



Tropentag, September 10-12, 2025, hybrid conference

“Reconcile land system changes
with planetary health”

Cultivating minds: how social media transforms iranian Farmers’ learning landscapes through engaging science communication

KHADIJEH SOLEIMANI¹, BAHMAN KHOSRAVIPOUR², MASOUD YAZDANPANAH³, LÖHR
KATHARINA⁴, STEFAN SIEBER⁵, MOSLEM SAVARI⁶

¹*Agricultural Sciences and Natural Resources University of Khuzestan, Khadijeh Soleimani, Iran*

²*University of Khuzestan, Dept. of Agricultural Extension and Education, Iran*

³*Agricultural Sciences and Natural Resources University of Khuzestan, Iran*

⁴*Germany & Division Urban Plant Ecophysiology, Humboldt University of Berlin, Germany*

⁵*Leibniz Centre for Agric. Landscape Res. (ZALF), Sustainable Land Use in Developing Countries (Sus-
LAND), Germany*

⁶*Agricultural Sciences and Natural Resources University of Khuzestan, Iran*

Abstract

Agricultural communication plays a crucial role in driving technological, social, and economic progress by fostering development across three key learning domains: cognitive, affective, and psychomotor which Bloom (1956) identified as three key areas where teaching influences learning. Online Social Networks (OSNs), a key achievement of the digital age, have a remarkable capacity to facilitate interaction between educators and learners, promote dialogue, enable the sharing of educational resources, and encourage collaborative learning. Based on this, understanding the potential of OSNs to enhance these domains is essential for exploring how virtual platforms can support holistic learning and development in agricultural education. To achieve this goal, this research employed the Theory of Planned Behaviour (TPB) as a theoretical framework to systematically analyse the factors influencing learners’ intentions and behaviours regarding the use of OSNs by Iranian’s farmers for educational purposes. utilising a cross-sectional survey of 371 farmers in the southwestern region of Iran (Khuzestan province). Data were collected through questionnaires (of 371 farmers) and interview with farmers. Structural equation modelling (SEM) revealed that the variables of attitude, subjective norm, and perceived behavioural control collectively explained 29 % of the variance in farmers’ intention to engage in OSNs education behaviours. Additionally, the variables of intention and perceived behavioural control explained 34 %, 32 %, and 35 % of the variance in the effect of OSNs usage on the farmers’ cognitive, emotional, and psychomotor domains, respectively. Further analysis of the pairwise mean differences between the three domains showed that there is a significant difference between the cognitive domain and both the emotional and psychomotor domains. However, no significant difference was found between the emotional and psychomotor domains. These findings suggest that usage had a greater impact on the cognitive domain of farmers compared to the emotional and psychomotor domains.

Keywords: Iranian’s farmers, learning areas’s Bloom, Online Social Networks (OSNs), TPB model

Contact Address: Khadijeh Soleimani, Agricultural Sciences and Natural Resources University of Khuzestan, Khadijeh Soleimani, Khuzestan, 33333333 Mollasani, Iran, e-mail: khadijeh.soleimani@gmail.com