

Application of analytic network process in agricultural extension

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In recent decades, scholars pay more attention to the multi-criteria decision making (MCDM) models for complex decision making process. In these kinds of decision makings, frequent criteria used for assessing the decision optimality. ANP is the one of MCDM models, which solves the complex problems based on human brain structure analysis and its uses. ANP do this by replacing hierarchical process by network process. By considering the complex nature of extension activities and many actors that exist in these activities, the essence of using MCDM models become necessity. The purpose of this study was to investigate the application of ANP in agricultural extension, by using ANP for prioritizing different extension methods. This study was conducted in two parts. First, different extension methods were extract from literature. In the second part, these methods were compared by considering t goals such as costs, time, participate and learning. The results showed that the highest priorities of agriculture extension methods included workshops (normalized score 0.311), research- extension projects (normalized score 0.156) and extension magazine (normalized score 0.153). According the results of the paired comparisons of criteria, learning criteria (normalized score 0.503) has highest priority comparing to others.

Keywords: Multiple Criteria Decision Making(MCDM), analytic network process, agricultural extension