

Comparative Scientometric Study: A Strategy for Benchmarking in Agricultural Science Development

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Scientometric studies have induced numerous benefits and have been used for various purposes. Development in agricultural and natural sciences requires precise information as well as suitable methodologies. In this regard numerous approaches have been introduced. One of these approaches is “comparative study” which was used in this research project to compare the programs and performance of 12 selected countries with those of Iran in the fields of Agriculture and Natural Resources. The specific merit of this study was the establishment of “Benchmarking” for cross sectional comparison, as well as longitudinal studies in the future. In scientometric studies various indices and indicators are used, such as number of published articles and citations. In this study, two new indices were developed and applied. First the weighted ratio of scientific production value of each country to its human development index, and second the weighted ratio of number of scientific papers of each country to its weighted “Prosperity Index Ranking”. The results indicated that Iran’s rank among the 13 countries was 10 to 12 as far as the number of articles, citations, and total scientific production is concerned, but according to these two new indices Iran’s rank is 4, which is admirable. Thus despite of all economic shortcomings and sanctions, Iran has been able to conduct highly valued research projects and make considerable scientific contribution to agriculture and natural resources disciplines in the world.

Key Words: Human development index, Prosperity index, Scientific ranking, Scientometric.

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