

Water Literacy in Agriculture: Identifying Key Managerial Components through Stakeholder Perspectives in Qarchak County, Iran

Extended abstract

Introduction: Water literacy is a new concept in research related to water demand management and one of the ways to improve public awareness in the field of water-related issues, and it has the ability to provide an estimate of society's water knowledge, attitude and behavior. This study aimed to redefine and identify the components of water literacy from the perspective of institutional stakeholders and key informants within the Agricultural Jihad sector of Qarchak County.

Material and Methods: Using a qualitative approach and thematic analysis, data were collected through semi-structured interviews with 17 key informants selected via purposive homogeneous sampling. These participants, who were knowledgeable about farmers' water literacy and had experience with their water management practices, provided insights that were analyzed to identify key themes.

Results and Discussion: The findings revealed 7 inclusive categories of water literacy components, including policy-making related to water resource management in agriculture; designing and developing strategies aligned with the capacities and limitations of water resources in agriculture; management of research and innovation in the agricultural sector; development of information systems; organization and expansion of education and extension culture in agriculture; utilization of sustainable water resource management in agriculture, and utilization of participatory management and incentives in agriculture.

Conclusion: The results indicate that by employing the managerial dimensions and components examined in the field of farmers' water literacy in Qarchak County along with formulating policies, developing strategies for water resource management, strengthening the extension culture, improving infrastructure, and enhancing existing capacities in the agricultural sector it is possible to improve and reform organizational activities and measures in agriculture.

Keywords: Redefinition, Managerial Water Literacy Components, Key informants and institutional Stakeholders, Agricultural Jihad, Qarchak, Thematic analysis