

Effect of social funds, community-driven development and reconstruction on environmental security

Social funds interventions (CERP initiative) aimed to enhance environmental security but had **no effect** due to disruptions from insurgency, corruption, and poor management. Some initiatives, such as irrigation and land-use projects, even caused unintended environmental degradation, limiting any long-term stability impact.

Geographical space: South Asia

Effect size: No effect (g=0.00)

Confidence in study findings: Low confidence (1 study; 2 ES)

Short summary

Social funds, community-driven development, and reconstruction projects under the CERP initiative in Afghanistan showed **no effect on environmental security**. Infrastructure projects such as irrigation canals and agricultural improvements were often disrupted by insurgency, corruption, and mismanagement. Some interventions caused unintended environmental harm, including soil depletion and inefficient water use, undermining long-term sustainability. Overall confidence in this cell is low due to the inclusion of only one study.

Long summary

The intervention

The intervention focused on the Commander's Emergency Response Program (CERP), which provided rapid, small-scale, community-driven development projects in Afghanistan. CERP sought to empower local communities by addressing immediate infrastructure, economic, and agricultural needs.

How the intervention is expected to work

The Commander's Emergency Response Program (CERP) projects were designed to improve environmental security by funding locally-driven initiatives like water infrastructure, schools, roads, and agricultural development. By engaging community leaders in decision-making, the program aimed to create economic opportunities, strengthen governance, and improve the sustainable use of natural resources.

The evidence base

The cell includes one study that used a mixed-methods approach, combining qualitative interviews with nearly 200 military personnel and quantitative satellite imagery analysis. The study focused on Helmand Province, Afghanistan.

Evidence findings

The social funds and CERP projects had **no measurable effect on environmental security**. Agricultural activity increased in stable areas, but in conflict-affected regions, interventions were

disrupted, and some projects caused environmental degradation. The effectiveness of the interventions depended heavily on local security, governance, and management capacity.

Included studies

Egel (2016) assesses agricultural land use changes in Afghanistan, particularly the impact of the U.S. military's Commander's Emergency Response Program (CERP) on agricultural development. The intervention focused on infrastructure and economic stabilization projects aimed at increasing agricultural productivity. The research primarily covers Afghanistan, with a specific focus on Helmand Province. This area was central to CERP agricultural investments. The study uses satellite imagery data, specifically the Normalized Difference Vegetation Index (NDVI), to track changes in agricultural land use from 2009 to 2014. The NDVI measures vegetation density and serves as a proxy for agricultural activity. The study analyses NDVI data for one-kilometre grid squares across Afghanistan, using over 1.5 billion pixels annually. They found that areas along main roads in Helmand Province saw increased agricultural intensity between 2009 and 2013. These regions already had significant agricultural activity, but production expanded further. Previously uncultivated land, particularly northeast of Helmand's centre, saw significant agricultural expansion. Agricultural activity declined in areas experiencing instability, particularly in Nad-e-Ali and the Arghandab River Valley. The study is rated as high and medium confidence quantitative study.

Confidence assessment

The overall confidence in the cell is low due to limited number of studies.

Other outcomes in the study:

- Human security/Economic security