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"Can agroecological farming feed the world? Farmers' and academia's views"

## Social capital effects on food security resilience: evidence from kyrgyzstan

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## Abstract

Although there exists a healthy body of literature related to neighbourhood roles for resilience outcomes, there are two main plausible cautions to get robust results. The first one is related to methodological difficulties to measure neighbourhood social environment and resilience itself; therefore, the majority of findings rely on mainly built environment of neighbourhood and related resilience related factors. The second main challenge is the difficulty find a causal relationship between neighbourhood social aspects and resilience. This study aimed to identify causal inferences between social capital and household resilience to food security. Using detailed "Life in Kyrgyzstan" multi-topic panel data, social capital and resilience to food security were estimated. The estimation of social capital was based on participation and trust. Resilience Capacity Index (RCI) was estimated by using resilience Index Measurement and Analysis (RIMA). In addition to RCI, resilience defining pillars such as Income and Food Access (IFA), Access to Basic Services (ABS), Agricultural Practices and Technologies (APT), and Adaptive Capacity (AC) were included as model outcomes. A principal component analysis (PCA) was used to identify determinant factors of social capital, pillars, and resilience itself. For empirical causal relationships, the impact of trust and membership on both resilience pillars and resilience itself was modelled through the use of IV methods for multiple endogenous variables. Findings through models indicate that improved resilience pillars and resilience itself are associated with higher trust and membership values. Therefore, findings indicate that there is a clear message to consider social capital for strengthening household resilience to food security.

Keywords: Food security, Instrumental variable, Resilience, social capital

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