

### **Effect of training & job creation on nature and scale of violence or atrocities**

Training and job creation interventions generally show no effect on conflict-related violence, including insurgent recruitment and economic shock mitigation.

Geographic region: South Asia, Middle East and North Africa, Global

Effect size: No effect ( $g=0.01$ )

Confidence in study findings: Medium (6 studies with 41 effect sizes)

### **Short Summary**

Job creation and training programs including cash-for-work initiatives, vocational training, and guaranteed employment schemes show no overall effect on reducing conflict-related violence. While some interventions decrease conflict intensity in specific contexts, others show no measurable improvement, and some may even have unintended consequences. Their effectiveness depends on strong local governance, security conditions, and careful implementation.

### **Long summary**

#### *The intervention*

The interventions assessed in this cell include a range of training and job creation programs designed to mitigate conflict and reduce recruitment into armed groups by addressing economic vulnerability. Examples include the United Nations Development Programme's Iraq Crisis Response and Resilience Programme (ICRRP), which provided vocational training, cash-for-work opportunities, and small business grants to displaced women between 2014 and 2016. In India, the National Rural Employment Guarantee Scheme (NREGS/NREGA) guaranteed up to 100 days of paid rural employment through public works, aiming to stabilize incomes and deter insurgency in Maoist-affected regions. The Commander's Emergency Response Program (CERP) in Iraq focused on labor-intensive infrastructure projects to generate employment and reduce insurgent activity, while the Prime Minister's Reconstruction Plan (PMRP) for Jammu and Kashmir combined infrastructure development with job creation to promote stability. Other initiatives included cash-for-work programs and vocational training in the Central African Republic. Across these interventions, the programs sought to provide economic opportunities, reduce grievances, and incentivize productive engagement as a means of lowering participation in violent activities and insurgency.

#### *How the intervention is expected to work*

Training & job creation interventions aim to reduce violence through several mechanisms: increasing employment opportunities to raise the opportunity cost of joining armed groups, alleviating economic grievances, and providing a buffer against resource shocks. For instance,

NREGS mitigates rural household income fluctuations caused by monsoons, while CERP keeps potential insurgents engaged in productive work, reducing daytime violence.

### *The evidence base*

The cell contains 8 impact evaluation studies (one is an ongoing study) and 2 systematic reviews. The study setting for the impact evaluation studies include: India (5 studies), Iraq (2 studies) and Central African Republic [1 ongoing study - Alik-Lagrange (2019)]. Note that one of the studies [i.e. Atkinson (2022)] did not have enough information to be able to conduct effect size calculation.

One of the reviews assessed whether different types of aid—such as public employment programs—help reduce violence or inadvertently fuel conflict. The other conducted a rapid evidence assessment on conflict prevention interventions, evaluating their effectiveness in reducing armed violence in developing and middle-income countries.

### *Evidence findings*

Overall, training and job creation programs show no effect on reducing conflict-related violence. In Iraq, ICRRP reduced grave violations against children, but in other areas, programs such as NREGS and CERP showed mixed results: while they reduced certain types of insurgent activity, effects were contingent on local governance, and some interventions coincided with short-term increases in state-led counterinsurgency actions. Therefore, although these interventions can be effective in specific contexts, the overall impact on conflict-related violence is no effect when aggregated across studies.

### *The review evidence*

Both reviews indicate that expanding wage employment opportunities or implementing training programs may reduce conflict.

### *The impact evaluation evidence*

This cell includes 8 impact evaluations, however one of these is an ongoing study. .Thus, seven summaries are provided below:

**Atkinson (2022)** focuses on the United Nations Development Programme’s Iraq Crisis Response and Resilience Programme (ICRRP), which was implemented in Iraq from 2014 to 2016. This program aimed to empower displaced women through economic and social initiatives, including cash-for-work programs, vocational training, and small business grants, to mitigate the impact of conflict on children by reducing their vulnerability to recruitment by armed groups. The research employs a mixed-method approach, combining qualitative interviews with elite professionals from United Nations agencies and non-governmental organizations, and quantitative analysis using data from the United Nations Monitoring and Reporting Mechanism (MRM). The study specifically examines the impact of the ICRRP on grave violations against children in armed conflict across various governorates in Iraq, comparing those with and without the livelihood programs. The findings suggest that governorates benefiting from the UNDP’s ICRRP livelihoods programs experienced a reduction in the rate of grave violations against children compared to those without such programs. While the overall number of violations decreased, the rate of increase in violations was significantly lower in governorates with the programs, indicating a correlation between the

implementation of gender-based development policies and the mitigation of conflict impacts on children. The study is rated as low confidence as it is a before vs after study.

**Dasgupta (2017)** The study examines the National Rural Employment Guarantee Scheme (NREGS), a large-scale anti-poverty program implemented in India, which guarantees wage employment to rural households. It explores how the program affects Maoist conflict violence in India's "Red Corridor", a region with high levels of insurgency. Using a difference-in-differences approach, the study leverages the staggered roll-out of NREGS across 144 districts between 2006 and 2008. Data on Maoist conflict incidents and deaths were compiled from multiple sources, including local-language newspapers. The analysis incorporates district-level variables such as state capacity and rainfall shocks to evaluate heterogeneity in program effects. The study finds that NREGS adoption led to a significant reduction in Maoist conflict violence, with a 57% decrease in incidents and a 63% reduction in deaths. However, these effects were contingent on local state capacity. High-capacity districts experienced substantial reductions in violence, while low-capacity districts showed negligible or slightly positive effects. Additionally, the program's impact was amplified in districts experiencing agricultural shocks, highlighting its role as an income safety net. The findings suggest that while anti-poverty programs can mitigate violence, their success depends critically on the strength of local governance. The study was rated as low confidence as the author did not report the evaluation questions.

**Fetzer (2020)** The study assesses the impact of India's National Rural Employment Guarantee Act (NREGA) on reducing conflict intensity by moderating the effects of adverse weather shocks, specifically monsoon rainfall deficits, on household incomes. Launched in 2006 in India, NREGA is the world's largest public employment program, guaranteeing up to 100 days of employment annually at minimum wages for rural households through public works aimed at creating sustainable infrastructure. By providing a safety net, the program stabilizes household incomes, particularly for individuals with limited income options during adverse economic conditions, aiming to reduce economic vulnerabilities and their potential link to conflict. The study combines household-level panel data with district-level conflict records in India, revealing that prior NREGA, adverse monsoon rainfall reduced agricultural output by 0.32% for every 1% rainfall deficit and significantly lowered agricultural wages. However, post-NREGA, this relationship disappears, showing that the program has a stabilizing effect on incomes. The study also finds that before NREGA, a 1% reduction in monsoon rainfall increased conflict intensity by 1.4%, but this effect vanishes after NREGA's introduction, suggesting that the program helps decouple economic shocks from conflict. A 25% shock to rainfall previously led to a 33% increase in conflict intensity, translating to 1.5 additional conflict events per district annually. In summary, NREGA reduces the vulnerability of rural households to weather-induced income shocks, stabilizes agricultural labor markets, and indirectly lowers conflict intensity, demonstrating its effectiveness as a social insurance mechanism in resource.

**Hoelscher (2012)** The study investigates the relationship between India's Maoist insurgency and development interventions, focusing on the role of public works programs and natural resource extraction in conflict-affected districts. The government's strategy of securitized development leverages programs like the National Rural Employment Guarantee Act (NREGA) to reduce allegiance to insurgents by providing employment and economic stability. Concurrently, mining activities in these districts drive economic growth but may exacerbate local grievances. The study utilizes a cross-sectional analysis at the district level, combining qualitative fieldwork with quantitative data from six Indian states most affected by Maoist violence. Data cover the period from January 2004 to November 2010, including 1,827 conflict events and 4,816 fatalities. The study finds that districts with higher SC/ST populations are more prone to Maoist violence, suggesting that horizontal inequalities are significant conflict drivers. Lower per capita GDP is linked to increased frequency and severity of violence, though the availability of public goods

showed no significant effect. Mining activities alone do not strongly predict violence but amplify conflict where socio-economic exclusion is prevalent. Effective implementation of NREGA correlates with reduced violence, indicating potential benefits of government development programs, though causality remains uncertain. Additionally, violence is more intense in border districts and regions with dense forest cover, emphasizing the role of geographical factors in insurgent mobility and access. The study is rated as medium confidence as it is non-experimental study design.

**Iyengar (2011)** The study evaluates the effect of labor-intensive reconstruction programs on insurgent violence in Iraq, focusing on the Commander's Emergency Response Program (CERP) implemented by U.S. military divisions between 2004 and 2008. The programs aimed to generate employment through labor-intensive development activities in conflict-affected districts. The study employs an instrumental variables (IV) approach and a difference-in-differences strategy. The analysis leverages district-level data on violence and CERP project allocations, controlling for fixed effects and other counterinsurgency efforts. Outcomes include types, frequency, and intensity of insurgent violence. The study found that a 10% increase in labor-intensive CERP spending correlates with a 15-20% decline in labor-intensive insurgent violence and a nearly 10% overall reduction in violence. This decline is driven primarily by reduced attacks on civilians, with a 49% decrease in civilian-targeted incidents and a 56% reduction in civilian fatalities. However, attacks on U.S. forces increased by 13%, suggesting a shift in insurgent focus from "soft" civilian to "hard" military targets. Violence reduction occurs predominantly during daytime hours, consistent with the hypothesis that increased employment raises opportunity costs for insurgents. These results suggest that economic opportunities through development programs can effectively reduce insurgent recruitment and violence. The study is rated as medium confidence as it is non-experimental study design.

**Kaila (2020)** The study investigates the impact of interventions aimed at reducing violence in Jammu and Kashmir, India, between 1998 and 2017. Key interventions include (i) the fencing of the border with Pakistan, (ii) the implementation of the Prime Minister's Reconstruction Plan for J&K (PMRP), and (iii) the phased rollout of the National Rural Employment Guarantee Scheme (NREGS). These measures addressed security, infrastructure development, and rural livelihoods, aiming to foster stability and reduce violence in the region. The research employs time series analysis and panel data methods to detect structural breaks in violence levels, using district-level data from 1998 to 2017. The study applies smooth transition regressions (LSTR) models to capture gradual transitions and Bai-Perron (BP) procedures to detect sharp breakpoints. Violence metrics include casualties among civilians, insurgents, and security personnel, as well as incidents involving explosives. The analysis identifies a transition from a high-violence regime (pre-2003) to a low-violence regime (post-2007), with a transition period between 2003 and 2007. This shift coincides with (i) the completion of border fencing in 2004, (ii) the launch of PMRP in 2005, and (iii) the rollout of NREGS between 2006 and 2008. Results highlight that improved security facilitated the effective implementation of economic development programs, contributing to reduced violence levels. Average monthly casualties declines significantly from 253.5 in the high-violence regime to 24.3 in the low-violence regime. The findings emphasize the complementary roles of security and development interventions in reducing violence.

**Khanna (2014)** The study examines the impact of the National Rural Employment Guarantee Scheme (NREGS) in districts affected by Maoist insurgency in India, commonly referred to as the "red corridor". NREGS is a flagship anti-poverty initiative of the Indian government, offering a legal guarantee of 100 days of public-works employment annually for rural households at the minimum wage. The program was rolled out in phases, starting with underdeveloped districts, with Phase 1 launched in February 2006. The research employs a quasi-experimental design, focusing on the Phase 1 implementation of NREGS across 200 districts. It analyses data from the South Asian

Terrorism Portal (SATP), which tracks Maoist-related incidents, including fatalities, injuries, abductions, and arrests. Trends in Phase 1 districts are compared with non-Phase 1 districts over time, considering both police- and Maoist-initiated violence. The findings indicate that the introduction of NREGS is associated with a significant short-term increase in Maoist-related violence. Fatalities rose by 43% (0.19 deaths per month), incidents increased by 20.6%, and the number of individuals affected (injuries, abductions, or captures) grew by 0.05 persons per month. These increases were primarily driven by police-initiated actions, including combing operations and encounters with Maoists, rather than by insurgent-initiated attacks. Furthermore, there was a marked rise in the number of Maoists surrendered or captured in Phase 1 districts following NREGS implementation, suggesting improved police efficiency due to enhanced civilian cooperation. The study rated as low confidence due to a lack of reporting attrition. The study is rated as having low confidence due to a lack of clarity in reporting evaluation questions.

*Confidence assessment:*

Overall medium: There are 8 impact evaluations included in this cell. Among those with effect sizes, the findings tend to be mostly consistent.

*Link to review summaries*

Cramer (2016)

Zurcher (2017)

All studies may be accessed via the EGM.

**Other outcomes in this study:**

Human security / economic security