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Understanding Farmers’ Shock-Coping Capacity in Dealing with Corona Virus Pandemic: An Iranian Case Study

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Abstract

Rural households are frequently hit by severe shocks which can be classified as either idiosyncratic or covariate shocks. While the former is specific, affecting individuals or households, for example, illness, injury or unemployment of household members, the latter is correlated across households within a community (e.g. village), such as floods, droughts or epidemics like the Coronavirus. Both these shock categories can have devastating consequences on rural household welfare. The emergence of the novel Coronavirus pandemic presents an unprecedented health communications challenge. Most of the affected populations live in rural areas (or are farmers) with very minimal resources but at high risk of COVID-19 due to their surrounding and livelihoods.

A detailed understanding of households’ shock-coping capacity is needed to design appropriate social safety net programs and interventions.

Therefore, the aim of this study is to investigate the factors affecting shock-coping capacity of farmers using Cognitive Theory of Stress Model.

To investigate farmers’ shock-coping capacities, a self-reported questionnaire survey was carried out in March 2020 in southern Iran. Participants were farmers who filled in a self-report online questionnaire. In total 310 questionnaires were completed and 294 were found useful for this empirical analysis after excluding incomplete responses, with a successful response rate of 17%. Structural equation modelling (SEM) was applied to examine relationships between variables of the stress theory. The structural model provided a good fit to the data (Chi square/df = 2.683, IFI = 0.917; CFI = 0.916, RMSEA = 0.076). Results of structural equation modelling showed the adequacy of the stress theory in predicting the shock coping ($R^2=0.90$). Moreover, demand appraisal ($\beta=0.83$, $p < 0.0001$) and collective efficacy ($\beta=0.35$, $p < 0.0001$) emerged as the most powerful predictors of farmers’ shock-coping.

Keywords: Corona virus pandemic, Iran, shock-coping capacity, theory of stress model