ABSTRACT

Scientists and other scholars need information to support their research activities. This information must be of high quality for them to perform their tasks effectively. Journals are one of the communication media used for disseminating scholarly information. While there are international indexing services that rank the quality of journals, these indexes have limited applicability to local journals or those in local languages. Using the Indonesian Agency for Agricultural Research and Development (IAARD) as a case, this study examined the quality, trust, and usability of nine agricultural journals in Indonesia. It also produced journal rankings and compare the ranking resulted from different approaches. Three journal assessment approaches, namely, quality, trust, and usability were employed using revealed preference and stated preference studies. A total of 229 researchers returned the questionnaire on trust and usability of IAARD journals. In parallel, 674 articles were examined using bibliometrics analysis. The data was then examined for ranking and the differences among the journals. The data showed that there were a total of 840 authors for the sample examined, and the number of authors for each paper ranged from 1 to 9. The authors were from Indonesia and 10 other countries, and affiliated to 118 organizations. Plant science and production were the fields of knowledge with the highest number of articles. The articles had low self-citation. The assessment found that journal quality index of IAARD journals reached 2.59. *Jurnal Hortikultura, Jurnal Agro Ekonomi* and *Indonesian Journal of Agricultural Science* are the top three journals with the highest journal quality index. Meanwhile, Trust index of IAARD journals was 3.26. *Jurnal Penelitian Pertanian Tanaman Pangan* achieved the highest trust of IAARD journals with the index value reached 3.44 followed by *Indonesian Journal of Agricultural Science* (3.40), and *Jurnal Penelitian dan Pengambangan Pertanian* (3.39). On the other hand usability index of IAARD

journal is 1.96. *Jurnal Enjiniring Pertanian* is the journal with the highest usability index (2.19), followed by *Jurnal Tanah dan Iklim* with the usability index reached 2.03, *Indonesian Journal of Agricultural Science* and *Jurnal Tanah dan Iklim* have similar the usability index of 1.98. Indices of IAARD journals quality varied from 2.52 to 2.71. *Jurnal Hortikultura* (2.71) is ranked first among IAARD journals, followed by *Indonesian Journal of Agricultural Science* (2.66), *Jurnal Penelitian Pertanian Tanaman Pangan* (2.64), *Jurnal Agro Ekonomi* (2.63), *Jurnal Tanah dan Iklim* (2.64), *Jurnal Penelitian dan Pengambangan Pertanian* (2.57), *Jurnal Ilmu Ternak dan Veteriner* (2.61), *Jurnal Penelitian Tanaman Industri* (2.58), dan *Jurnal Enjiniring Pertanian* (2.52).

ABSTRAK

Ahli-ahli sains dan cendikiawan yang lain memerlukan maklumat untuk menyokong aktiviti penyelidikan mereka. Maklumat ini mestilah berkualiti tinggi supaya dapat mendukung tugas-tugas mereka dengan berkesan. Jurnal adalah salah satu media komunikasi yang digunakan untuk menyebarkan maklumat ilmiah. Walaupun ada perkhidmatan pengindeksan antara bangsa yang berpangkat kualiti jurnal, indeks ini mempunyai kesesuaian yang terhad untuk jurnal tempatan atau orang-orang di dalam bahasa tempatan. Menggunakan *Agency for Agricultural Research and Development* (IAARD) sebagai kes, kajian ini mengkaji ciri-ciri dan kualiti, kepercayaan, dan kebolehgunaan sembilan jurnal pertanian di Indonesia. Ia juga mengeluarkan ranking jurnal dan membandingkan kedudukan jurnal sebagai akibat daripada pendekatan yang berbeza. Tiga pendekatan penilaian jurnal, iaitu, kualiti, kepercayaan, dan kebolehgunaan dilakukan dengan *revealed preference* and *stated preference studies*. Seramai 229 penyelidik mengembalikan soal selidik mengenai kepercayaan dan kebolehgunaan jurnal IAARD. Pada masa yang sama, 674 artikel telah diperiksa dengan menggunakan analisis bibliometrics. Data diperiksa untuk kedudukan dan perbezaan antara jurnal. Data menunjukkan bahawa terdapat sejumlah 840 penulis untuk sampel yang diperiksa, dan bilangan penulis untuk setiap kertas adalah di antara 1 hingga 9. Para penulis dari Indonesia dan 10 negara lain dan 118 organisasi. Sains tumbuhan dan pengeluaran adalah bidang ilmu yang mempunyai jumlah artikel poaling banyak. Artikel dalam jurnal IAARD mempunyai petikan diri rendah. Kajian ini mendapati bahawa indeks kualiti jurnal jurnal IAARD mencapai 2.59. *Jurnal Hortikultura, Jurnal Agro Ekonomi* dan *Indonesian Journal of Agricultural Sciece* adalah tiga jurnal atas dengan indeks kualiti jurnal tertinggi. Sementara itu, indeks kepercayaan dari jurnal IAARD adalah 3.26. Jurnal Penelitian Pertanian Tanaman Pangan mempunyai

kepercayaan tertinggi dengan nilai indeks yang mencapai 3.44 diikuti oleh *Indonesian Journal of Agricultural Sciece* (3.40), dan Jurnal Penelitian dan Pengambangan Pertanian (3.39). indeks kebolehgunaan daripada IAARD jurnal adalah 1.96. Jurnal Enjiniring Pertanian adalah jurnal dengan indeks kebolehgunaan tertinggi (2.19), diikuti oleh Jurnal Tanah dan Iklim dengan indeks kebolehgunaan mencapai 2.03, *Indonesian Journal of Agricultural Sciece* dan Jurnal Tanah dan Iklim mempunyai indeks kebolehgunaan yang sama (1.98). Indeks kualiti IAARD jurnal antara 2,52-2,71. Jurnal Hortikultura (2.71) berada di kedudukan pertama di kalangan jurnal IAARD, diikuti oleh *Indonesian Journal of Agricultural Sciece* (2.66), Jurnal Penelitian Pertanian Tanaman Pangan (2.64), Jurnal Agro Ekonomi (2.63), Jurnal Tanah dan Iklim (2.64), Jurnal Penelitian dan Pengambangan Pertanian (2.57), Jurnal Ilmu Ternak dan Veteriner (2.61), Jurnal Penelitian Tanaman Industri (2.58), dan Jurnal Enjiniring Pertanian (2.52).

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF SYMBOLS AND ABBREVIATIONS

AGFI	Adjusted Goodness of Fit Index
AGRIS	International Information System for the Agricultural Sciences and Techno
AIMQ	Assessment and Improvement of Management Quality
CARIS	Current Agricultural Research Information System
CEO	Chief executive officer
ERA	Excellence in Research for Australia
FAO	Food and Agriculture Organization
GFI	Goodness of Fit Index
HOR	Jurnal Hortikultura
IAARD	Indonesian Agency for Agricultural Research and Development
ICALTD	Indonesian Center for Agricultural Library and Technology Dissemination
IDR	Indonesian Rupiah
ISSN	International Standard Serial Number
JAE	Jurnal Agro Ekonomi Pertanian
JAS	Indonesian Journal of Agricultural Science
JEP	Jurnal Enjiniring Pertanian
JPP	Jurnal Penelitian dan Pengembangan Pertanian
JTP	Jurnal Penelitian Pertanian Tanaman Pangan
LIPI	Lembaga Ilmu Pengetahuan Indonesia
LISA	Library and Information Science Abstracts
NAK	Jurnal IlmuTernakdanVeteriner
NFI	Normed Fit Index
PSP/IQ	Product and Service Performance/Information Quality
RMSR	Root Mean Square Residual

SPSS	Statistical Product and Service Solutions
TAN	Jurnal Tanah danAgroklimat
TRI	Jurnal Penelitian Tanaman Industri