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Investigating Agriculture Students' Perception, and Ability Towards Education Farmers Toward Climate Change

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Abstract

It is confirmed that climate change has serious economic and social impacts, particularly on farmers' livelihood. However, mounting evidence has revealed that farmers can effectively manage this negative impacts through adaptation behaviour. Agricultural adaptation to climate change increases food productivity and security. However, lack of knowledge is a major barrier. This lack of knowledge about adaptation behaviour is a common phenomenon among farmers worldwide. A huge body of literature shows that education plays a significant role on farmers' adaptation behaviour. As such, providing educational programs and disseminating knowledge about different aspects of climate change for farmers can enhance adoption. Agricultural students will be a unique set of educators who serve to connect and translate research from universities to farmers in order to decrease risk to the farm enterprise and increase productive capacity and resilience. Therefore, agricultural student will have an important role in this regard. Before student attempt to educate farmers about adaptation measures, we need to understand the students' perspectives, and ability towards climate change. Such understanding will, in turn, help us see how such preexisting perceptions can be changed in universities in order to encourage adaptation advisory behaviour. As such the aim of this research is to examine the interrelationship between trust (media/experts/ government organisations), belief in happening climate change, risk perception and self-efficacy between agriculture students in Iran. A questionnaire study was conducted among 320 Iranian agriculture students in Ramin University in southwestern Iran. The modelling was performed using Amos software. The survey findings revealed that the model explained 45 % of the variance in self-efficacy., the trust in science ($\beta = 0.25$, $p < 0.0001$), trust in government organisation ($\beta = 0.28$, $p < 0.0001$) and belief about climate change ($\beta = 0.25$, $p < 0.0001$) had significant direct effects on self-efficacy. However risk perception was not significant on it. From the practical point of view, the present study provides a justification for using trust, beliefs and self-efficacy dimensions in policy and decision making in educating programme that intend to encourage students to educate adaptation among farmers.

Keywords: Agriculture students:Climate change, farmers education:self-efficacy, Iran

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