A Bibliometric Assessment of the Intellectual Content and Recognition Level of the Journal of the National Science Foundation of Sri Lanka

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Bibliometrics enables quantitative description of scholarly documents, their impact and influence. This study explores "The Journal of the National Science Foundation of Sri Lanka (JNSF)"; a globally recognized journal where the objectives were to assess (1) the subject coverage, (2) types of information sources consulted by authors, and (3) total citations received by JNSF. Articles in 40 issues (n=335) published during 2004 and 2013 in two five-year periods; 2004-2008 (P-I) and 2009-2013 (P-II) were analysed separately. Among the 9 major disciplines identified, most articles were related to biology, and agriculture; particularly biochemistry, plant sciences, microbiology and animal sciences. Increased research has been carried out in the fields of chemistry, biomedical research, geo science and engineering. Physics and mathematics were narrowly studied. The subject diversity and inter-disciplinary research have increased by 19% and 10% respectively. Several new fields of research have emerged while research in some areas are lacking. JNSF contains 7043 intext citations with 176.1 citations per issue whereas 20.8 citations per article with an average increased by 56.2% during P-II. Journal articles were the most-cited material incessantly, followed by books, proceedings and web-resources. Citing local references per volume has lessened by 4% whereas self-citation has declined to 1.14%. Most references (23%) lies within 6-10 years. The 'price-index' was 19.82 while 'citing half-life' for journals and books were 11 and 15 years respectively. JNSF has received 366 citations with an average of 3.02 per "cited article". Citing of JNSF has improved from 19.87% (P-I) to 50.56% (P-II). Certain recent articles received early citations, especially within the published year. Most articles (38.84%) were cited once whereas the citations received were highest in the first 2, 3 years after publication, and a rapid decline observed after the 5th year. The results revealed the information needs of researchers, existing and deprived research areas, and recognition of JNSF in terms of citations.

Keywords: Bibliometrics, Scientometrics, Subject analysis, Citation analysis.