#### Abstract

Desertification is one of the biggest environmental problems in central, southern, and eastern areas of Iran. To prevent desertification, desert greening plans such as mulching, seeding, protection, planting, saplings and planting wind breaks are carried out which have positive effects on society, economy, and ecology. In order to motivate farmers to participate in desert greening plans, first socio-economic and cultural characteristics of the local people and factors affecting villagers' participation should be identified, and then necessary measures be taken using a comprehensive and coordinated planning. To this aim, the present research investigates the role of human development and poverty in the process of desertification and provides participatory management solutions in Zahak County. As total population of these villages is 5300 people, the number of the sample chosen for this research using Cochran formula was 384. Data collection instrument was a questionnaire. To confirm its validity, the supervisor and the consultant professors closely studied the questionnaire and their comments were applied. To measure its reliability, Cronbach alpha was obtained to be 0.87 which indicated their questionnaire was reliable. Data were analyzed using descriptive statistics including frequency, standard deviation and mean, and inferential analysis was done using excel and spss software. The results showed that as family income increases, desertification decreases and vice versa. of livestock, sheep has the most effect on desertification in such a way that as the number of livestock increases, more pastures are destroyed and desertification speeds up .The extent of effect of bread production in desertification is more than use of other fuels. In other words, as villagers mostly use twigs to cook, make heat and bake breads, this could lead to desertification after a while and the more bread is consumed, the more desertification and destruction will take place. The more villagers are informed to optimally use the resources, the less desertification and destruction will take place. The more government facilities are provided for villagers, the less natural resources and planting will be destroyed. Thus, to prevent desertification from happening, providing farmers and villages with the necessary facilities is crucial. According to the results, there's a significant direct relationship between people's participation and local communities in desertification, and as people's participation in local communities increases, desertification occurs at a lower speed.

#### Keywords: Desertification, Zahak, Economic, Participation



University of Zabol Office of Post-Graduate Studies Faculty of Water and Soil Sciences

## **Department of Rangeland and Watershed Management**

# The Role of Human Development Components and Poverty in the Desert Greening Process and Providing Collaborative Management Strategies in Zahak City

**Supervisors:** Dr. Hossein Piri Sahragard Dr. Alireza Shahriari

### Advisor: Mr. Abbas Khaksefidi

**By:** Halime Rezaie Kahkha

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