

**AHMEDABAD UNIVERSITY**  
**Proposal Submission Form (Seed Grant)**

## **1. Introduction**

More than fifty years have passed since the break of the Naxalite movements in India. The insurgency, which broke in the northern part of West Bengal in 1967, has now consolidated its hold over a swath of territory stretching over the eastern, central, and southern states of India in the last five decades. According to the Ministry of Home Affairs (MHA), conflicts related to Left Wing Extremism (LWE) have claimed the lives of 8625 people between 2004 to 2022<sup>1</sup>. The numbers are projected to be far greater when we consider the five decades of conflict. Moreover, the civil unrest has threatened economic investment, energy supplies and inclusive economic development (Banerjee, 2008). Although MHA identifies some parts of 11 states affected by LWE, the literature in the field underscores that irrespective of state boundaries, all the affected areas have one common problem - socio-economic deprivation and low standard of living.

In the last couple of decades, much of the developmental policy debates in India have been centred on poverty, unequal income distribution, and socio-economic deprivation and disparity (Mukhopadhyay & Banik, 2013). Moreover, MHA formed a separate division in 2006 to address the root causes of underdevelopment and to assist the local and state government in providing extra security in the LWE-affected areas. According to recent reports, MHA has several schemes to improve communication, transportation, security, financial inclusion, as well as employment opportunities in the area. In this study, we would like to estimate the relationship between such proactive policies taken by the State and Central Governments and the LWE insurgency and violence by focusing on the “Red Corridor”<sup>2</sup> area of India using district and village/panchayat level data. One of the impediments to exploring such an association is the endogeneity issue stemming from reverse causality. Since socio-economic deprivation has been predominant in the affected areas from the very beginning and has been established as one of the root causes of the LWE insurgency in the first place, it is hard to establish the direction of the relationship. Does deprivation cause LWE-related violence, or does the violence further ensure deprivation and threaten development? We would like to use the spatial regression discontinuity method to disentangle this problem.

## **2. Objectives**

We intend to study the relationship between the implementation of development projects and LWE-related violence using district and village/panchayat level data over the last couple of decades. We would like to use data from multiple welfare schemes implemented by the

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<sup>1</sup> <https://www.mha.gov.in/en/divisionofmha/left-wing-extremism-division>

<sup>2</sup> Typically, some parts of the eastern, central and southern India that experience a substantial amount of Naxalite–Maoist insurgency is identified as the Red Corridor.

Government of India<sup>3</sup> and implemented by MHA<sup>4</sup> to explore the association between implementation of such policies and increase or decrease in the LWE related violence.

### **3. Review status of R & D in this area**

There are extensive theories on how public policy can affect civil conflicts across the globe (Martin-Shields and Stojetz, 2019; Nandwani, 2015; Crost et al., 2014; Dube and Vargas, 2013; Nunn and Qian, 2012; Berman et al., 2011). However, rather surprisingly, the findings cannot reach a consensus on the direction of the effect of such welfare programs on violence. A similar dichotomy is observed in the papers addressing the Indian Naxalite movement. Khanna and Zimmerman (2012) and Srivastava (2014) find a rise in violence with the implementation of NREGA, whereas Fetzer (2014) and Banerjee and Saha (2010) find that Maoist inflicted violence has reduced with the introduction of NREGA. Such conflicting findings emphasize the need for further research to understand the relationship between public welfare programs and Maoist unrest (Ghatak and Eynde (2017)).

### **4. Importance of the proposed study**

Since the socio-economic distribution has been established as the root cause of civil insurgencies, we hypothesize that identifying the mechanism through which the government has undertaken development projects that affect LWE-related disturbance is crucial for ascertaining a better method to establish local democracy in the affected areas. On the other hand, the literature in the field has dichotomous findings, thereby giving rise to ambiguity in policy debate. We believe a granular geographical level analysis will help us understand the underlying mechanism governing the increase or decrease in violence in response to welfare programs. To the best of our knowledge, this project will be the first to analyze the relationship with village-level/panchayat-level data.

### **5. Methodology**

In this study, our outcome variable is LWE-related violence, and our treatment is the policy implemented at the state and/or district level. The challenge is two-fold. Firstly, it will require rigorous data collection at a granular level. We will require data on both the welfare programs as well as on conflict and violence. In order to compile the panchayat level data for each of the public welfare projects undertaken for India and specifically for the LWE-affected areas, hand

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<sup>3</sup> Such as Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA); Pradhan Mantri Gram Sadak Yojana (PMGSY); District Primary Education Program (DPEP); Sarva Siksha Aviyan (SSA); National Rural Health Mission (NHRM).

<sup>4</sup> Such as Security Related Expenditure (SRE) Scheme; Special Central Assistance (SCA) for 30 most LWE affected districts; Special Infrastructure Scheme, along with Construction of Fortified Police Stations in the LWE affected States; Scheme of Fortified Police stations; Assistance to Central Agencies for LWE management Scheme; Civic Action Programme (CAP); Road Requirement Plan-I (RRP-I) for LWE affected areas; LWE Mobile Tower Project.

curation is needed. Furthermore, we will be using the village-level data provided by the Socioeconomic High-resolution Rural-Urban Geographic Platform for India (SHRUG) to augment our understanding of socio-economic and demographic conditions. The conflict data will be collected primarily from the Global Terrorism Database (GTD,) which provides detailed geo-coded data on LWE-related violence. Additionally, we will access similar data collected by the MHA or reported in the local media.

Secondly, the challenge lies in disentangling the reverse causality nature of the treatment and outcome. It is hard to identify the direction of causality since socioeconomic deprivation may cause unrest, and the unrest may also threaten socioeconomic development. To handle this issue, we would like to implement a spatial regression discontinuity model that uses spatial variation in the implementation of policies as the identification strategy. Since the implementation of the different public policies/programs varies across states and districts, it is possible that for two border-sharing villages with similar observable characteristics, one of them receives the treatment (policy implementation). In contrast, the other does not, purely on the basis that they are in different districts and/or from different states. Consequently, measuring the difference in outcome (LWE violence) in two such villages will estimate the effect of public policy on violence controlling for other observable and unobservable characteristics.

## 6. Bibliography

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## **7. Year wise activities/milestones**

We plan to finish the data collection and take logistical decisions by September 2023, and pursue data cleaning and analysis until January 2024, we will subsequently present the paper at conferences, and the draft of the paper will be ready to be submitted for publication by May 2024.

## **8. Proposed utilization of research outcomes**

The research outcomes will inform about the empirical association and causation between policy implementation and LWE-related violence in the Red-corridor area. The findings will be shared with the policy-making authorities at the central and state levels and should be informative in designing future policies for the LWE-affected regions.

## 9. Budget details

No	Budget Head	Amount Rs (in lakhs)		
		Year 1	Year 2	Total
I	Equipment	51,772		
II	Manpower	3,60,000		
III	Consumables			
IV	Contingencies	80,000		
V	Travel			
VI	Other costs			
	Total	4,91,772		

## 10. Equipment cost details

S.No.	Generic Name	Model	Quantity	Estimated cost (in Rs)
I	STATA software	STATA 17	1	51,772

## 11. Justification of consumables

## 12. Justification for contingencies

We require sub-district-level shapefiles to carry out our research. For India, only the district-level shapefiles are publicly available. We are in the process of finding a relevant agency to procure the required shapefiles and deciding the exact cost for the same.

## 13. Justification for travel

## 14. Justification for manpower

Due to the rigorous data collection necessary for the project, the project heavily relies on the support provided by one or more skilled Research Assistant who is proficient in data collection and data cleaning and can handle a large amount of data in either STATA or R or any other related software. The RA should also be able to assist the PI and co-PI in data analysis and disseminating the result. With such a requirement, we would like to recruit someone who is pursuing/pursued an undergraduate/ graduate degree in economics, statistics, or related fields.

**15. Expected qualification of the manpower to be employed**

Undergraduate and/or post-graduate degree (pursuing/pursued) in economics, statistics or related areas.

**16. Justification of other costs**

**17. Details of the previous seed grant (date of approval, title, amount, duration, completion date, and outcomes of the project)**

**18. Attach biodata of PI and co-PI**

PI: Ishita Tripathi (PhD Economics), Assistant Professor of Economics, Amrut Mody School of Management, Ahmedabad University

Co-PI: Sujana Kabiraj (PhD Economics), Assistant Professor of Economics, University of Wisconsin-Stevens Point, [skabiraj@uwsp.edu](mailto:skabiraj@uwsp.edu)