

## Research Paper

## An Investigation on Environmental Attitude values in Pro-Environmental Behavior of Farmers in Coping with Drought (case study: Sistan Region of Iran)

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**ABSTRACT**

Sistan is located in one of the warmest and driest regions of the world experienced severe drought exacerbation to the severity of the drought and behavior changes that occur in the environment. Thus, change in human behavior towards the naturalistic aspects is expected to avoid drought and environmental protection and it is undeniable that change requires an understanding of people's attitudes. This study aims at an investigation on environmental attitude values in pro-environmental behavior of farmers in Sistan in case of Coping with Drought. The methodology of this study is descriptive and causal-correlative that is conducted using survey technique as a research method. The statistical population include farmers in Sistan region (N =1453) total 400 farmers had been selected as a sample using stratified random sampling method. The research tool is questionnaire which its validity confirmed by a panel of agricultural extension and education specialists and its items reliability were confirmed using a pilot test and calculating Cronbach's alpha test ( $70 \leq \alpha \leq 90$ ). The results indicate that causal proposed model is capable of explaining 30 percent of the dependent variable changes. More farmers have been altruistic attitude and biosphere and personal norms have the most impact on pro-environmental behavior. Therefore, it is suggested to provide appropriate training in order to strengthen the attitudes, strengthen personal norms and pro-environmental behavior.

**Key words:**

Attitude Values,  
Pro-Environmental  
Behavior, Sistan  
Farmers.

**Extended Abstract****1. Introduction**

One of the problems of the world is preservation of the environment. Environmental disaster that threatens the peace, safety and security of human life. However, the quality of the environment throughout the world is threatened by problems such as

global warming, water pollution, rapid depletion of forests and rapidly increasing desertification. One of the important effects of global warming, its impact on water resources, this climate change has cause of repeated natural disasters such as drought. Drought in Iran and especially in the Sistan region and the rurals around the Hamoon wetlands cause a lot of damage, including water scarcity, migration and depopulation of rural areas and increasing unemployment. One can see a lot of these problems and their solutions in human behavior, so as to avoid drought

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and environmental protection should also change human behavior towards the naturalistic aspects and the change also requires an understanding of people's attitudes.

## 2. Materials and methods

The purpose of this study is to investigate environmental attitude values in pro-environmental Behavior of Sistan Region's Farmers in Copping with Drought. This study is considered as a descriptive and causal-correlative research that was conducted using survey technique as a research method. The statistical population include farmers in Sistan region (N=1453) that 400 farmers has been selected as a sample using stratified random sampling method. The research tool was questionnaire and the research validity has been confirmed by a panel of agricultural extension and education specialists. Likewise, reliability of research is confirmed using a pilot test and calculating Cronbach's alpha test ( $70 \leq \alpha \leq 90$ ). In this study, the Independent variables include those variables related to personal and professional characteristics (marital status, number of household members, non-agricultural activities, etc.) and variables related to activation theory norms include environmental values and attitudes personal and dependent variable environmental norms and pro-environmental behavior of Sistan farmers in Copping with Drought.

## 3. Results and discussion

Based on research findings, Farmers' pro-environmental behavior in the environment the conservation of natural habitats and biodiversity (9/42 percent) as well as reducing environmental pollution (43%) good and protect soil and water (37 percent) in average and reducing pressure on land resources and energy (8/40 percent) than good. and for environmental attitude values variable is egoistic attitude 64.6 percent as weak and 9/34 percent altruistic attitude was good value and good attitude is worth the biosphere 7/34 percent. Personal norms variable has a direct effect on pro-environmental behavior. Calculating direct and indirect effects on the behavior of environmental variables showed that farmers obtained Causal Model, variable value approach (egoistic, altruistic, biosphere) is consistent with the conceptual framework and to test the conceptual framework was used path analysis. The results of analysis and calculation of the direct and indirect effects and impacts of adaptation research has shown that the conceptual framework

## 4. Conclusion

Results showed that causal proposed model is capable of explaining 30 percent of the dependent variable changes. Number of farmers have altruistic attitude and biosphere and personal norms have the most impact on Pro-Environmental Behavior and people attending training courses was (63%), which is indicator of the experience and the people attending the courses and they are satisfied with the courses and attend been the people who are in classes of more pro-environment Behavior than other people who did not attend in these classes, can conclude that educational classes and training and informing the people about the drought could have a role in increasing farmers' pro-environment Behavior and between the two groups of farmers, agriculture and non-agricultural activities in terms of environmental behavior in the face of drought, there is no significant difference. Which indicates that realistic pro-environmental behavior of farmers who are self-employed and farmers whose main occupation is farming sub is no difference together, and the second source of income for farmers even though their behavior is the same in the face of drought. Therefore, it is suggested that providing appropriate training to strengthen the attitudes and to will strengthen their personal norms and showing Pro-Environmental Behavior and educational programs should be designed as long-term and to obtain understanding of the issue of water conservation and drought prevention methods among different age groups and different economic sectors of society.

Considering that the value altruistic attitude and biosphere on farmers behavior was significant and valuable egoistic attitude is not significant. It can be stated that farmers are more altruistic attitudes and the biosphere, however, in an altruistic attitude towards fellow human beings support and priority interests and the biosphere is a priority ecosystem benefits, But to have a realistic pro-environmental behavior in dealing with drought have valuable attitude is the first step and the next steps in this regard requires training Field. Because education for people with the right attitude, Can strengthen the norms and to be realistic pro-environmental behavior.