**Identification and Prioritization of Effective Indicators on Preventing Sustainable Participation of Rural Societies in Combating Desertification Plans (Case Study: Mousian Region, Dehloran)**

**Abstract**

Prioritizing the effective indicators of non-public participation is a fundamental step in the community-based watershed management so that recognizing the relevant factors and priorities paves the way for measures to eliminate barriers to the participation of stakeholders. Paying attention to the participation of stakeholders and identifying and eliminating obstacles to its implementation in natural resources and desertification projects provide the possibility of cooperation of local communities in different stages of study, implementation, evaluation and protection of projects.

The main purpose of the research is the identification and prioritization of criteria and indicators affecting on lack of sustainable participation of rural communities in combating desertification plans in Mousian Region of Dehloran, Ilam province. To determine the number of sample villagers, 189 family were selected using the Cochran formula. In this research, after determining the effective indices and also indicators in the lack of sustainable participation, the questionnaire was designed and its validity was determined by the relevant experts. The reliability of the questionnaire was also tested and validated by calculating the Cronbach's alpha coefficient. Data were analyzed using hierarchical process analysis (AHP) and Friedman nonparametric test. The findings of the research show that the results of prioritizing the indicators that affect the lack of stakeholder participation in the AHP based combating desertification plans from the experts' point of view, design-implementation, and educational-promotional criteria are the maximum and minimum priorities, respectively. The results of criteria ranking using the Friedman test in terms of rural residents also indicated that the economic criterion (3.66) is placed in the first priority and design-implementation (2.69), social criterion (2.20) and educational-promotional (1.45) are in the next priorities, respectively. Likewise, the results of effective indicators ranking in the lack of sustainable participation of rural communities in combating desertification plans based on the Friedman test in term of the experts’ viewpoints indicate that “ignoring people's income as a direct incentive to implement combating desertification projects, and lack of alternative income during economization time of the plans” are the most significant economic indicator. Similarly, in the compartment of executive design indicator, from the experts’ viewpoint “the lack of a comprehensive participatory management program to combating desertification, the focus of central decision-making power” and from the viewpoint of residents of the village “the lack of attention to popular opinion in the design and development of projects, lack of attention to the local force in implementing combating desertification plans (i.e., employment) are prioritized as the most important indicators. In prioritizing social indicators from the viewpoint of the experts “dependence of the villagers on the state power, distrust of the results of combating desertification plans as well as low literacy level” and in terms of villagers’ opinions, “distrust of the results of combating desertification plans, the dependence of rural residents on the state power, migration of youth” are introduced and prioritized as the most substantial indicators. In the educational-promotional criterion, in terms of both views “lack of training the residents of the area regarding combating desertification projects and the related purposes, as well as lack of utilizing the local promotional group”, are determined as the main important indicators.  
Identifying and prioritizing the factors influencing the lack of public participation in desertification projects is a prerequisite for any plan and managerial decision-making to solve the relevant problems. Alignment of the goals of desertification projects with the interests of the residents of the area and implementation of multi-purpose desertification projects as a direct economic incentive, on the one hand, contribute to the effective participation of stakeholders in the mentioned stages and the decentralization of decision-making power in the center, and on the other hand, will lead to the trust and participation of stakeholders. In this regard, it is proposed to formulate a new description of integrated watershed management services and pay special attention to the desert areas based on the participation of stakeholders and cooperation of organizations in charge of natural resources as a fundamental step to achieve effective stakeholder participation. It is also suggested that similar research be conducted in other areas and desert region of the country to identify and prioritize indicators based on the opinions of experts from executive bodies, research and educational centers, as well as the views of residents of desert areas.

**Keywords**: Stakeholders, multi-criterion decision-making, Analytical Hierarchical Process, Delphi method, Friedman test, Dehloran.