

SEEDS for Recovery: Research & Policy

October 2022

About the program

The [FCDO-funded FAO program](#) provided households in Syria with agricultural emergency support such as rehabilitating irrigation systems. The overarching goal is to diversify income-generating activities and improve food security, nutrition, and welfare.

About the study

Using innovative quantitative methods, we analyzed the short-, medium- and long-term impacts of the agricultural interventions on food security in Syria.



4 waves of panel data tracking the same households in Syria between 2017 & 2021



High resolution **satellite imagery** and **deep image classification** to assess impact on productivity



Machine learning to estimate heterogeneous treatment effect

Research Findings

1

A systematic review showed that agricultural interventions **improve food production and consumption**. Mixed results were found on dietary diversity and no effects on children's stunting or wasting.

2

Panel analysis showed that a 10% improvement in **Food Security** are causally linked to the program. The impact analysis shows no positive significant effect on building resilience.

3

The **heterogeneous treatment effect analysis shows that women-headed households** who experienced moderate violent events have benefited the most from the interventions.

4

Remote-sensing analysis showed that rehabilitating irrigation systems **significantly increased the use of water and the crop productivity**, in some areas similar to pre-conflict levels.

Workshop Discussion

1

Context matters to understand the impact pathways and **fine-tune targeting**.

2

Clustering interventions is key to unlocking potential for **building resilience** in the long-term.

3

Access to irrigation is crucial not just to increase crop productivity but protect vulnerable farmers against future climatic shocks.

4

Market-oriented approaches that include market access are important to ensure the **sustainability** of the agricultural input provision interventions.

About the Workshop

On the 28th and 29th of September, 2022, academics, practitioners and policymakers came together in the American University of Beirut to listen to the results of our project and discuss its implications. Participants and panelists came from a range of organizations, including ISDC, AUB, the Food and Agriculture Organization (FAO), the UK Foreign, Commonwealth & Development Office (FCDO), Mercy Corps and Oxfam.

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