elite capture, and poor public data management are mechanisms that obscure the true extent of farmer suicides and affect top-down decisions on investment and protections, as well as the bottom-up reporting of the success of the policy implementation. All of which is characterised by the extensive use of erroneous data.

# Relevance to Development Studies

The increasing phenomenon of farmer suicides serves as a poignant indicator of poorly designed and insufficient rural development policies, as well as the socio-economic challenges faced by rural communities. By analysing the linkages between economic policies and their impact on agrarian distress, the study highlights the importance of integrating socio-political dimensions into economic and agrarian development frameworks. Additionally, this study examines elite capture in agrarian contexts. It furthers analyses of problems associated with farmer suicides and its mitigation. Additionally, while the scope of this paper is rather broad, the purpose is the establishment of certain conceptual relationships within this larger historical phenomenon. Future research on the topic could then identify the specific dimensions of these relationships identified.

# Keywords

Agrarian distress, Farmer Suicides, Agrarian Political Economy, Elite Capture, Longitudinal Study

# Chapter 1 Introduction

The alarming increase in Indian farmer suicides since the 1990s reflects the intensification of rural economic distress. Deaths by suicide of those involved in farming have continued to increase. The National Crime Records Bureau indicated that in 2022, 11,290 farmer suicides occurred. (Abhijita et al., 2024). This indicates that 1 farmer dies by suicide every hour.

As "the most tragic and dramatic symptom of the crisis of survival faced by Indian peasants" (Shivas, 2005), this consistent pattern of suicides is concentrated among poor, small and marginal farmers. This is underscored by several critical factors. Since the 1990s, there have been significant changes in Indian agricultural policies, characterised by a shift towards neoliberalism.

This has involved the dismantling of previously guaranteed protections that safeguarded small-holder farmers, in particular. These policy shifts have resulted in increased vulnerability for farm households, exacerbating financial distress, and leading to a sense of disenfranchisement (as evinced by the 2020 mass farm protests). Literature on the economic causes of suicide has established causal relations between such events, as well as factors like debt, environmental degradation, rising input costs and falling market prices.

Given the economic nature of these causes affecting farmer suicides in India, the governmental policies affecting these risks are of great importance. The design and implementation of these policies shape the extent to which economic causes heighten or mitigate the vulnerability of farmer suicides. Thus, drawing on the large quantum of literature on the causes of this phenomenon, it is possible to analyse the impact that Indian policies have on the incidence of farmer suicides. In this paper, I do so by considering these causes as risk factors associated with farmer suicides. By examining the interaction between these risks and economic policies, this paper comment on the indirect impact it has on farmer suicides.

With this research paper, I intend to address the following objectives:

- To understand the evolution of economic policies that affect farmer suicides.
- To develop a conceptual model of the interaction between economic policy design and implementation and risks associated with farmer suicides.
- To investigate public data management in this context.

Leading me to the main research problem:

#### How do economic policies impact farmer suicides in India?

By employing an agrarian political economy framework, the research highlights the mechanisms of surplus value appropriation. Additionally, it examines the role of elite capture in resource allocation, power, and policy design. It also investigated discrepancies in suicide data that obscure ground reality. Through a critical longitudinal study of relevant economic policies, this paper

attempts to understand larger patterns taking place in the context of farmer suicides. This involves a comprehensive analysis of trends, policies, and data on lived experiences of those affected. Thus, this paper aims to shed light on the urgent need for reform in both agricultural practices and the governance structures that influence them, ultimately striving for a more equitable and sustainable agrarian landscape in India.

The study concludes that the design and implementation of economic policies in India from 2011 to 2024 has increased the risk of farmers committing suicide. At the design level, State and National policies enable the appropriation of surplus value from poor farmers. At the implementation level, resources intended to benefit vulnerable farmers are captured by elite farmers. Additionally, the design is influenced by data-gathering and reporting from the ground. The way the phenomenon of farmer suicides and its examination by scholars has evolved highlights the need for a re-evaluation of how we understand data and its use in policy design.

Additionally, while the scope of this paper is rather broad, the purpose is the establishment of certain conceptual relationships within this larger historical phenomenon. Future research on the topic could then identify the specific dimensions of these relationships identified.

The phenomenon of farmer suicides serves as a poignant indicator of poorly designed and insufficient rural development policies, as well as the socio-economic challenges faced by rural communities. By analysing the linkages between economic policies and their impact on agrarian distress, the study highlights the importance of integrating socio-political dimensions into economic and agrarian development frameworks. Additionally, this study examines elite capture in agrarian contexts. It furthers analyses of problems associated with farmer suicides and their mitigation.

This paper is organised as follows: Chapter 2 provides a historical and contextual overview, examining the progression of Indian agricultural policy and tracing the socio-economic factors associated with farmer suicides. Chapter 3 introduces the conceptualisation of the paper, the construction of the research problem, and then delves into the theoretical framework- i.e. Agrarian Political Economy (APE). Chapter 4 outlines the methodology, detailing the longitudinal and critical analysis used to examine policy impacts from 2011 to 2024. The analysis itself is presented in Chapter 5, where quantitative and qualitative data on policy evolution, farmer suicide trends, and economic vulnerabilities are examined in detail. Chapter 6 discusses the findings and implications for policy reform, while Chapter 7 concludes with recommendations for more equitable policy approaches and avenues for further research.

# Chapter 2 Background

In order to understand the setting in which these economic policies have been designed and implemented, and farmer suicides have been occurring, this chapter provides a brief history of Indian agricultural policy. Subsequently, this chapter looks into debates in academic literature as to whether this is a significant/pressing issue (or an exaggerated one), and about the personal versus socio-economic nature of its causes. Lastly, the chapter looks into discussions on the specific causes of farmer suicides in India.

# 2.1 A history of farmer suicides and agricultural policy in India

Observations of a consistent pattern of suicides as a consequence of agrarian distress began in the late 1990s (Vidal, 1999; DTE Staff, 1998). However, this phenomenon has roots in the changes imposed by **British colonial rule** on Indian agriculture. The British East India Company, and subsequently the British crown established the Zamindari and Ryotwari systems where zamindars (aka landlords) were tasked with the collection of large, fixed amounts of revenue (Arnold, 2005). Farmers were forced to grow cash crops such as cotton, indigo, opium, tea, and jute in lieu of food crops. These cash crops were (and still are) resource intensive and drain the soil of its nutrients. Traditionally, food crops would be consumed in large by the farming communities themselves (Karmakar, 2015). A series of major famines ensued.

The Great Bengal Famine of 1770, the Deccan Famine (1876-1878), and the Bengal Famine of 1943 each resulted in millions of deaths, and starvation. Several studies on the matter concluded that colonial policies that prioritised revenue over relief were (in part) causes of these famines (Drèze, 1991; Drèze and Sen, 1990). These policies include the continued export of food produced domestically during this time. The high reliance on informal moneylenders and their exorbitant interest rates (as high as 100% in some cases) also contributed to the rapid impoverishment of the farming community, the confiscation of land, and intense dissent amongst peasants against the British (Dutt, 2017).

In 1947, the British Raj ended, and erstwhile British India was partitioned into the states of Indian and Pakistan. In 1950, an independently elected government began to rule the Republic of India. As part of a larger process of recovery from the damage of the colonial era (and the subsequent frequent droughts and famines), the government sought to push the agricultural sector towards industrialisation.

The <u>Green Revolution</u> in India was first introduced in Punjab in late 1966-67 as part of a development program issued by international donor agencies and the Government of India. The strategy mainly revolved around the introduction of modern inputs that would increase crop yields. The particular focus was on seeds, which were High Yeilding Variety (HYV) and disease resistant. Additionally, chemical pesticides and insecticides, motorised farm tools, and innovations in irrigation systems were also introduced (Shiva, 1991).

This initial boom was short-lived. These new inputs were expensive, and the bulk of the financing had to be undertaken by farmers themselves. Farmers had to borrow greater principles at higher

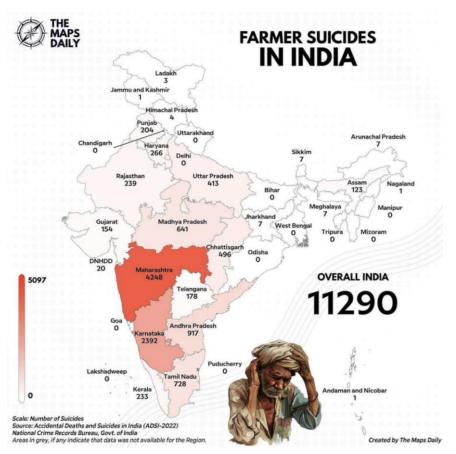
rates of interest. This led to the expansion of the compounding debt phenomenon- where farmers took out new loans in order to pay off old debts. Soil-quality began to degrade with the excessive use of the chemical pesticides, fertilisers, and sowing of cash-crops. With the lack of nutritious soil, farmers used more fertilisers, while continuing with mono-cropping. The biodiversity of local seed varieties was lost (Dutta, 2012). Groundwater levels decreased drastically. Additionally, the concentration of the Green Revolution strategy's attention and resources on rain-fed areas worsened regional disparities amongst rural areas.

With the adoption of the IMF's Structural Adjustment Policy (SAP) requirements, and the consequent <u>liberalisation of the economy in 1991</u> began what Vandana Shiva (2005) termed the 'second Green Revolution'. The first Green Revolution was largely publicly funded. The second was driven by private global trade. Agriculture became more exposed to global markets and price volatility as the government reduced subsidies and scaled back interventionist price-protection policies. This shift left farmers more vulnerable to international price swings, especially those growing cash crops, who increasingly relied on very expensive inputs (Ghosh, 2016). During this period, media reports of farmer suicides began emerging in states such as Andhra Pradesh and Karnataka, signalling a rise in agrarian distress (Mishra, 2006).

In 1997 the government began to collect specific data on farmer suicides, revealing over 100,000 suicides by 2005, especially in regions such Vidarbha in Maharashtra, where cotton farmers were crushed by debt (ibid). This was due to their use of Monsanto's Bt cotton seeds and the frequent price fluctuations and export bans.

In response, activists and journalists drew public attention led to policies such as the 2007 National Farmers' Policy, and the 2008 Agricultural Debt Waiver and Debt Relief Scheme, which offered a temporary respite. Interventions such as the Pradhan Mantri Fasal Bima Yojana (PMFBY) provided crop insurance but were hindered by delays and denied claims (PIB, 2024). Loan waivers and other short-term measures were repeatedly introduced, with little impact on the rate of farmer suicides.

In 2016, India's <u>demonetisation</u> of INR 500 and INR 1,000 notes caused severe cash shortages, disrupting smallholder farmers during the crucial rabi sowing season. The lack of cash prevented timely purchases of essential supplies, leading to delayed planting, reduced productivity, and lower incomes (Kohli, 2016). And, in 2020, the <u>COVID-19 pandemic</u> further strained agriculture. Restricted market access forced farmers to sell at lower prices or abandon crops. Later that year, the government introduced <u>three new Farm Laws</u> aimed at deregulating markets, boosting private investment, and promoting contract farming. However, many farmers, (particularly from Punjab, Haryana, and Uttar Pradesh), protested the imminent corporate dominance in agriculture, culminating in one of India's largest protests (Drèze, 2020), and later, parliament's decision to repeal the laws in late 2021.



Map 1: Number of farmer suicides in India in 2022 Source: The Maps Daily (2022)

In 2022, farmer suicides in India continued to reflect the deep-seated challenges facing the country's agrarian sector, which remains affected by debt burdens, volatile market conditions, and environmental instability. Data from the National Crime Records Bureau (NCRB) indicated that thousands of farmers and agricultural laborers took their lives, with states like Maharashtra, Karnataka, and Telangana reporting some of the highest incidences. Economic pressures such as rising input costs, erratic rainfall patterns due to climate change, and insufficient access to fair market prices left many farmers struggling to sustain their livelihoods.

#### 2.2 Causes of Farmer Suicides in India

Farmer suicides in India is not a new phenomenon. Literature on farmer suicides has had no consensus on the main causes that push farmers to commit suicide. However, analyses that acknowledged a complex interplay between economic and ecological causes began to appear by the 2000s (Mayer, 2017). Recent studies have increasingly focused on climate change, caste, gendered dimensions, technological interventions, and the role of domestic and international trade and finance organisations and lobbies.

The main causes identified in the literature are broadly- climate vulnerabilities, crop failures, debt distress, economic hardship in general, the corporatisation of agriculture, failures of rural credit systems and agricultural policies, as well as socio-cultural practices such as dowry. Anthropological

studies highlight the concentration of such suicides in Dalit, OBC and other marginal farmer communities, driven by socio-economic transformations over the past three decades (for example, Vasavi et al., 1999).

Abhijita. et al. (2024) used National Crime Records Bureau data to examine suicide trends in India. Through statistical analysis of this data, they found that a significant rise in farmer suicides was due to climate change, economic distress, and mental health deterioration. The use of recent data, and comprehensive coverage provides robust results at face value. However significant concerns regarding the quality of the data used (as a function of data collection issues with the NCRB), implying that the estimated impact is skewed. Additionally, the examination only looks at trends, and not potential causal impacts of these variables on farmer suicides.

Basu, Das and Misra (2016) identified a significant increase in farmer suicides over a 16-year period, particularly in areas experiencing deep agricultural distress (Maharashtra and Andhra Pradesh). The scale of the longitudinal analysis yields interesting insights on the evolution of this issue. However, considerations of the specific dimensions of the issue in each state are lacking. Additionally, as mentioned previously, the use of NCRB data calls into question the quality of the results.

The following are the main causal themes:

#### 2.3.1 Indebtedness and Access to Credit

Indebtedness remains a central issue in discussions on agrarian distress and farmer suicides in India, with financial exclusion compounding the impact of debt cycles on farmers' wellbeing. Sadanand (2014) underscores that competitive banking policies have shifted resources away from agriculture, leading to increased reliance on high-interest moneylenders. Intended to diversify and modernize banking, these policies ironically exacerbated farmers' debt cycles by limiting their access to affordable credit, which correlates with higher suicide rates. While interventions like farmer credit cards and irrigation improvements have been somewhat effective, they inadequately address the structural gaps in the rural credit landscape.

However, a critique of studies such as Sadanand is that they often rely on correlational data, which may oversimplify causation between banking practices and suicide rates. They may not fully account for other variables, such as regional socio-economic disparities, which could influence both financial exclusion and suicide rates independently of banking policy shifts.

Gerber, Moreda, and Sathyamala (2021) similarly argue that the coexistence of formal and informal credit systems has entrenched debt dependency rather than alleviated it. While formal credit is more affordable, it often fails to meet farmers' immediate needs, leaving them dependent on informal lenders. Yet, this argument assumes that formal credit could fully meet these needs if simply restructured, which may overlook deeper structural issues in agricultural profitability and price volatility that render even affordable credit insufficient. Furthermore, this perspective risks undervaluing the role of traditional credit networks which, despite their high costs, have long adapted to the urgent and nuanced demands of rural communities.

# 2.3.2 Ecological Vulnerabilities

Ecological stressors—ranging from groundwater depletion to erratic climate patterns—compound agrarian distress. Barve, Kumar, and Viswanathan (2021) reveal that adverse weather patterns and insufficient irrigation correlate with productivity declines and, consequently, increased suicide rates. Their analysis of data from 16 Indian states suggests that a one-degree rise in temperature can drive a 4.8% rise in farmer suicides. Yet a critique of this study is that it primarily employs broad temperature data and National Crime Records Bureau (NCRB) suicide records, which are known to have significant reporting inconsistencies. This reliance on aggregate data may mask region-specific climate impacts and fail to capture the heterogeneity of local ecological and economic conditions.

Similarly, Rothler et al. (2024) argue that rainfall deficits directly correlate with suicides, particularly among male farmers who face greater economic pressure. While compelling, the study's focus on econometric correlations may obscure the complex interaction of ecological and social variables, such as caste and land ownership patterns, which also impact resilience against climate-related shocks. By not disaggregating data across these additional socio-economic dimensions, the study might inadvertently overemphasize environmental factors while underexploring structural socio-economic vulnerabilities.

# 2.2.3 Rising Input Costs

The rising cost of agricultural inputs—fertilizers, seeds, pesticides, and water—has exacerbated the vulnerability of Indian farmers. Vandana Shiva (1991) in her seminal work "The Violence of the Green Revolution' critiques the shift toward industrial agriculture, including the use of high-yield seed varieties and reliance on multinational corporations like Monsanto. Shiva argues that while these inputs were intended to modernize Indian agriculture, they have driven farmers into cycles of dependency on costly resources, disrupting traditional farming practices and undermining farmers' financial stability.

A critique of Shiva's argument is that her approach tends to generalize the impacts of input costs across diverse agricultural contexts in India. While her work highlights the negative consequences of corporate-driven agriculture, it may underrepresent cases where technological advancements, when coupled with local adaptation, have increased productivity without the same level of distress. Thomas and De Tavernier (2017) extend this analysis to biotechnology, particularly Bt cotton, finding that although the genetically modified crop aimed to reduce pesticide use, its high costs and inconsistent yield gains have led to economic strain for many smallholders. Critics argue, however, that these studies focus primarily on the financial burdens of Bt cotton without sufficiently addressing regional variations where Bt cotton may have had positive impacts, or the adaptability of some farmers to new technologies.

#### 2.2.4 Market Pressures

Market pressures—particularly in the form of price volatility, competition with industrial agriculture, and limited market access—have placed additional economic strain on farmers. Mandis (local agricultural markets) are intended to protect farmers by regulating prices and ensuring a fair marketplace. However, these markets often fail to deliver on these goals, as price support policies are inconsistently enforced and favor larger farms over smallholders, thus contributing to the erosion of income stability for smaller farms. According to Mishra (2020), this market dynamic forces small farmers to make cropping decisions based on fluctuating prices rather than sustainable agricultural

practices, pushing them toward high-risk cash crops with potentially devastating financial outcomes.

The limitation of Mishra's analysis is that it doesn't fully account for the variety of cropping choices available across different regions, nor does it consider the regional policy adaptations that might mitigate some of the market-induced stresses. Additionally, the study may overemphasize the influence of market forces at the expense of local community or cooperative initiatives, which have provided resilience in certain areas.

### 2.2.5 Social Factors

Social factors, including caste discrimination and cultural practices such as dowry, significantly impact farmers' psychological and economic wellbeing. Kannuri and Jadhav (2021) examine the intersection of social identity, agrarian distress, and mental health, finding that lower-caste and marginalized communities are particularly vulnerable to financial and emotional stressors. These communities often face limited access to support networks and resources, amplifying their economic hardships and distress. The use of toxic pesticides, combined with precarious economic circumstances, creates what they term "toxic landscapes" for marginalized farmers, further degrading their quality of life and wellbeing.

A critique of Kannuri and Jadhav's approach is its focus on caste and cultural identity as primary factors without fully addressing how economic policies could intersect with these identities to produce distress. While their work highlights critical social determinants, it may not fully explore how economic or policy interventions targeting financial vulnerability might alleviate some of the caste-specific pressures. Furthermore, the study's emphasis on "toxic landscapes" risks oversimplifying complex socio-economic environments, as it implies a uniform experience of agrarian distress across all marginalized groups rather than a more nuanced, location-specific understanding.

## 2.3 Debates

The debates surrounding farmer suicides in India represent the polarisation of the narratives regarding this issue, and rural distress at large. This discussion reflects not just differences in empirical findings but an ideological divergence in the interpretation of this phenomenon and the consequent responsibilities of the State to its citizens.

# 2.3.1 Is this phenomenon a significant issue?

The set of scholars who conclude that farmer suicides are not an important issue in the grand scheme of things say while comparing its suicide rates with those from other professions. Patel et al. (2012) argue that farmer suicides are not disproportionately high relative to suicides among other occupational groups in the country. The basis of this argument is that the incidence of suicide among housewives and non-farming self-employed persons is more than that of farmers. By extension, the authors are arguing that if economic distress is the cause of farmer suicides, it is no more so for them than those in other professions. The effect is not unique to agriculture.

Further, official figures indicate that the agricultural sector (aside from government employment) has witnessed a decline in suicide rates since the mid-2000s, as Nair (2019) corroborates. This indicates an uptrend in suicide rates across non-agrarian sectors instead. By framing farmer suicides

within the larger occupational context, this argument shifts focus away from agriculture-specific issues.

Those opposing this position-such as Mishra (2006) and Vasavi (2009)- critique the 'underreporting' and 'masking' of the true extent of suicides and rural distress at large. This is through official categories that obscure the reality of agrarian hardship. These scholars posit that the stigma around suicide in rural areas, and with economic challenges uniquely faced by farmers are the causes of a suicide epidemic. Kennedy and King (2014) agree, arguing that inconsistencies in reporting mask the actual scale of farmer suicides. This is echoed by Deshpande and Arora (2010), who urge a targeted approach to address these vulnerabilities, especially in high-risk states. So, this perspective sees farmer suicides as symptoms of a larger rural crisis.

# 2.3.2 Are the causes primarily personal or socio-economic?

This debate considers whether farmer suicides are a consequence of personal issues or rather, larger socio-economic factors. Those attributing farmer suicides to personal factors argue that familial disputes, addiction, and social isolation are key drivers. Gururaj et al. (2004) and Vijayakumar (2007) identify issues such as alcoholism, mental health challenges, and domestic conflicts as triggers. Similarly, Behere and Bhise (2009) and Kandlur, Sardana and Richardson-Vejlgaard (2021) interpret suicides among farmers as driven more by social stigmas around family and marital issues than economic burdens.

In contrast, scholars emphasizing socio-economic causation argue that the rising cost of inputs, debt cycles, and agricultural market failures are central to understanding farmer suicides. Mishra (2006) and Vasavi (2009) argue that structural factors—including indebtedness and policy-induced vulnerabilities—create relentless economic pressures on farmers. Deshpande and Arora (2010) underscore the lack of institutional support for farmers facing crop failures and escalating debts, viewing these suicides as products of a neoliberal agrarian economy that prioritizes market liberalization over rural welfare. This narrative casts farmer suicides not as individual failings but as outcomes of a socio-economic structure that leaves farmers with insurmountable financial risks and negligible state support, situating the issue within broader critiques of agricultural policies in India.

# 2.4 Research Gap

This paper contributes to literature by examining the quality of suicide data and examining the extractive nature of the agricultural system in areas of worst affected by farmer suicides, and the diversion of policies, resources, and opportunities intended to alleviate rural distress. It reframes knowledge on credit and agricultural policies, updates analyses of suicide statistics, contributes to critiques of policy design, and reconsiders prevalent conceptualisations of farmer suicides, as often portrayed in the media.

# Chapter 3 Conceptualisation

The extent and urgency of the farmer suicide phenomenon begs the question- what is being done about it? Upon further delving into this subject, it quickly became apparent that the quality of the NCRB's suicide would be an issue. The bulk of academic literature on Indian farmer acknowledges that the data had serious concerns regarding its quality yet used the data as the base of their analysis.

To address, this paper uses an 'agrarian political economy' framework that accommodates the limitations of the data while allowing for a meaningful analysis. It provides a framework for looking beyond just numbers and data. Further, by using the terms 'risk' and 'vulnerability' in the context of suicides, the study draws on epidemiological frameworks to establish a link between suicides and its potential causes.

This is in line with work by Acemoglu, Johnson and Robinson (2001) who use historical data to understand long-term economic effects, and thus demonstrating how structural insights can improve research in the presence of imperfect data. Additionally, 'Poor Economics' by Banerjee and Duflo (2012) emphasises the need to consider local contexts and structural causes in poverty research, thus combining data with historical and structural analysis.

### 3.1 Theoretical framework

Agrarian Political Economy provides the basis for a structural analysis of stressors causing farmer suicides. As the Journal of Agrarian Change (n.d.) identifies, agrarian political economy focuses on "the social relations and dynamics of production and reproduction, property and power in agrarian formations and their processes of change, both historical and contemporary." It moves beyond the identification of single factors and causes such as individual mental health and isolated policy failures, to look at the larger patterns taking place in this phenomenon.

Agrarian Political Economy (APE) provides a structural framework to analyse the stressors behind farmer suicides in India, so as to examine broader social, economic, and political dimensions. It focuses on how capitalist expansion, power dynamics, and state policies interact to create agrarian distress (Bernstein, 2010). By placing the emphasis on structural inequalities, APE holds that the economic pressures faced by Indian farmers is part of a larger agrarian change, characterised by the increasing commodification of rural production and social relations Informed by Marxist perspectives, agrarian political economy highlights how under capitalism, elites exploit rural labour and resources, resulting in widening inequalities, dispossession, and the commodification (ibid).

Key studies by scholars such as Bernstein, Scott, and Shiva demonstrate the complex effects of market integration on rural societies. APE thus provides a lens to understand the socioeconomic determinants of these suicides by examining the historical and material realities of Indian agrarian systems, showing how policy interventions ostensibly aimed at alleviating rural distress may inadvertently reinforce inequalities and worsen the conditions leading to farmer suicides.

# 3.2 Concepts

#### **3.2.1 Farmer**

In this research, the term 'farmer' is used broadly to encompass not just landowners/cultivators but also tenant farmers and agricultural labourers, as these groups are often conflated in both official data and broader discourses on rural distress. This inclusive definition is necessary because available data does not effectively differentiate between these categories—whether in terms of land ownership, tenancy, or labour status.

While scholars such as Henry Bernstein (2010) and James Scott (2020) discuss class differentiation and labour exploitation in rural settings, it is essential to recognize that these categories often overlap and intersect in complex ways. Thus, the use of the concept 'farmer' as an umbrella term in the context of this research allows for the use of a larger and more heterogenous section of people engaged in agricultural activities, regardless of whether they own land or work it for wages. It avoids the complications that arise from more finicky distinctions that might overcomplicate an already messy data landscape at the specific state and year level.

Further, the inclusion of women, Dalits, and tribals within this broader definition is crucial for capturing the full spectrum of those committing suicide and experiencing economic distress in agrarian India. These groups are often excluded or marginalised in conventional discussions of agrarian issues. Yet, constitute a significant portion of the agrarian workforce (Pattnaik and Lahiri-Dutt, 2021). As APE theory observes, the agrarian world has deeply entrenched power disparitieshere, marginalised groups are disproportionately affected by harmful policies and structures (Bernstein, 2010). As will be discussed in Chapter 5, the marginalised position of women, Dalits and tribals is used to obfuscate the actual incidence of farmer suicides.

#### 3.2.2 Suicide

In this paper, 'suicide' is understood as a public health issue influenced by social determinants of health such as poverty, unemployment, and a lack of sociopolitical control, all of which increase mental health vulnerabilities, especially among marginalised groups (WHO, 2024). In lieu of training a moral lens on suicide, this approach aligns with the WHO's view that suicide prevention requires addressing broader social inequalities and economic hardships.

Classical economic theories suggest that suicide can be seen as a cost-benefit analysis (Hamermesh and Soss, 1974; Marcotte and Zejcirovic, 2020). In other words, it is a response to perceived life dissatisfaction under severe financial duress, as seen in rural India, where cyclical debt and lack of institutional support elevate despair among agrarian communities. APE focusses on the structural inequities associate with suicide instead.

The morality associated with suicide is an important consideration in its reporting. The erstwhile Indian Penal Code (IPC) had categorised attempted suicide as a criminal offense that merited fines and/or imprisonment (Law Commission of India, no date). Although the Mental Healthcare Act, 2017 (MHCA) effectively decriminalised it, while attempted suicide did not warrant a penalty, it remained under the purview of the criminal justice system, not health (Vadlamani and Gowda, 2019; IMHO, 2024). However, with the implementation of the new penal code in July 2024, the Bharatiya Nyaya Sanhita no longer has any provisions criminalising suicide, thus effectively decriminalising it.

This is also why the National Crime Records Bureau (not the Ministry of Health) compiles this data, and why the surviving family members of a person who has committed suicide need to interact with the police (and later revenue administrators to claim compensation). However, this central body itself does not collect the data, it collects it from the States and collates it. Its primary attempt to be transparent is via footnotes that clarify that this data is provided by the States (NCRB, nd).

### 3.2.3 Risk

Here, 'risk' refers to socio-economic conditions that increase a person's vulnerability to committing suicide. This understanding of risk is the norm for epidemiological studies. This literature highlights multiple socio-economic risk factors—such as debt, unemployment, low income, and occupational insecurity—that significantly increase the likelihood of suicide among at-risk populations. For instance, Knipe et al. (2017) found that in Sri Lanka, having a relatively lower socio-economic position and an insecure, low-paying job (such daily wage labour) was positively correlated with higher suicide risk, especially among men with minimal education.

Similarly, research on farmers in the United States of America found high rates of depression and anxiety linked to financial instability, extreme weather, and market pressures (Bjornestad, Cuthbertson and Hendricks, 2021). Here, coping mechanisms, particularly self-blame, were closely associated with increased suicide risk, as feelings of inadequacy and hopelessness escalated under chronic financial stress (Raschke *et al.*, 2022).

# 3.2.4 Appropriation of Surplus Value

The concept of appropriation of surplus value, grounded in Marxist theory, refers to the extraction of value from workers (in this case, farmers) by those who control the means of production. In India's agrarian context, farmers often face situations where their labor and produce are undervalued by market forces or intermediaries, while the value generated by their work is appropriated by large agribusinesses, traders, and even financial institutions. This dynamic results in low income for farmers, making it difficult for them to pay off debts or invest in better agricultural practices. As the surplus value from farming is concentrated in the hands of a few, the economic distress deepens, leading to a vicious cycle that can contribute to mental health issues and suicides.

# 3.2.5 Elite Capture

Elite capture as a concept examines how privileged groups (in this case, large landholders) disproportionately benefit from rural distress mitigation programmes. This reinforces existing structural inequalities and worsens rural distress. In the second section, I investigate how corruption at various levels (local bureaucrats, agribusinesses) distorts the intended impact of these interventions.

The phenomenon of elite capture, where large farmers, landowners and agribusinesses disproportionately benefit from state interventions, further entrenches inequalities in rural India. As illustrated in Chapter 5, policies intended to alleviate farmer distress, such as loan waivers and agricultural subsidies, are often captured by these elites, undermining their effectiveness for marginal farmers. For example, loan waiver schemes, while presented as solutions to agrarian distress, often

disproportionately benefit large landholders who have greater access to formal credit and can navigate bureaucratic systems more effectively.							

# Chapter 4 Methodology

This section details this paper's methodological approach- the strategy, data collection, data, methods used, and their ethics and limitations. As a critical longitudinal study, this paper uses secondary qualitative and quantitative data pertaining to farmer suicides, and policy events from 2011 to 2024.

# 4.1 Strategy

The use of a critical longitudinal approach to investigate the impact of economic policies on farmer suicides is helpful as it allows for the observation of an evolving relationship. In other words, it allows for the tracking of policy changes and risk factors over time. We can then understand which mechanisms are connected to this phenomenon, and whether they compound or mitigate the risk of farmer suicides. This study does this from 2011 to 2024 (2011 as this is when official data on farmer suicides became too suspiciously abnormal).

This approach aligns with research by Babbie (2010), who argues that longitudinal studies are well-suited to explore causal patterns in policy impact studies, allowing researchers to observe and critique shifts in policy efficacy over time secondary data—both quantitative and qualitative—allows this study to leverage existing information comprehensively. Similarly, Acemoglu, Johnson, and Robinson (2001) use historical data to understand long-term economic effects, showing how structural insights can improve research when data is imperfect. Quantitative data primarily focuses on suicide rates from the National Crime Records Bureau (NCRB), while qualitative data comes from policy documents, journalistic reports, activist accounts, and academic literature.

This paper specifically examines economic risks- sorted through a systematic review of literature-to assess policies that may influence farmer suicides. The geographical focus on five states (Andhra Pradesh, Karnataka, Maharashtra, Madhya Pradesh, and Telangana) reflects the intensity of their suicide rates in these regions. Limiting the analysis to these states ensures the data is both manageable and rich, providing an opportunity to delve deeper into well-documented cases. Nagaraj's (2008) seminal work on farmer suicides also used a similar sampling rationale. The inclusion of other states and international data is beyond the scope of this paper, although an important avenue for future research.

## 4.2 Methods

Three methods are used to consider the impact of economic policies on farmer suicides in India, using historical mixed secondary data. First, the mixed-methods evaluation of the quality of NCRB data. Here, the suicide rate (per 100,000 population) is compared with national and global suicide rates. Changes in this are also observed. Qualitative analysis of the suicide data collection process, and an investigation in who is being excluded is conducted so as to understand the source of any inconsistencies.

Next, I look at the interaction of economic policies with farmer suicide risk factors. First, by documenting the policy evolution, with care to collect information on any impacts of the policies on the risk factors. Then, but looking at this interaction. By doing so, the analysis focuses on tracing

how economic policies (such as loan waivers and subsidies) claim to reduce suicide rates but may not do so in actuality.

Lastly, based on the findings in the previous section of the analysis, I build a conceptual model of mechanisms involved when the policy design and implementation process interacts with farmer suicide risks. Here, I use the concepts of the Appropriation of Surplus Value, Elite Capture, and Public Data Managment. This model emerged from observing patterns in policy design and implementation failures, paralleling studies by Banerjee and Duflo (2011) on how elite influence can redirect policy benefits away from intended recipients. This framework is also supported by critiques of public data management, which argue that underreporting and misclassification distort data reliability, especially in issues as nuanced as farmer suicides.

## 4.3 Data Collection

Quantitative data on farmer suicides was obtained from the National Crime Records Bureau (NCRB)- the government agency responsible for the collection and analysis of crime data in India. This includes data disaggregated among the sub-categories of farmers from 2015 to 2022, and aggregated data on Self-Employed (Farmers) from 2002 to 2014. Discussions pertaining to the quality of this data can be found in Chapter 5. Additionally, academic literature, journalistic accounts, activist reports, and NCRB reports are also used to question the data.

Data pertaining to the policies implemented was compiled through an online search of State level, national, and shocks from 1980 to 2024. While the focus of this study is from 1997 onwards, the collection of data on earlier policy events provides useful context. Particular focus was given to policies and programmes that were instituted between 2011 and 2024 (as this is the period where farmer suicides intensified, and data available on this phenomenon became increasingly muddied). These policy events were then categorised into:

- Major State Govt Policies (of the 5 states with the highest suicide rates: Andhra Pradesh, Karnataka, Maharashtra, Madhya Pradesh, and Telangana)
- National Policies
- Shocks- natural and economic

This includes policies such as loan waivers, agricultural subsidies, crop insurance, compensation, the introduction of specific seed types, drought years, etc. Details regarding these policies were obtained from analyses of their official reports and impact statements/evaluations, press releases on the topic, journalistic and academic observations of their design and implementation, and other literature pertaining to them. Further, to corroborate the timings, implementation, etc. of these programmes, cross-referencing between government reports from different departments, press releases, journal articles, and academic literature was conducted.

To ensure reliability, cross-validation between government publications, press releases, journalistic sources, and academic literature was conducted. Studies by Yin (2018) emphasize the necessity of triangulation in policy research to reduce potential biases when relying on secondary sources, thereby enhancing the credibility of the findings.

So, this table lists critical risks faced by farmers, such as indebtedness, rising input costs, and environmental challenges. Each risk is paired with economic factors that intensify its impact on farmers' livelihoods.

Risk	Associated economic factors
Indebtedness	Existing debt
	Lack of access to credit
Environment-related vulnerabilities (Ground water depletion, soil degradation, rising temperatures, erratic rainfall, loss of biodiversity)	Choice of crop, variety of seed Crop failure- Insurance
Rising Input Costs	Subsidy structure and access and reductions, MNCs and seeds, fertilisers, pesticides, fuel, machinery, fluctuating exchange rates, fuel prices
Falling Incomes	Market price volatility, Falling farm product prices, Monocropping, Unemployment, Mi- gration, Compensation for suicide, Losses (Non-recoverable Costs)
Competition	With industrial farming, large agribusinesses, subsidised imports
Regulation	Government-imposed price ceilings or floors, tariffs, and export bans; Land Use and Zoning Laws
Markets	selling to corrupt mandis, middlemen, selling to corporates at unfavourable terms; Lack of transport, storage, and marketing facilities, lack of access to timely, accurate market price data, SEZ
Lost Land	Land fragmentation, Land Tenure Security, tribals and Dalits losing land because of laws,
Lack of access to support	Lack of access to healthcare (mental), food assistance, income support, or health insurance

Table 1: Risks and their Associated Economic Variables

# Policy Theme List

This list categorizes policy themes relevant to the agrarian crisis. Each theme includes specific aspects of rural economics and support that influence farmers' vulnerability, such as rural credit systems, input cost subsidies, market infrastructure, and social safety nets.

- 1. Rural Credit
- 2. Environmental Sustainability and Resource Management
- 3. Input Costs and Subsidies
- 4. Market Infrastructure and Access
- 5. Social Support and Safety Nets

# Chapter 5 Analysis

This section is divided into three parts- the analysis of data management by focussing on the incidence of farmer suicides in India, and then the policy evolution and interaction with risk factors. And last, the development of a conceptual model that looks at the dimensions of the appropriation of surplus value and elite capture in this context.

## 5.1 The incidence of farmer suicides in India

### 5.1.1 Total Suicides in India

The total number of suicides among farmers in India has remained alarmingly high, fluctuating slightly year by year but showing no consistent downward trend. As indicated in Table 1, in 2012, 13,754 suicides were recorded, while by 2022, the number had slightly decreased to 11,290. However, this decrease is marginal, and the persistence of high numbers suggests that the underlying issues causing farmer suicides to have not been adequately addressed by existing policies.

	Andhra	Karna-	Madhya	Maharash-	Tamil	Telangana-	All India-
	Pradesh- total	taka- total	Pradesh- total	tra- total	Nadu- total	total	TOTAL
2012	2572	1875	1172	3786	499	-	13754
2013	2013	1403	1090	3146	105	-	11772
2014	632*	768	1198	4004	895	1347*	12360
2015	916	1569	1290	4291	606	1400	12602
2016	804	2079	1321	3661	381	645	11379
2017	816	2160	955	3701	387	851	10654
2018	664	2405	655	3594	401	908	10349
2019	1029	1992	541	3927	427	499	10281
2020	889	2016	735	4006	477	471	10677
2021	1065	2169	671	4064	599	359	10881
2022	917	2392	641	4248	728	178	11290

Table 2: Incidence of Farmer Suicides (Total)

Source: NCRB

<sup>\*</sup> Note- Before 2014, Andhra Pradesh and Telangana were one state. After their split, data was available for both States

#### **Incidence of Farmer Suicides**

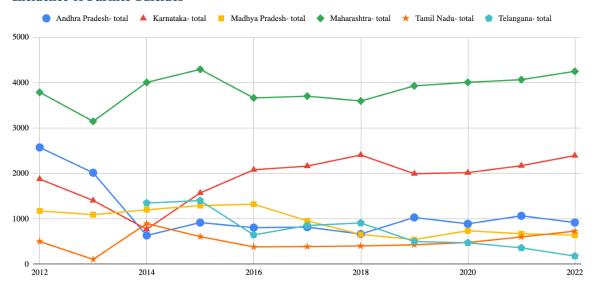


Figure 1: Incidence of Farmer Suicides (Total) Source: Author, using NCRB data

Certain states consistently report higher numbers of suicides, indicating regional hotspots of agrarian distress. Maharashtra stands out with the highest number of suicides each year, reaching a peak of 4,291 in 2015 and still recording 4,248 suicides in 2022. This indicates a continuous state of crisis in the state's farming community, particularly among those engaged in cash crop farming such as cotton, which is highly susceptible to market volatility.

Karnataka and Madhya Pradesh also show persistently high numbers, with Karnataka recording a steady increase from 1,569 suicides in 2015 to 2,392 in 2022, and Madhya Pradesh fluctuating but remaining significant with 1,290 suicides in 2015 and 641 in 2022. Telangana, which saw a significant peak in 2015 with 1,400 suicides, had its numbers decrease but still reported 178 suicides in 2022. This may indicate some success of policy interventions, although the reduction is far from solving the issue (Sainath, 2014).

Although the overall numbers fluctuate slightly, the trends do not show any significant or consistent reduction over the eight-year period. The largest reductions appear in Telangana, where suicides dropped from 1,400 in 2015 to 178 in 2022. However, other states such as Maharashtra and Karnataka show continued distress with minimal changes.

# 5.1.2 Comparative suicide rates

The global suicide rate (per 100,000 population) is 9.0, and this is higher for males at 12.6 than for females at 5.4 (WHO, 2019). The crude suicide rate in India, per 100,000 is 14.1 for males, 11.1 for females, and 12.7 for both.

Andhra	3.91	4.54	3.79	4.39	2.83	3.48	3.43	3.90
Pradesh								
Karna-	17.41	15.79	14.68	14.50	17.51	15.72	15.13	11.42
taka								
Kerala	11.69	15.25	19.97	7.53	10.59	15.00	16.11	10.54
Madhya	2.91	3.04	3.34	2.45	2.97	4.33	5.99	5.85
Pradesh								
Maha-	16.30	15.60	15.37	15.07	13.79	14.20	14.05	16.47
rashtra								
Tamil	5.25	4.32	3.44	3.08	2.89	2.79	2.75	4.37
Nadu								
West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bengal								

Table 2: Farmer Suicides rates (per 100,000 population)

With a national suicide rate of 12.7 per 100,000 (higher than the global average of 9.0), India faces unique social and economic pressures that disproportionately impact rural and farming communities. The suicide rate among Indian men (14.1) is particularly high, consistent with a global pattern where men are more vulnerable to suicide. These statistics underscore the urgent need to understand and address the factors driving distress among farmers in India.

At the state level, significant disparities exist. Karnataka and Maharashtra stand out with some of the highest farmer suicide rates, with Karnataka reaching 17.41 in 2022 and Maharashtra at 16.30. These states, both heavily dependent on agriculture, show a persistent and troubling pattern of farmer suicides, suggesting that economic stress, debt, and crop failure may be particularly acute here. Kerala also demonstrates a notable variation, with rates fluctuating dramatically from 19.97 in 2020 to 7.53 in 2019. This inconsistency may indicate the influence of changing economic conditions, policies, or environmental factors on farmer well-being in the region.

Some states, such as Tamil Nadu and Andhra Pradesh, report moderate suicide rates but show positive signs of reduction over time. Tamil Nadu's rates, for example, decreased from 4.37 in 2015 to 5.25 in 2022, which may reflect the effectiveness of certain interventions or improved agrarian conditions. Madhya Pradesh also shows a downward trend, declining from 5.85 in 2015 to 2.91 in 2022, potentially indicating successful efforts in reducing farmer vulnerability in recent years. In contrast, West Bengal has consistently reported zero farmer suicides across these years, raising questions about whether this reflects reality, differences in data collection, or is a result of underreporting.

#### 5.1.3 Distortions

#### Revisions in Methodology

In 2014, the NCRB introduced major changes in how suicides were categorised, reducing reported farmer suicides by more than half. The official number of farmer suicides fell to 5,650 in 2014, down from 11,772 in 2013 (Sainath, 2014). This was done by shifting suicides into different categories, particularly that of 'Others.'

Between 2011 and 2024, the pattern of inconsistent categorisation persisted. For instance, in 2012, farmer suicides were recorded at 13,754, before seeing a slight decline in 2013. By 2014, this sharp drop coincided with a reclassification of many suicides. The introduction of new subcategories such as 'daily wage earners' and 'Others' muddied the figures, making it challenging to track trends accurately (Kulkarni, 2023). At this *same* time, States began reporting a dramatic rise in suicides in this 'Others' category. For example, in Karnataka, total farmer suicides dropped from 1,403 in 2013 to 321 in 2014, while suicides in the 'Others' category increased by 245%, from 1,482 to 5,120. In the five worst-affected states, suicides under 'Others' doubled. Even after subtracting 15,735 suicides (now reclassified under 'daily wage earners'), the category still accounted for 31.3% of all suicides in India.

Moreover, the period from 2015 to 2024 saw further complications in suicide reporting. While data from 2015 indicated 12,602 suicides among farmers and agricultural labourers, the trend showed increasing underreporting in subsequent years. For instance, the NCRB's 2018 report revealed only 10,349 such deaths, with large disparities between regions. Maharashtra, the state with the highest farmer suicide rate, saw a drop from 3,228 suicides in 2016 to 2,550 in 2018.

Additionally, the revised classification system relied on local police officers, often untrained, to determine whether a suicide victim was a farmer, labourer, or belonging to any other category, further undermining the accuracy of the data. By 2020, the cumulative effects of inconsistent reporting became evident, with discrepancies in suicide figures increasing across states. In 2021, the NCRB recorded 10,677 farmer suicides, but activists argued that the actual numbers could be much higher due to reclassification.

In 2016, the National Crime Records Bureau (NCRB) stopped publishing farmer suicide data, and in 2017, the NCRB was merged with the Bureau of Police Research and Development (BPRD), further obscuring the data (Kulkarni, 2023). This gap continued until 2024, making it difficult to assess current trends in farmer suicides, although anecdotal evidence and regional reports suggest that rural distress remains a significant issue.

Between 2018 and 2024, the reporting of farmer suicides continued to be marked by inconsistencies and underreporting. In 2018, while the NCRB reported 10,349 farmer and agricultural labourer suicides, the lack of clarity in categorisation became a major issue, with activists and researchers repeatedly pointing out discrepancies between state-level data and NCRB reports. Maharashtra, which consistently had the highest numbers, saw a reported decrease from 2,550 in 2018 to 2,274 in 2019, though local reports suggested that suicides were actually increasing due to agrarian distress linked to erratic monsoon patterns and rising input costs.

In 2020, the situation was exacerbated by the COVID-19 pandemic, which put additional economic pressure on farmers. The NCRB's 2020 data showed 10,677 farmer suicides, but regional analyses indicated that the economic fallout from lockdowns, market disruptions, and migrant labour issues may have led to a spike in unrecorded suicides. In states such as Telangana and Andhra Pradesh, reports of farmer suicides surged despite official figures remaining relatively stable (Sainath, 2015), reflecting ongoing problems in data collection and classification.

The years 2021 to 2024 saw a growing gap between government-reported data and on-the-ground realities. In 2021, the NCRB recorded 10,732 farmer suicides, a slight increase, but analysts highlighted that this figure masked severe distress in drought-prone regions such as Vidarbha in Maharashtra and Bundelkhand in Uttar Pradesh (Sainath, 2015), where farmer suicides were

reportedly climbing. In Punjab, the rising costs of agricultural inputs and the impact of farmer protests against controversial farm laws were also thought to contribute to higher suicide rates, but these were often not reflected in the official data due to ongoing reclassification issues.

By 2023 and 2024, anecdotal evidence and reports from farmer unions suggested that farmer suicides were still a serious issue, but national data remained sparse (ibid). As of 2024, farmer suicides continued to be underreported due to flawed categorisation, with much of the data hidden under broader classifications such as 'daily wage earners' or 'Others,' making it difficult to accurately gauge the full extent of the crisis.

#### Exclusion of women

With regards to the gendered rates of change of farmer suicides, the data indicates that the majority of those who commit suicide are male farmers. For instance, in 2022, of the 11,290 total suicides, 10,471 were men, while only 819 were women. This gender disparity suggests that male farmers are disproportionately affected, likely due to their direct involvement in farming and financial responsibility for their families (Mohanty, 2017). However, the lower number of female suicides may also reflect underreporting or gender-based exclusion from official data, as women often work as agricultural labourers or support in informal roles that are not recognised officially (KRRS/LVC India, 2017).

State		2015	2016	2017	2018	2019	2020	2021	2022
Andhra Pradesh	Total	916	804	816	664	1029	889	1065	917
	Male	824	730	704	593	839	805	958	798
	Female	92	74	112	71	190	84	107	119
Karna-	Total	1569	2079	2160	2405	1992	2016	2169	2392
taka	Male	1485	1876	2045	2232	1842	1893	2050	2201
	Female	84	203	115	173	150	123	119	191
Madhya	Total	1290	1321	955	655	541	735	671	641
Pradesh	Male	1152	1224	918	643	529	704	614	608
	Female	138	97	37	12	12	31	57	33
Maha-	Total	4291	3661	3701	3594	3927	4006	4064	4248
rashtra	Male	4086	3480	3485	3360	3650	3760	3860	4009
	Female	205	181	216	234	277	246	204	239
Tamil	Total	606	381	387	401	427	477	599	728
Nadu	Male	449	321	331	303	294	401	529	681
	Female	157	60	56	98	133	76	70	47
Tel-	Total	1400	645	851	908	499	471	359	178
angana	Male	1241	572	732	801	442	423	330	173
	Female	159	73	119	107	57	48	29	5

Table 3: Farmer Suicides, disaggregated by gender

The 2014 NCRB report on suicides in India introduced a more detailed classification. Notable, it added the category of agricultural labourers, distinct from that of daily wage earners (NCRB, 2014). Suicides among agricultural labourers is higher than those of farm owners.

Mayer (2017) explores the puzzling drop in reported farmer suicides between 2013 and 2014. There is no clear explanation for this fall in the rate of farmer suicides. This emphasises the need to broaden the scope of rural suicide studies to include agricultural labourers as well as housewives, given their significant suicide rates. Mayer's commentary extends to regional variations- for example, the large variation in suicide rates in Puducherry and Kerala for farmers and housewives over the years (ibid).

# **Underreporting of Tenant Farmers**

Many tenant farmer suicides were reclassified as 'agricultural labourers', further diluting the actual count of farmer suicides. Tenant farmers, who often lack formal recognition or documentation, often fail to be accounted for in national suicide statistics (Tiwari, 2020). Estimates suggest that tenant farmers constitute about 30-40% of the total farming population in India. This demographic is particularly vulnerable, facing high levels of indebtedness and insecurity, yet their representation in suicide statistics remains disproportionately low (ibid). For example, in 2020, while the NCRB reported 10,677 farmer suicides, research by organisations such as the People's Archive of Rural India (PARI) indicated that the true number, when factoring in tenant farmers, could be as high as 15,000.

The lack of a robust classification system that recognises tenant farmers contributes to this underreporting. Tenant farmers are often excluded from government schemes aimed at supporting farmers, which not only exacerbates their financial difficulties but also leads to their deaths being misclassified in official records (ibid). Consequently, the persistent invisibility of tenant farmers in the suicide statistics not only underrepresents the agrarian crisis but also hampers efforts to address the systemic issues that lead to such tragedies.

# Missing Data

The first case of missing farmer suicide data was in 2011, in Chhattisgarh (where 80% of the population is rural, and agriculture is the main occupation). Other states followed suit, underreporting suicides through category manipulations.

Previously, between 2006-2010, farmer suicides averaged 1,555 annually. However, this figure starkly contrasts with later trends. For instance, in 2015, after the reclassification changes were implemented, reported farmer suicides in India rose to approximately 12,602. By 2016, the National Crime Records Bureau (NCRB) reported 11,379 suicides, but analysts believe that the actual figures were significantly higher due to continued underreporting and data manipulation.

In 2014, a record 12 states and 6 Union Territories (including three major agricultural states such as West Bengal, Rajasthan, and Bihar) declared that no farmer suicides had occurred, which is highly suspect—even in comparison with the total number of suicides. In comparison, in 2010, no large state claimed such figures, making this 2014 data implausible.

This trend of missing data has persisted. In 2019, while the NCRB reported 10,349 farmer suicides, studies indicated that the true number could have been much higher, particularly as reports of unrecorded suicides emerged from regions facing severe agrarian distress. For example, in Maharashtra, an estimated 3,000 suicides have been reported, yet many more were thought to go unrecorded due to misclassification.

By 2020, the impact of the COVID-19 pandemic further complicated reporting, with a noticeable spike in agrarian distress leading to a reported 10,677 farmer suicides. However, activists suggested that the actual numbers could be upwards of 15,000 when factoring in underreported tenant farmer suicides. The years 2021 to 2024 continued to highlight this issue, with the NCRB reporting 10,732 suicides in 2021, despite many regions indicating increased rates of distress and suicide among farmers. This ongoing trend of missing or manipulated data raises serious concerns about the true scale of the farmer suicide crisis in India.

# 5.2 Policy interaction with risk factors associated with farmer suicides

This analysis considers the interaction on risk factors with the policy themes (via the associated economic factors as well). These policy themes, consist of processes involving a design and an implementation though primarily

#### **Rural Credit**

#### 2011-2014: Focus on Financial Inclusion

The National Rural Livelihoods Mission (NRLM) was launched in 2011 to enhance financial inclusion and provide credit to the rural poor, focusing on self-help groups (SHGs). Banks were encouraged to lend to farmers under priority sector lending. However, access to credit remained a challenge due to high collateral requirements and bureaucratic hurdles.

Government policies, including the National Rural Livelihoods Mission (NRLM) and priority sector lending, attempted to formalise credit for farmers. However, informal moneylending persisted as a critical source of debt for those without access to formal credit, particularly landless farmers. As described by Tripuraneni and Robbins (2024), state efforts to eliminate informal lending have failed, and formal credit has often been used to repay informal loans, creating a debt trap for many farmers.

#### 2015-2019: Expansion, New Initiatives, and Financialisation

The government intensified efforts to provide easy access to credit through schemes such as the Pradhan Mantri Mudra Yojana (PMMY) in 2015, aimed at micro and small enterprises. The Direct Benefit Transfer (DBT) scheme was implemented to ensure that subsidies and benefits reached farmers directly, reducing reliance on intermediaries. Interest subvention schemes were introduced, allowing farmers to borrow at lower rates, but these often failed to cover the cost of production adequately.

However, at the same time it was noted that the growing reliance on microfinance and private credit institutions increased rural indebtedness, particularly among vulnerable groups such as women. Marcus Taylor's study on the microfinance crisis in Andhra Pradesh outlines how

microfinance institutions, by banking on rural vulnerability, drove farmers deeper into cycles of debt without resolving the structural causes of agrarian distress, including trade liberalisation and fluctuating crop prices (Taylor, 2011). Women in Karnataka have been at the forefront of protests against microfinance companies (KRRS/LVC India, 2017). These protests, although largely undocumented in national media, highlight the harassment rural women face due to microfinance debt, further exacerbating debt-related distress.

#### 2020-2024: Digitalisation and Shift in Policy Focus

The use of technology in agriculture financing increased, with mobile banking and digital platforms facilitating credit access. Initiatives such the Kisan Credit Card (KCC)- which though an old programme (initiated in 1998 by public banks)- were promoted for easy loan access. The COVID-19 pandemic necessitated emergency credit measures, leading to the implementation of schemes such as the Emergency Credit Line Guarantee Scheme (ECLGS) to support farmers during economic downturns.

While some states, such as Maharashtra and Madhya Pradesh, have implemented partial loan waivers, these measures are short-term solutions that fail to address the deeper economic challenges faced by farmers. Their consistent occurrence just before general and state elections take place is also key to note.

Rural women, particularly those involved in microfinance schemes, have borne a disproportionate burden of debt. The case study of women's protests in Karnataka illustrates how women face harassment and social stigma due to indebtedness. Although self-help groups (SHGs) have empowered some women by providing credit access, these benefits are often overshadowed by the negative consequences of microfinance debts, as outlined in the KRRS/LVC (2017) case. Women in rural India are often responsible for managing household finances, and the growing indebtedness exacerbates their already precarious position within the household and community. Microfinance institutions have leveraged women's vulnerability, leading to an intensified crisis of social reproduction among land-poor and landless labourers.

# Environmental Sustainability and Resource Management

These policies are designed to improve agricultural productivity and reduce climate and pest-related risk in agricultural production. They focus on expanding irrigation infrastructure, promoting water-use efficiency, and advancing crop technologies such as genetically modified (GM) seeds to increase yields.

#### 2011-2014: Water Conservation and Expansion of Bt Cotton

The National Mission for Sustainable Agriculture (NMSA) (2014) targeted small and marginal farmers, particularly those in rain-fed and drought-prone regions. It aimed to promote sustainable agriculture by improving water-use efficiency, conservation, and promoting the adoption of climate-resilient crops. However, it had limited implementations in many states, with benefits mostly reaching regions with already existing quality infrastructure. And, the outreach programme associated with this resulted in a significantly slower than planned adoption of water conservation techniques.

The ongoing National Food Security Mission (NFSM) pushes for an increase in crop productivity through the use of improved seeds, modern farming technologies, and biotech solutions. This programme targets farmers of protected crops such as wheat and rice. It acts in continuance of Green Revolution era policies that promote and protect (in terms of price stability and procurement) these select crops. These inputs are expensive- especially that of GM seeds. Additionally, farmers growing non-cash crops such as cotton are experiencing the brunt of agrarian distress, yet have been excluded from the programme's direct benefits.

Maharashtra's Micro-Irrigation Policy (especially intended for those cultivating high-value cash crops such as cotton, sugarcane, and horticultural crops) aimed to increase water-use efficiency. This was especially important in the context of the State's rapidly depleting groundwater supply. Yet again, the expense of this equipment made it primarily accessible to large, not marginal farmers. Another concern that was apparent in the implementation of this policy was the need for up-front capital, and maintenance costs. The policy did not reach its intended groups.

The Biotechnology Policy of Maharashtra (for the expanded use of Bt Cotton) promoted GM seeds to cotton farmers in drought-prone regions such as Vidarbha. Ironically, while the other policies in this section tried to improve agricultural productivity by enhancing irrigation capacity, Bt cotton is an expensive, timely water-intensive crop.

### 2015-2019: Expanding irrigation, protections for agro-forestry

Between 2015 and 2019, the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) aimed to improve irrigation infrastructure across the country. The scheme included components such as 'Har Khet Ko Pani' (Water for Every Field) and 'Per Drop More Crop'. Regional disparities emerged, with northern and western states receiving a disproportionate share of funding. The maintenance of irrigation systems also posed challenges, particularly for small farms where inadequate local infrastructure hindered the effective use of these systems.

The National Agricultural Insurance Scheme (NAIS) and Pradhan Mantri Fasal Bima Yojana (PMFBY) introduced in 2016 sought to provide financial security to farmers facing crop failures due to natural calamities such as droughts and floods. While these schemes aimed to compensate farmers for losses, delays in claim settlements have frustrated beneficiaries, with compensation often arriving too late to mitigate financial distress. Moreover, smaller farmers have struggled to access insurance benefits due to bureaucratic hurdles and a lack of awareness. In some regions, the high premiums associated with the schemes have discouraged enrolment, leading to underutilisation among the most vulnerable farmers.

The National Agroforestry Policy (launched in 2014) promoted the integration of trees into agricultural systems, thereby enhancing farm income and environmental sustainability. However, adoption rates of agroforestry have been low, particularly among small and marginal farmers who prioritise immediate economic returns over long-term environmental benefits. A key issue has been the lack of extension services and technical support, which has left many farmers without the necessary knowledge to integrate agroforestry practices effectively.

#### 2020-2024: Modernising irrigation and mitigating agri-production risk

From 2020 to 2024, the Pradhan Mantri Krishi Sinchayee Yojana 2.0 (PMKSY 2.0) continued efforts to expand irrigation networks, with a renewed focus on water-scarce and rain-fed regions.

The allocation of funding remained inefficient, with well-irrigated regions continuing to receive a disproportionate share, while severely water-scarce areas such as Vidarbha and Marathwada were neglected. Small and marginal farmers also struggled to afford micro-irrigation systems, even with subsidies, particularly in regions with inadequate infrastructure support. Larger landowners, by contrast, were better able to access infrastructure and government support, deepening inequalities.

The Pradhan Mantri Fasal Bima Yojana 2.0 (PMFBY 2.0), implemented between 2020 and 2021, sought to expand insurance coverage for farmers affected by natural disasters, pests, and diseases. Although the scheme introduced simplified claim procedures with direct payments to farmers through online platforms, delays in claim processing and disbursement remained prevalent. Additionally, smaller farmers continued to face barriers to accessing insurance, including bureaucratic hurdles and a lack of awareness. In some regions, high premiums continued to discourage enrolment, particularly among small and marginal farmers.

Under the Atmanirbhar Bharat Abhiyan, irrigation reforms introduced in 2020 aimed to modernise irrigation infrastructure and expand the adoption of water-efficient technologies. These reforms included the promotion of digital solutions for irrigation management.

The National Agroecology Policy, launched in 2023, focused on promoting environmentally sustainable agricultural practices, particularly among small and marginal farmers. The policy encouraged the integration of agroecological principles, such as water conservation, reduced chemical inputs, and ecological diversity. However, uptake among small and marginal farmers has been slow due to financial constraints, with many farmers prioritising short-term gains over long-term ecological benefits. The lack of adequate extension services and technical guidance has further hindered the policy's impact, particularly in less developed rural areas.

Similarly, the National Policy for Organic Farming, introduced in 2023, targeted small and marginal farmers with the goal of reducing dependence on chemical inputs and promoting organic farming practices. While the policy emphasised the use of organic inputs and sustainable water management techniques, the high costs associated with organic farming have deterred many small farmers from transitioning. Moreover, market access for organic products has been limited to well-connected regions, and farmers in water-scarce areas have struggled to implement organic farming practices without sufficient irrigation infrastructure.

Lastly, the expansion of the Rythu Bandhu Scheme in Telangana in 2020 continued to provide direct cash support to farmers, offering ₹5,000 per acre per season to invest in agricultural inputs. The scheme disproportionately benefited large landholders due to its per-acre payment structure. Tenant farmers, who constitute a significant portion of the agricultural workforce, were excluded from the scheme's benefits.

# **Input Costs and Subsidies**

2011-2014: Direct Subsidies and Price Volatility
During this period, the government aimed to stabilize input costs for farmers through direct subsidies on essential inputs like fertilizers, seeds, and irrigation. The National Food Security Mission expanded support for essential crops, offering subsidized seeds and fertilizers. However, despite these efforts, price volatility—particularly in imported fertilizers—created challenges, as input

costs remained unstable. The Soil Health Card Scheme was piloted in some states to promote efficient fertilizer use and soil management, although its full impact would only be seen in later years.

Policies during this period attempted to bring down input costs and encourage sustainable practices. However, rising global prices for inputs and limited reach of subsidies left many small farmers heavily reliant on credit, which deepened financial strain.

## 2015-2019: Intensified Subsidy Programs and Direct Transfers

With rising input costs, the government intensified subsidy programs. The Soil Health Card Scheme was officially launched in 2015, allowing farmers to manage soil nutrient levels more effectively and reduce fertilizer overuse. In 2016, the Pradhan Mantri Fasal Bima Yojana (PMFBY) was introduced to cover crop losses due to natural calamities, indirectly relieving input cost pressures. Additionally, Direct Benefit Transfer (DBT) schemes were introduced to ensure subsidies reached farmers directly, minimizing delays and reducing intermediary corruption.

However, as fuel and fertilizer prices continued to rise, these subsidies were often insufficient to meet actual production costs, particularly for smallholder farmers, who struggled with ongoing input cost inflation despite these schemes.

## 2020-2024: Increased Subsidies and Sustainability Focus

This period saw further enhancements to input subsidies alongside a shift towards sustainable practices. The PM-KISAN scheme provided small and marginal farmers with direct cash transfers to help offset input expenses, increasing subsidies and ensuring predictable support. The government also promoted organic farming practices, introducing the National Policy for Organic Farming (2023) to reduce dependency on chemical inputs.

Despite these advancements, climate-related challenges—like unpredictable rainfall and extreme weather—intensified input costs, making it challenging for subsidies alone to address rising production expenses.

#### Market Infrastructure and Access

#### 2011-2014: Infrastructure Expansion

This period saw investments in rural infrastructure, such as the Pradhan Mantri Gram Sadak Yojana (PMGSY), which improved rural connectivity, facilitating better market access. The National Agricultural Market (e-NAM) began laying groundwork to create a digital platform for trading agricultural produce, intending to link physical APMC markets across the country. Rural road expansion continued, yet small farmers often found it difficult to access formal markets, relying heavily on intermediaries.

#### 2015-2019: Digital Platforms and Market Linkages

The e-NAM platform was officially launched in 2016 to provide a unified national market, aiming to reduce inter-state barriers and improve price transparency. This period also saw the introduction of the National Agricultural Market which promoted online transactions, allowing farmers to sell produce across state lines. While digital platforms enhanced transparency, technological challenges and low digital literacy in rural areas limited the platform's impact for smallholder farmers.

# 2020-2024: Expanding Digital and Direct Market Access

Market reforms continued with a push towards digitalization and direct market access. The Digital Agriculture Mission sought to leverage technology for more efficient supply chains and better market linkage, helping farmers reach urban markets without relying on intermediaries. Karnataka's Digital Agricultural Mission is one example, promoting direct farmer-to-consumer sales. However, lack of adequate digital infrastructure in many rural areas continued to restrict the reach of these programs.

# 5.3 Dimensions of the Appropriation of Surplus Value, Elite Capture, and Data Management

The interaction of risks associated with farmer suicides is associated with both the policy design and its implementation. This study finds that at the policy design level, this is related to the appropriation of surplus value. At the implementation level, it is related to elite capture. The current public data management system is core to the policy process, and it encourages surplus value appropriation by denying the existence of worsening agrarian distress on the ground, thus justifying large-scale changes like the removal of price protections. Additionally, elite capture is also encouraged, as ground reports to the ministerial level report that the people who ought to receive the benefits do (although they may not be).

## Rural Credit: Debt Cycles and Surplus Value Appropriation

Rural credit policies, such as the National Rural Livelihoods Mission (NRLM) and Pradhan Mantri Mudra Yojana (PMMY), are promoted as financially inclusive (Ministry of rural development, no date). However, further analysis shows that these policies often entrench farmers, particularly those with minimal resources, within cyclical debt dependencies (Kennedy and King, 2014). Formal credit, designed without dismantling informal lending systems. This dependence facilitates the appropriation of surplus value from farmers, who are unable to leverage credit effectively due to limited collateral and market agency, pushing them debt traps. This analysis is supported by several other longitudinal studies, including Tripuraneni and Robbins (2024).

#### Environmental Risks: Ecological Fix and Elite Capture

The set of agro-economic policies interacting with the environment have a techno-scientific character. Their goal is the enhancement of agricultural productivity through the introduction of new inputs. For instance, this took place with the continued promotion of genetically modified (GM) seeds and Bt cotton (Kaur, 2020).

Despite learnings from the Green Revolution, there is continued emphasis on high-input agriculture as the primary solution to low yield concerns. In keeping with the fallout of the green revolution strategy, the continuance of resource-intensive farming practices is very risky. Bt cotton itself needs a very large amount of water within a very short window of time, without which the crop will fail- a recurring issue in Vidarbha (Maharashtra) (Ministry of Agricultural Welfare, 2011).

These interventions represent an 'ecological fix' (Büscher and Arsel, 2012). I.e., it addresses symptoms, not the root causes of environmental degradation. Ideally, the focus would be on issues such as land degradation or water scarcity instead. Instead, agribusinesses interests are privileged in the allocation of resources. Thus, elite capture takes place at the policy implementation level. The intended effects of such initiatives are thwarted to an extent.

#### Crop Insurance and Debt

The Pradhan Mantri Fasal Bima Yojana (PMFBY) aims to provide farmers with a safety net against crop failures. This policy primarily serves to mitigate agrarian risk by absorbing some financial liabilities, which ultimately protect private sector interests over farmers' welfare. Until 2024, delays in insurance claims disproportionately impacted small and marginal farmers(PIB, 2024).

### Rising Input Costs, Subsidies

Subsidies such as PM-KISAN fail to address rising input costs. They help in the repeated purchase of expensive, 1-time use inputs. Typically, these are costly inputs and are imported.

## Market Competition and Regulatory Constraints

Market deregulation efforts, such as those seen in the 2020 Farm Laws, highlight how neoliberal policies favour centralisation and privatisation (Drèze, 2020). Smallholder farmers are exposed to heightened market competition sans significant protections in the form of procurement and subsidies.

#### Data Management: Hiding Structural Issues through Elite Capture

Good public data management in policy implementation is cruicial. Sainath (2014), Kulkarni (2023) and others have documented the data mismanagement in farmer suicides and its associated causes. By decreasing the publicity of these issues, the current data management system provides the justification for policies that are not in the interests of small and marginal farmers. The support elite interests (including that of politicians (Biswas, 2019)). The mismanagement of data allows for the assertion that those truly in need have been taken care of, and that media reports otherwise are exaggerated.

# Chapter 6 Discussion

Through a critical longitudinal study of the interaction between economic policies and risk factors associated with farmer suicides, this paper has 3 mechanisms through which farmer suicides are potentially exacerbated.

While examining the evolution of economic policies, it is observed that rural credit schemes, insurance, input subsidies, as well as market deregulation often fail to treat the root causes behind low agricultural productivity and low farm incomes and prices. They focus on the symptoms and the encouragement of an industrialised agricultural landscape.

A worrying trend is that the genre of superficial agricultural interventions can potentially worsen farmers' vulnerability to compounding debt (cycles). So, both the lack of alleviation of existing pressure, and the encouragement of economic decisions that worsen debt burdens are concerns. For instance, policies such as the National Rural Livelihoods Mission (NRLM), Pradhan Mantri Fasal Bima Yojana (PMFBY), as well as other various state-level subsidy schemes, while intended to support rural livelihoods, inadvertently reinforce structural inequalities and elite capture. Small and marginalised farmer are thus more exposed to market fluctuations and rising production costs.

This study develops a conceptual model outlining how economic policies contribute to specific risks linked to farmer suicides (including debt dependency, environmental degradation, input cost inflation, and precarious market conditions). Using an Agrarian Political Economy (APE) framework, this model demonstrates that elite capture does takes place at the policy implementation level, while surplus value extraction and unequal power dynamics is often built in at the design level.

Additionally, this paper investigated management of public data (in particular, suicide data in section 5.1) and its role in policy design and implementation. Here, inconsistent and biased data conceals the true extent of farmer suicides and thus contributes to ineffective policy responses.

This analysis directly addresses the research problem by revealing the mechanisms through which economic policies affect farmer suicides in India. Through the first research objective -to trace the evolution of these policies- this study finds that while rural economic policies have evolved (in terms of infrastructure) to improve financial inclusion and agricultural resilience, they often reproduce existing inequalities by prioritising capital circulation in lieu of sustainable, stable growth in the longer-run.

In addressing the second objective -developing a conceptual model- the analysis identifies how policies interact with economic, social, and environmental risks that elevate suicide vulnerability. Finally, in investigating public data management, the study reveals significant limitations in the state's capacity to capture and respond to the scale of agrarian distress, thereby impairing evidence-based policy formulation.

While the analysis sheds light on the policy dynamics contributing to farmer suicides, it is constrained by several limitations. First, the lack of high-quality, consistent data on farmer suicides and economic stressors restricts the precision and accuracy of the analytical findings. The analysis, thus, is composed via aggregate data and secondary sources, which may mask regional and demographic variations.

Second, although the study explores structural inequalities, it cannot conclusively establish whether policies are intentionally designed to be thus, or if they are instead a mere consequence of the larger neoliberal system. Finally, the study acknowledges the influence of socio-demographic factors, such as caste, gender, and migration, but lacks the disaggregated data necessary to comprehensively analyse how these factors intersect with policy impacts.

# Chapter 7 Conclusions

This study set out to explore the intricate relationship between economic policies and farmer suicides in India, addressing how policy design, implementation, and public data management impact agrarian distress and, ultimately, farmer vulnerability.

Key findings from this analysis indicate that the design of policies enables surplus value appropriation, disproportionately benefiting large-scale agribusinesses and well-connected elites. At the implementation level, elite capture restricts access to intended benefits for the most vulnerable farmers. Moreover, this study has highlighted critical flaws in public data management practices, where data inaccuracies obscure the reality of farmer suicides and complicate evidence-based policy design.

This research contributes to literature on agrarian distress by developing a conceptual model that links policy design and implementation to risk factors associated with farmer suicides. The model identifies how current economic policies interact with suicide risk factors, demonstrating that policies designed to alleviate agrarian distress often overlook the systemic inequalities driving the vulnerability itself.

By emphasizing the impact of public data management on policy outcomes, the study further provides insight into how data transparency and disaggregation are essential for developing effective interventions that can truly reduce farmer suicide rates.

While this study offers valuable insights, its broad scope underscores the need for further, more granular research into specific causal relationships. Future studies might delve deeper into how particular policy dimensions—such as credit policies or crop insurance—affect different demographics within farming communities, paying attention to variables such as caste, gender, and regional factors. Such research could refine our understanding of the social factors intersecting with economic policies and improve targeted interventions. In conclusion, this paper emphasises the urgency for policy reform that moves beyond surface-level support.

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## Appendices

### **Appendix 1- State Policy Events**

Year	Maharashtra- State Policy	Madhya Pradesh- State Policy
1998-99	1998-1999: Maharashtra State Agriculture Debt Waiver - Implemented by the state gov- ernment to waive off loans for drought-hit farmers, an attempt to address rising farmer distress.	
2000		Karnataka Land Reforms Act (Amendment) - Aimed at providing land ownership to landless laborers and enhancing land rights for tenant farmers.
2001	Maharashtra Agricultural Debt Waiver Scheme - A major debt waiver scheme focus- ing on marginal farmers impacted by droughts and crop failures.	Rural Employment Generation Programme (REGP) - Introduced to promote self-employment in rural areas through financial assistance.
2002	-	
2003	The State Agricultural Produce Marketing (Development & Regulation Act, 2003)- direct marketing of agricultural produce, bypassing the monopoly of the APMC mandis. Farmers were permitted to sell their products directly to private buyers, processing companies, and even at organised retail outlets.	
2004	Maharashtra Farmers' Relief Package - Initiated to address the crisis in Vidarbha due to high rates of farmer suicides; provided compensation to families of farmers who committed suicide.	Karnataka State Seed Policy - Focused on promoting seed production and ensuring the availability of quality seeds to farmers.
2005		Karnataka Agriculture Development Policy - Aimed at enhancing agricultural productivity, ensuring sustainable agriculture, and improv- ing farmers' income.
2006	2006-2008: Vidarbha Package - A special relief package for the Vidarbha region, including financial support, loan restructuring, and promotion of sustainable agricultural prac-	Rural Infrastructure Development Fund (RIDF) - Launched to provide financial support for rural infrastructure projects, including irrigation and roads.
2007	tices.	Karnataka Organic Farming Policy - Promoted organic farming practices among farmers to enhance sustainability and environmental protection.
2008		Farmers' Debt Relief Scheme - Implemented to provide financial relief to farmers burdened by debt.
2009		Karnataka State Agriculture Marketing Policy - Aimed at improving marketing facilities for agricultural produce and promoting farmers' welfare.
2010		

2011		Karnataka Agriculture Price Policy - Intro-
		duced to ensure fair pricing for agricultural produce and protect farmers' interests.
2012		Karnataka Farmers' Commission - Established to address the issues faced by farmers and recommend policy changes.
2013		Karnataka State Rural Livelihoods Mission (KSRLM) - Launched to promote sustainable livelihoods for rural households through selfhelp groups (SHGs).
2014		Integrated Watershed Development Programme - Focused on sustainable management of natural resources in rural areas.
2015		Karnataka Agricultural Mission - Aimed at enhancing agricultural productivity through improved research and extension services.
2016	e-NAM Implementation in Maharashtra (2016): Facilitate online trading of agricultural commodities.	Karnataka State Agro-Climate Resilience Action Plan - Aimed at improving farmers' resilience to climate change through sustainable agricultural practices.
2017	Chhatrapati Shivaji Maharaj Shetkari Sanman Yojana (CSMSSY) - A state-level farm loan waiver scheme aimed at reducing farmer in- debtedness by waiving loans up to ₹1.5 lakh.	Chief Minister's Crop Loan Waiver Scheme - Introduced to waive loans for farmers to alle- viate financial distress.
2018		Karnataka State Farmer Welfare Programme - Aimed at providing financial support and welfare schemes for farmers.
2019		Karnataka Agricultural Produce Marketing Committee (APMC) Amendment - To re- form APMC markets and improve farmers' access to better pricing.
2020	Loan waiver (state)	Karnataka State Digital Agricultural Mission - Launched to leverage technology in agricul- ture for better yields and market access.
2021	Maha Vikas Aghadi Loan Waiver Scheme - Another loan waiver scheme implemented by the coalition government for small and mar- ginal farmers.	
2022		Karnataka Agro-Processing Policy - Aimed at promoting agro-processing industries to increase the value addition of agricultural products.
2023		Karnataka State Climate Action Policy - Addressing climate change challenges affecting agriculture and promoting sustainable practices.
2024		Karnataka Rural Employment Policy - Aimed at enhancing employment opportunities in rural areas through skill development and entrepreneurship.

Year	State Govt Policies- Madhya Pradesh	State Govt Telangana	Policies-	Govt a Prade	
2000	Madhya Pradesh Land Ten-				
	ancy Act - Aimed at secur-				
	ing land rights for tenant				

	farmers and improving land tenure security.	
2001	> Self-Employed Women's Association (SEWA) - Pro- moted to support women farmers through micro-fi-	
	nancing and cooperative activities.	
	> Krishi Rin Samadhan Yojana - A scheme to re-	
	schedule loans and offer concessions to farmers who	
	were unable to repay their debts due to crop failures.	
2002		
2003		
2004	Farmers' Debt Relief Scheme - Implemented to provide financial assistance	Rajiv Palle Bata Scheme - Focused on rural devel- opment, including in-
	to farmers facing indebted-	creasing rural credit avail-
2005	ness. Madhya Pradesh State Agri- culture Policy (Revised) -	ability.
	Aimed at increasing agricul- tural productivity and sup- porting farmers' welfare.	
2006	National Agricultural Insurance Scheme - Integrated to	
	provide financial support to farmers for crop loss due to natural calamities.	
2007	Madhya Pradesh Organic Farming Policy - Promoted organic farming practices and provided support for certification.	
2008	Rural Infrastructure Devel-	Debt Relief Scheme - A
	opment Fund (RIDF) - Launched to enhance rural	state-wide loan waiver scheme covering a large
	infrastructure, including	proportion of marginal
	roads and irrigation facilities.	farmers.
2009	Madhya Pradesh State Live- lihood Mission - Initiated to	
	promote sustainable liveli-	
	hoods for rural communities through self-help groups (SHGs).	
2010	8 - 1 - ()	
2011	Madhya Pradesh Agricul-	
	tural Marketing Policy -	
	Aimed at improving mar- keting infrastructure for ag-	
	ricultural products and en-	
	suring better price realisation for farmers.	
2012	Mukhyamantri Kisan Loan	
	Waiver Scheme - Launched	

	to waive off short-term ag- ricultural loans, targeting debt-ridden farmers.		
2013	Kisan Credit Card Scheme (Expanded) - Aimed at providing easy access to credit for farmers to meet their agricultural needs.		
2014	Madhya Pradesh Micro Irrigation Policy - Promoted micro-irrigation techniques to enhance water efficiency in agriculture.	Rythu Bandhu Pathakam - Telangana government scheme providing ₹8,000 per acre per year for two cropping seasons to farmers as direct finan- cial support.	Andhra Pradesh Loan Waiver Scheme - Launched after the state bifurcation, targeting dis- tressed farmers with loans waived up to ₹1.5 lakh.
2015	Madhya Pradesh Soil Health Management Policy - Launched to promote soil health through sustainable practices and efficient ferti- lizer use.		
2016			
2017	Madhya Pradesh Kisan Samman Nidhi - Intro- duced as a financial assis- tance scheme to support farmers' income.		
2018	Madhya Pradesh Integrated Agriculture Development Programme - Focused on enhancing productivity through integrated farming systems.	Rythu Bandhu Scheme (Farmers' Investment Support Scheme) - Landmark scheme providing ₹4,000 per acre per season as direct support to farmers for investment in agriculture.	
		Telangana Crop Loan Waiver Scheme - Imple- mented a loan waiver for loans up to ₹1 lakh to reduce farmer in- debtedness.	
2019	Madhya Pradesh Farmers' Debt Relief Policy - Implemented to provide relief to farmers burdened by debt due to crop failure and other issues.	Rythu Bima Scheme (Farmers' Insurance) - Provides life insurance cover of ₹5 lakh to the family of deceased farmers to ensure social security.	YSR Rythu Bharosa Scheme - Provides ₹13,500 annually to farmers as financial sup- port, including crop in- surance and financial as- sistance for various agricultural needs.
2020	Madhya Pradesh Agricultural Extension Policy - Aimed at enhancing agricultural extension services to improve farmers' knowledge and practices.	Second Phase of Rythu Bandhu Scheme - Increased financial support under the scheme to ₹5,000 per acre per season.	

2021	> Interest-Free Loan	Interest-Free Loans for
	Scheme - Provides interest-	Farmers - Scheme offer-
	free loans up to ₹3 lakh to	ing interest-free loans to
	farmers, intending to reduce	farmers up to ₹3 lakh,
	the burden of high-interest	aimed at reducing de-
	debt from private lenders.	pendence on informal
	> Madhya Pradesh Organic	credit.
	Farming Promotion Policy -	
	Revised to support organic	
	farming initiatives and ex-	
	pand certification efforts.	
2022	> Mukhyamantri Kisan	
	Kalyan Yojana - Modeled	
	after the central PM-	
	KISAN scheme, providing	
	direct income support to	
	farmers.	
	> Madhya Pradesh Agro-	
	Processing Policy - Aimed	
	at promoting agro-pro-	
	cessing industries to in-	
	crease the value addition of	
	agricultural products.	

#### Appendix 2- National Policy Events

Year	National Policies
1980	National Rural Employment Programme (NREP, 1980) The National Rural Employment Programme was launched in 1980 as an anti-poverty and anti-unemployment program. The aim was to develop key assets, such as fisheries, fuel and energy plantations, and fodder and pasture development plantations by mobilising unemployed and under-employed laborers. It was also hoped that the project would succeed in the development of homestead projects for the homeless alongside essential economic infrastructures, such as godowns, banks, and workshops for the beneficiaries.
1981-82	
1983	Rural Landless Employment Guarantee (RLEG, 1983) The Rural Landless Employment Guarantee was a program funded by the central government for the landless with guaranteed employment for at least 100 days. While 25% of the funds were allocated for social forestry and 20% for housing, 10% for also earmarked for the benefit of only SC/ST communities.
1989	Jawahar Rozgar Yojana (JRY, 1989) The Jawahar Rozgar Yojana scheme was launched on the 1st of April, 1989 by a consolidation of the NREP and RLEGP While the general aims were the same, the primary demographic target were people below the poverty line.
1990	National Agricultural Policy - Focused on promoting sustainable agriculture, increasing productivity, and improving rural credit availability.
1991	
1992	
1993	
1994	Employment Assurance Scheme (EAS, 1993) The Employment Assurance Scheme was launched on the 2nd of October, 1993 specifically to address unemployment and underemployment during lean

	agricultural seasons where able-bodied adults in rural areas could not find
	enough work. It was also hoped that through this scheme, community, social and economic assets would be created for further sustained employment and development
1995	
1996	
1997	
1998	World Bank funded ATMA projuct- Agricultural Technology Management Agency (Pilot)https://mpra.ub.uni-muenchen.de/45549/8/MPRA paper 45549.pdf
1999	<ul> <li>Jawahar Gram Samridhi Yojana (JGSY, 1999)         The Jawahar Gram Samridhi Yojana was launched on the 1st of April, 1999 specifically to create demand-driven village infrastructure. It was hoped that this scheme would create new employment opportunities for the under-employed and unemployed poor living in rural areas. Special preference would be given to the SC/ST families living below the poverty line and for physically handicapped persons.</li> <li>Swarna Jyanti Gram Swarojgar Yojana (SJGSY, 1999)         The Swarnajayanti Gram Swarojgar Yojana was launched on the 1st of April, 1989 with its primary aim towards the creation of self-employment opportunities for the rural poor. This scheme envisioned the upliftment of the low-income families (referred to as the swarojgaris) into self-help groups through mobilisation, capacity building and provision of income generating assets.</li> </ul>
2000	Micro Finance Development and Equity Fund (Farmers) - Established to provide financial assistance to small farmers and promote self-help groups.
2001	Sampoorna Gramin Rozgar Yojana (SGRY, 2001) The Sampoorna Gramin Rozgar Yojana was launched on the 25th of September, 2001 aimed towards providing gainful employment for the rural poor. One of the other primary aims of the scheme was also to provide employment and food for people who lived below the poverty line and had special provisions for women, scheduled castes, scheduled tribes and persons employed in hazardous occupations. Additionally, the employment of contractors and middlemen was not permitted under this scheme.
2002	National Agriculture Insurance Scheme - Implemented to provide financial support to farmers in case of crop loss due to natural calamities.
2003	National Horticulture Mission (Farmers) - Aimed at promoting horticulture and enhancing farmers' income through better production and marketing.
2004	<ul> <li>&gt; Pradhan Mantri Gram Sadak Yojana (PMGSY) (Infra) - Launched to improve rural road connectivity, thereby benefiting farmers by enhancing market access.</li> <li>&gt; National Farmers Policy - Introduced to double farmers' income by improving access to credit, technology, and market linkages.</li> <li>&gt; National Food for Work Programme (NFWP, 2004)</li> <li>The National Food for Work Programme was launched on the 14th of November, 2004 specifically for the 150 most backward districts of India in order to create supplementary wage employment for manual unskilled labour in need of wage employment. The NFWP was subsequently subsumed under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).</li> </ul>
2005	ATMA (Agency) established for 7 states
2006	> Rural Debt Relief Scheme - Provided debt relief to small and marginal farmers across the country, addressing high levels of indebtedness. > National Rural Employment Guarantee Scheme (NREGS, 2006) The National Rural Employment Guarantee Scheme, later renamed as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) aimed to provide 100 days of guaranteed wage employment in every financial year in every household whose household members agreed to do unskilled manual work. Like the NREP and the SJGSY, the NREGS aimed to rope in rural infrastructure development through the employment of manual workers in irrigation canal projects, roads and flood control and drought-proofing infrastructure projects.

2007	> RKVY
	> National Agricultural Policy (Revised) (Farmers) - Aimed at enhancing
	productivity, sustainability, and farmers' welfare.
2008	> Agricultural Debt Waiver and Debt Relief Scheme - Waived off ₹60,000 crore of agricultural loans for millions of farmers across the country, one of the largest debt waiver schemes in the country's history. ADWDRS (Centre) > Prime Minister Employment Generation Programmes (PMEGP, 2008) The Prime Minister Employment Generation Programme (PMEGP) is aimed towards creating jobs in rural, as well as urban areas through various self-employment enterprises. It is a conflation of the PMRY (Prime Minister's Rozgar Yojana) and REGP (Rural Employment Generation Programme). It is hoped that this project will create sustained employment opportunities for a large segment of traditional and emerging artisans and other small entrepreneurs through the setting up of micro enterprises. > National Livestock Policy (Farmers) - Focused on improving livestock production and enhancing the livelihoods of livestock farmers.
2009	<ul> <li>National Food Security Act (Farmers) - Aimed at ensuring food and nutritional security for people, benefiting farmers indirectly.</li> <li>Market Linked Focus Product Scheme (MLFPS) Foreign Trade Policy 2009-14 (extended interest subsidy scheme + export promotion of capital goods)</li> </ul>
2010	<ul> <li>National Rural Livelihood Mission (NRLM) - Integrated into state policies to promote self-employment and livelihoods in rural areas.</li> <li>NBS, NCU (45 kg Urea bags),</li> <li>Formation of FPOs through SFAC as nodal agency</li> <li>ATMA expanded</li> <li>National Dairy Plan (Agribusiness) - Launched to increase milk production and support dairy cooperatives.</li> </ul>
2011	> PODF > National Agricultural Innovation Project (NAIP) (Admin) - Aimed at promoting agricultural innovation and technology transfer.
2012	National Policy for Skill Development and Entrepreneurship (Farmers and Agribusiness) - Focused on enhancing skill development in agriculture and agribusiness sectors.
2013	<ul> <li>National Policy and Process Guidelines for FPOs</li> <li>Vishesh Krishi and Gram Udyog Yojana</li> <li>Direct Benefit Transfer</li> <li>Export Promotion Capital Goods Scheme</li> <li>National Food Security Mission (NFSM) (Farmers) - Aimed at increasing the production of rice, wheat, and pulses to enhance food security.</li> </ul>
2014	> PRODUCE Fund > National Mission for Sustainable Agriculture (NMSA) > ATMA expanded > Soil Health Card Scheme (Farmers) - Launched to provide soil health cards to farmers for better soil management practices.
2015	<ul> <li>New Urea Policy (Centre), MACP (State).</li> <li>soil health card</li> <li>Merchandise Exports from India Scheme (MEIS)</li> <li>State, Nat. Disaster Response Fund</li> <li>Pradhan Mantri Krishi Sinchayee Yojana (irrigation network)</li> <li>National Agroforestry Policy (Farmers) - Promoted agroforestry systems to enhance farm productivity and sustainability.</li> </ul>
2016	<ul> <li>&gt; Pradhan Mantri Fasal Bima Yojana (PMFBY) - Launched to provide crop insurance and protect farmers against crop failures due to natural disasters.</li> <li>&gt; NFSA, VNSSM, Cotton MSP hiked</li> </ul>

2017	> Focus Market Scheme ends
2017	> National Policy on Electronics (NPE) (Agribusiness) - Encouraged the devel-
	opment of electronics in agriculture for precision farming and smart agriculture.
2018	> Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) - Launched to provide
	direct income support of ₹6,000 per year to small and marginal farmers.
	> Doubling Farmers' Income by 2022 (Dalwai Committee) > Agri-Export Policy in 2018
2019	> Agriculture Export Policy (Agribusiness) - Aimed at doubling agricultural ex-
201)	ports and improving market access for farmers.
	> Farm Laws (later repealed in 2021) - Enacted to open up agricultural markets
	to private players, though the laws were widely protested by farmers who feared
	that the removal of MSP guarantees would worsen rural distress.  > Central Sector Scheme for Promotion and Nurturing of FPOs
2020	> CCI Procurement Enhanced
	> Atmanirbhar Bharat Abhiyan (Self-Reliant India Initiative) (Admin) - Included
	various reforms in agriculture to enhance farmers' income and promote agribusi-
	ness.
2021	> Repeal of the Farm Laws, following the largest peasant protest in history
	> Remission of duties/ taxes on export products scheme, replaces MEIS 10% customs duty imposed on cotton since 2nd February 2021
	> National Mission for Sustainable Agriculture (Farmers) - Aimed at promoting
	sustainable agricultural practices and enhancing productivity.
	> Pradhan Mantri Kisan Mandhan Yojana (PM-KMY) (Farmers) - Launched to
	provide a pension scheme for small and marginal farmers, ensuring financial security in old age.
2022	> National Fisheries Policy (Farmers) - Focused on enhancing fish production
	and improving livelihoods in fishing communities > Digital Agriculture Mission (Admin and Farmers) - Aimed at leveraging tech-
	nology for improving agricultural productivity, enhancing data-driven decision-
	making, and promoting digital literacy among farmers.
2023	> National Policy on Biofuels (Agribusiness) - Aimed at promoting the produc-
	tion and use of biofuels in agriculture and energy sectors.
	> 2023: National Policy for Organic Farming (Farmers) - Aimed at promoting
	organic farming practices across the country, improving farmers' access to organic markets.
	> National Agroecology Policy (Farmers) - Focused on sustainable agricultural
	practices that are ecologically sound, economically viable, and socially just.
	> PM-KISAN 2.0 (Farmers) - An extension of the Kisan Samman Nidhi scheme
	with enhanced benefits for farmers, including increased financial support and eligibility for a larger number of farmers.
2024	> National Rural Livelihoods Mission (NRLM) (Farmers) - Aims to reduce pov-
	erty by promoting self-employment and organisation of rural poor into SHGs.
	> Pradhan Mantri Krishi Sinchai Yojana (PMKSY) 2.0 (Farmers) - A revamped
	version of the irrigation scheme aimed at ensuring "Har Khet Ko Pani" (water for every field) through improved irrigation infrastructure and water conserva-
	tion methods.
	> National Agriculture Development Programme (Farmers) - Aimed at improv-
	ing agricultural productivity and farmers' income through innovative approaches
	and technology integration.  > National Policy for Sustainable Livelihoods (Farmers and Agribusiness) - Fo-
	cused on promoting sustainable livelihoods in rural areas through skill develop-
	ment and entrepreneurship initiatives.