



The Survey of Professional Development Practices for the Emerging Trends among Academic and Research Librarians in Lagos State. Nigeria.

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Abstract

The field of librarianship is undergoing profound transformation in response to the digital revolution and evolving user needs. Developing knowledge and skills is therefore essential to remain relevant and effective. The study investigated the professional development practices for adaptation to the emerging technologies and trends among academic and research librarians (ARLs) in Lagos state. It also determined the sources of their professional development strategies and sponsors, and the training need of the academic and research librarians. Descriptive statistics of frequency and simple percentages were used to analyse the data collected. The study revealed that librarians are aware of the emerging trends, they are committed to their professional development through self-sponsored and also have challenges facing them. It was recommended that librarians should be encouraged to be more committed to their profession development, the library should be involved in generating funds to support professional development to alleviate the problem of fund scarcity.

Keyword: Professional development, Technology emerging trends, Academic libraries, Research libraries.

Introduction

It is evident that there are distinct changes to all professional practices. Notable among these changes is the technology which has made the world a global village. The changing world with innovations from organisations and different disciplines need all professionals to be up-to-date in order to provide best service. The change according to Mahapatra and Dash (2022) has awakened the talents of business owners, institutions, and even the government about the nature of work, how work is done, workplace, employees, and machine. Also, this change has affected researchers in academia in several ways which includes collaboration between two or more disciplines, evolving researches and means of getting information.

Universities are charged with some basic functions among which are knowledge generation, knowledge-dissemination, teaching and learning, advancement of knowledge through community service, and leadership training. Academic and research librarians (ARLs) play a vital role in ensuring the success of these critical functions through the adequate and well-timed provision of the information resources that are essential for high-quality scholarship (Mahapatra & Dash, 2022). Research works are evolving thereby causing a paradigm shift in teaching, learning and research process in academic and research institutes. This calls for a significant change in the role of librarians in order to render quality services to their users. Therefore, there is need for librarians to support the process because the skill and knowledge about these processes is essential and must be developed.

The field of librarianship is undergoing profound transformation in response to the digital revolution and evolving user needs. The consideration of new trends is crucial to understanding the areas of implementation for meeting the diverse needs of users (Kiran, Nadia, & Lashari, 2024). Library automation, artificial intelligent (AI), Internet of things (IoT), social media, data management, open access, digital reference services and podcasting are among the innovations impacting on library services and how librarians cater for their users in the 21st century. The extent of technology and digital development has caused a clog in the wheel of library physical patronage with a shift to preference Given access to users to access the information on the internet or using the library remotely thereby, fuelling a rethink of how the library is used by patrons (Dongare, 2022). The implication is that libraries also need more efficient and adaptable individuals who can manage the rapid changes and technology effectively (Jan & Jan, 2022). Professional development for librarians is essential in the changing world, but it is particularly important in today's rapidly evolving information landscape. The technological change is affecting everyday living and the information sought by researchers is daily increasing. Librarians therefore must be able to adopt the technology and adapt to the change. Huffstetler (2020) reported that professional development is beneficial to employees as it makes them confident, better workers, productive, efficient thereby helping the organisation to grow and open doors to new opportunities for employees. From the foregoing, Professional development among librarians is the effort and strategies to continually acquire new and relevant skill to keep abreast of current changes in their profession in order to be relevant and have effective maximum performance. Professional development may cover areas such as engaging in research in order to contribute to the literature, attending conferences/workshops, mentoring,

receiving specialized training, or attending continuing education classes (Anene & Idiedo, 2023)

Statement of the Problem

The development of human resources in academic and research libraries are burning issues. The era of technological progression, information explosion has made information available in different formats and media and also in time and space thereby placing a great demand on ARLs. Some are of the opinion that libraries are not necessary in institutions anymore since users felt they can easily access information from the internet. Information technology has changed the role of all librarians in ARLs and in the new normal. Some librarians are faced with low recognition from the parent institution, thereby making the need for their professional development effort of little or no attention. Furthermore, there are effort by the parent institution to train librarians to meet with the current change but, the pace is not meeting up with the evolving changes even though it has proven to have positive impact on librarians work output. The budget to library from parent institution that is reducing every year is impacting negatively on the effort to increase library collections. Maintaining and upgrading the library software and subscribing to databases is difficult for many libraries especially the academic and research libraries and same has affected the librarian's professional development. The shift from information society to knowledge society has put more demand on librarians so that they can fit into information quest of their users. Developing skills and knowledge therefore is essential to remain relevant and effective. However, from observation, not all librarians and library are embracing this change for efficient service delivery through human capacity building. How are librarians undergoing professional development practices to adapt to the emerging technological trends? This is a practical-knowledge gap that the paper tends to address.

Objectives of the study

The objectives of the study are to determine:

1. The emerged activities carried out by academic and research librarians (ARLS),
2. The source of sponsorship for professional development
3. The training need of ARLS,
4. The motivation for continuous professional development,
5. The challenges of professional development practices among the librarians.

Research Questions

The following research questions guided the study:

1. What are the emerged activities carried out by academic and research librarians (ARLS)?
2. What is the source of sponsorship for professional development?
3. What are the training needs of ARLS?
4. What is the motivation for continuous professional development?
5. What are the challenges of professional development practices among the librarians?

Literature Review

The New Development and Librarians Investment

A deliberate effort towards the acquisition of new skills that will reflect both current and future key trends in the professional is what Ebong, Ogwo and Nwachukwu (2022) referred to as professional development. Professional development (PD) practice in the library are activities designed for personal and professional growth of librarians (Posigha & Seimode, 2015) and these activities are typically formal or informal in nature Jan and Jan (2022). Therefore, it must be systematic and an on-going process to broadening professional skills and competence in order to keep abreast and meet with the new trends and innovations in the workplace (Ebong, Ogwo & Nwachukwu, 2022)

Madukoma and Ali (2022) noted that continuous professional development (CPD) makes individual worker have the opportunity to stay current with developments, knowledge, skills and constantly learn and advance their potentials and upload their professional understanding. According to Gunasekera, Chamani (2021), CPD is a vital instrument that enables the creative energies, talents and skills of professionals to keep abreast with current advanced knowledge in providing possibilities for implementing new technologies in library and information practice. Gomba (2019) defined Continuing Professional Development CPD as the acquisitions of professional skills and knowledge beyond those required for initial qualification and learned in formal programmes of education. This corroborate the position of Saeed & Rahim (2022) that the activities engage in can be formal or informal, making it clear that there are activities outside the four walls of classroom that librarians can engage in for their development.

Madukoma and Ali (2022) mentioned some of the professional development activities that can impact on the dynamic trends of knowledge economy. ARLs should focus on skills like data science and research data management, artificial intelligent tools, technology and information literacy skills, open science and scholarly communication and collaboration with other researchers and these can be achieved by short term courses, workshops, in-house training, computer-based instructions, distance education, professional talks, seminars, symposia, conferences, pre-and post-conference tutorials, vestibule etc. (Anyaegbu & Wali, 2019; Rabasa & Abrizah, 2022; Mahapatra & Dash, 2022, Sulyman, Usman & Badmus, 2022).

Librarians in both academics and research libraries are to support the research, teaching and learning of their parent institutions. Before the advent of technology, librarians perform many functions to ensure quality delivery of teaching and research services. The change in the book process to the end users is different from the system practice in the 21st century. There is literature to support the dwindling nature of library patronage and this is evident from practice and experience (Adeh & Hayatu, 2020; Isah, Yelwa & Dan Amo, 2022; Obi, 2023). The development in the library system is now putting so much pressure on librarian to invest and re-learn and un-learn in order to meet up with the information challenge of the twentieth century posed by users and researchers.

Librarian's core service is assumed to have traditionally been understood to be rooted in knowledge organisation, i.e. cataloguing and classification, indexing and retrieving documents in a collection, referencing and archival management. This was supported by (Anyaegbu & Wali (2019) that Librarians acquire, organize, evaluate and

disseminate information, providing support to members of the university community including students, researchers and teaching staff. All these core services are still relevant but, keeping in pace with the current and ongoing development and change will guide against the practice from going into extinction Elsa (2014). The changing world requires that professional adapt to the new professional skills and knowledge to meet the needs of researchers in the 21st century. The shift should also motivate librarians to pay attention to their professional development by adding value to their expertise

It was submitted by BOBCATSSS (2014) that libraries daily work format changes, librarians had to adapt and learn more new things, like working with computers and serving readers using new technologies. This was emphasized by Ayolugbe, Jidere and Ogwo (2021) that academic libraries have the responsibility to make information resources available and accessible to users in remote tone and space especially in the present digital library environment. Therefore, Madukoma and Ali (2022) concluded that continuous train and retrain is necessary in order for librarians to have the skill needed for the work and have an edge over the competitive market. As effort is ongoing to have skills especially technological skill, it is also imperative to take soft skill into consideration

The library services mostly target the users and that is one of the major reasons why a librarian should also develop soft skills. This is important because it will take librarians from passive to an active player in rendering quality service and also bridge the gap between user's satisfaction and expectation (Derek, 2020). Soft skill is the personal and learnable attributes that are important to the expressions of human component. (Derek, 2020, Komalla, Aparna & Muthu 2021; Bejalwar & Kherde, 2021).

Examples of soft skills required to become a successful library professional were also mentioned, these includes listening skills, communication skills, interpersonal skills, customer service, leadership skills and teamwork, writing skills, project management skills, presentation skills and teaching skills. Technical and soft skill is imperative for ARLs to be able to leverage on the current technological changes where artificial intelligence and other technical tools are being deploy for use in the library Ntogo-Saghanen & Eссор (2021). The social and emotional skill cannot be downplayed because librarians must be attuned to those ideas and values to be able to fit into the information society and learn how the society relate and interact with the information (IFLA, 2021). This suggest that librarians need to adapt to the changes evolving through continuous professional development strategies targeting the technological changes and also bridging same with the soft skill that will enhance the display of these skills.

Methods

Quantitative survey design was used for this study and the online survey questionnaire adapted from Posgha and Seimode (2015) was used to explore the professional development practices for the emerging trend among academic and research librarians in Lagos State. The online survey was adopted because of ease of use and also because of the potential of collecting data from all ARLs in Lagos within a short time. The respondents are only the librarians from all government owned academic and research libraries in Lagos state. The total number of these librarians are ninety-seven (97), seventy-three (academic) and twenty-four (Research) librarians respectively. The online

survey questionnaire link was sent through WhatsApp and email to all ARLs in Lagos State. Sixty-eight (69%) Librarians responded the survey. Descriptive statistic of frequency and simple percentage was used to analyse the data.

Results

Table 1: Emerging Trends Activities Carried Out by Academic and Research Librarians

Items	Freq.	%
ICT literacy	65	96
Research data management	58	85
Researchers' engagement	58	85
Communication skill	57	84
Open science and scholarly communication	57	84
Digitisation of information materials	55	81
Artificial intelligence	52	76
Data science	51	75
Advocacy	48	70

As shown in Table 1, information communication technology literacy had the highest rating of 96% as the highest identified emerged activity carried out by academic and research librarians. Research data management and researcher's engagement had the same rating of 85% each. These were closely followed by communication skill and open science. Digitisation of information materials was also rate high with 81%. It is interesting to note that artificial intelligence, data science and advocacy were rated high even though not as high as other earlier stated.

Table 2: Professional Development Activities

Items	Freq.	%
Workshops/conferences	68	100
On-the-job training	66	97
Formal courses offered in classroom/tutorials	65	96
Training in ICT	65	96
In-house seminars	62	91
Joining professional organisations	62	91
Online programmes	61	90
Online self-paced courses	55	81
Collaboration with faculty members	46	68
Distance education programmes	30	44
Staff exchange programs	27	40

All (100%) the respondents have attended conference/workshop at least once for professional development (Table 2). This was closely followed by on-the-job training with 97%. Training on ICT and regular courses had 96% while in-house-training and membership of professional organisation had 91% each. Online programmes had 90%, online self-paced trainings had 81%. Librarian’s collaboration with faculty members had 68%. The least on the professional development are distance learning programmes and staff exchange program with 44% and 40% respectively.

Table 3: Source of Sponsorship for Professional Development

Items	Freq.	%
Self-sponsorship	61	88
Institutional sponsorship	48	70
TetFund sponsorship	38	51
Professional Association sponsorship	22	32
Corporate sponsorship	15	22

The result as shown in Table 3 revealed that most (88%) professional development activities were self-sponsored by the respondents. This is followed by institutional sponsorship 70%. Librarian had professional association sponsorship 32% and this was followed by corporate sponsorship. Librarians are also enjoying TetFund sponsorship with 51% rating.

Table 4: Motivation for Career Development.

Items	Freq.	%
To acquire new skills	66	97
To develop skills	65	96
To excel in the profession	63	93
To improve performance	63	93
To improve library services delivery	63	93
To be current with the trend of my profession	63	93
To be trained in the new technologies applied in the library	62	91
For promotion purpose	62	91
To have a competitive edge over fellow librarians	53	78
For recognition purpose	38	51

Table 4 shows that motivation for career development for most of the respondents was to acquire new skills with 97% rating. To excel, improve performance on the job, improve library delivery and be current about the new trend in the profession had 93% each. Training in new library technology and promotion had same rating of 91% and recognition purpose had 51%.

Table 5: Institution Support to Professional Development

	Freq.	%
Dedicated to professional development activities	58	85
Encourage regular attending of workshop /conference	56	82
Provide study leave/fellowship with pay	52	76
Encourage continuous education program through funding	50	73
Education program in the library	44	65

The support of the institution for professional development were measured to know how dedicated the institution are to the professional development of librarians. The result as shown in Table 5 indicates that institutions were dedicate to professional development activities with 85% closely followed by encouraging workshop/conference. 76% attested to the provision of study leave and fellowship by the institution. Funding of continuous education program was also rated high with 73%. Education program in the library had 65%

Table 6: Challenges of Professional Development Practices among Librarians

Items	Freq.	%
Lack of fund	63	93
Absence of mentorship from senior colleague	42	61
Insufficient information technological tools	40	59
Poor information technological literacy skill	37	54
Lack of knowledge of research cycle to assist faculty members	34	50
No training need assessment (TNA) in my library	32	47
Lack of interest	20	29
Lack of self-will	17	25

Adapted from Posgha and Seimode (2015)

As shown in Table 6, lack of fund was the greatest challenge for achieving professional development by librarians. Dearth of mentorship had 61% and insufficient ICT tools had 59% rating. Poor ICT literacy skill. Lack of research circle with 50% hindered librarian’s professional development especially in relation to assisting faculty members. Training needs assessment had a role to play. Lack of interest and self-will 29% and 25 % respectively had the least rating of the challenges faced.

Discussion of Findings

The research surveyed professional development practices among academic and research librarians in Lagos state. The findings showed that majority of the respondents are aware of these emerging activities and participates in ICT literacy, researchers' engagement, research data management, open science and scholarly communication skill while digitization of information materials, artificial intelligent and advocacy are not so popular among these librarians.

It was evident from the result that self-sponsored for professional development is the most used avenue for professional development. This is as noted in the study of Ebong, Ogwo and Nwachuckwu (2022) which revealed that self-sponsored was the most rated source of librarian's professional development programs. Professional association and corporate sponsorship were the least source of professional development programs among librarians

The highest rated PD activities engaged in by librarians was workshop/conference while online programs, on-the-job training, ICT were seen to be popular as part of PD activities in their libraries. This is in line with study of Gunasekera (2021), majority had conference as their PD activities and followed by workshops. The least rated activity was staff exchange program, although this was not popular from the result but this negates the findings of Anyaegbu and Wali, (2019), where staff exchange/sabbatical had significant rating from the respondents although this was not unexpected since the study focused on only academic libraries.

Acquiring and developing new skills had the highest ranking, these were followed by improve library service delivery, performance improvement and being current with the new trend in the profession. This finding corroborated Jan and Jan (2022) where improved library services and skill acquisition had higher ranking. Recognition purpose had the least ranking as part of the factors that motivated for career development.

The result showed that the institutions provided support in various way for staff professional development. Thereby showing a favourable disposition and dedication to librarian's career development, the institutions encouraged regular attending of workshop/conference, provision of study leave/fellowship with pay and encouraged continuous education through funding were also rated high. The least was education program in the library which implies that the trainings, interventions and other initiatives may not be directed to the library but made general to the institution.

In the area of challenges faced by the respondents in undertaking professional development activities, funding was the highest rated challenge facing librarians this is line with the study of Jan and Jan (2022) where it was revealed that funding had the highest ranking as a challenge facing professionals in developing their career and also the institution as well. Other points rated were not significant as they were not seen as major challenge.

Recommendations

Based on the findings of the study, the following are recommended:

1. Librarians should be supported by library management to keep abreast of emerging trends in library and information services and technology through sponsorship to trainings and workshops.
2. Academic and research librarians should seek for grants and fellowships from cooperate and professional organizations that will enable them attend professional development programmes
3. Many training programmes are now online through webinars, YouTube and other platforms on the internet, librarians should participate in these trainings to acquire skills in the emerging trends
4. Furthermore, the library can think out of box on how to generate funds which will encourage the management to allocate large sum of money during budget allocation.
5. Librarians should be encouraged to be more committed to invest in their professional progression.

Conclusion

Continual Professional Development is an obligation for every librarian to participate. It is necessary for updating skills, knowledge, and learning new ideas for quality service delivery. Findings of the study show that for professional development, all the respondents have attended conference/workshop at least once. This was mostly through self-sponsorship. There is therefore need for increased support by management for professional development of librarians through funding. Information explosion and emerging technologies suggest that library and information practitioners need training and retraining if they want to be relevant in their service to patrons.

References

- Sulyman, A. S., Usman I., & Badmu, I. B. (2022). Investing in employability of librarians: An impetus for enhancing the professionalism of librarians in Nigeria. *Business Information Review* 1-12 <https://wwwjournals.sagepub.com/home/bir>
- Adeh, R. & Hayatu, M. M. (2020). Library user's Value-Chain: Assessing the use of library services by undergraduates in Ahmadu Bello University, Zaria. *Samaru Journal of Information Studies*, 20(1) <https://www.ajol.info/index.php/sjis/article/view/>
- Anene Ifeanyi Adindu & Idiedo Victor Okeoghene (2023) Librarians participation in professional development workshops using Zoom in Nigeria. *Information Development* 39(1), pp 36-45. <https://journals.sagepub.com/home/idv>

- Anyaeibu Mercy Ifeyinwa & Wali Nkiruka Blessing (2019) Influence of staff training and development on librarians' job performance in Federal University Libraries in South-South Nigeria. *Library Research Journal* 4(1) 38–60.
<https://journals.unizik.edu.ng/lrj/article/view/549>
- Ayolugbe C. J, Jidere A. J & Ogwo. U (2021). Utilization of zoom as an interactive platform in repositioning library administration management for effective service delivery in academic libraries in Nigeria. *Library Philosophy and Practice* 6514
- Bejalwar, S.A., & Kherde, M.R. (2021). Soft Skill Performance of Librarians' Working in Institutions of Higher Education in Western Vidarbha of Maharashtra State in India. *American Journal of Information Science and Technology*, 5(4), 86 -92.
<https://www.semanticscholar.org/reader/3c7ae7d8bcebd6f475760ecf418f2905708ed0>
- BOBCATSSS (2014) From Collections to Connections: Turning Libraries Inside-Out. 21st Century Library and Information Professional. A paper presented at the 21st International BOBCATSSS Conference 23-25 January 2013, Ankara, Turkey Proceedings <http://bobcatsss2013.bobcatsss.net>
- Chamani, G (2021) Continuing Professional Development for Library Professionals in Sri Lanka: University Libraries Perspectives. *Library Philosophy and Practice*. 5036.
<https://digitalcommons.unl.edu/libphilprac/5036>
- Decker, E. (2020): The X-Factor in Academic Libraries: The Demand for Soft Skills in Library Employees. *College & Undergraduate Libraries*, Issue 1. DOI: <https://doi.org/10.1080/10691316.2020.1781725>
- Dongare, Sudesh N. (2022) Reinventing Trends of Libraries & Librarians in Digital Landscape. *Journal of Emerging Technologies and Innovative Research* 9(5)
<https://www.jetir.org/papers/JETIR2205285.pdf>
- Dongare, S. N. (2022). Reinventing Trends of Libraries & Librarians in Digital Landscape. *Journal of Emerging Technologies and Innovative Research* 9(5)
<https://www.jetir.org/papers/JETIR2205285.pdf>
- Ebong, M., Ogwo, U, & Nwachukwu, V. N., (2022). Continuing professional development as a medium in the empowerment of library and information science educators for effective knowledge delivery and sustainable education in South East, Nigeria. *Library Philosophy and Practice*. 7086. <https://digitalcommons.unl.edu/libphilprac/7086>
- Elsa Bitri (2014) 21st Century Library and Information Professional. A paper presented at the 21st International BOBCATSSS Conference 23-25 January 2013, Ankara, Turkey Proceedings <http://bobcatsss2013.bobcatsss.net>
- Evidence Base (2021). The role of academic and research libraries as active participants and leaders in the production of scholarly research. A Report for Research Libraries UK.
<https://www.rluk.ac.uk/wp-content/uploads/2021/07>

- Frederick, A. and Run, Y. (2019). The Role of Academic Libraries in Research Data Management: A Case in Ghanaian University Libraries. *Open Access Library Journal*, 6, 1-16. https://www.scirp.org/pdf/OALibJ_2019032810262834.pdf
- Gomba, G. K. B. (2019). Challenges faced by educators in the implementation of Continuing Professional teacher Development (CPTD): Gauteng providence. open access peer-reviewed chapter. <https://www.intechopen.com/books/teacher-education-in-the-21st-century/>
- Huffstetler, K. (2020). What Is Professional Development and Why is it Important? <https://www.ahaworldcampus.com/b/what-is-professional-development>
- IFLA (2021) IFLA Trend Report Update. The Hague: IFLA headquarters.
- Isah, J., Yelwa S. A. & Amo, B. D, (2022). Influence of social media on undergraduates' low patronage to university library services in Sokoto state university, Sokoto. *Rima International Journal of Education* 1(2) <https://rijessu.com/wp-content/uploads>
- Jan, S. U. and Jan, R. (2022). Professional activities and training needs of college librarians in Khyber Pakhtunkhwa. *Library Philosophy and Practice (e-journal)*. 7099. <https://digitalcommons.unl.edu/libphilprac/7099>
- Kiran, Nadia & Aziz, Tariq & Lashari, Ajab Ali. (2024). Academic Libraries Emerging Trends in 21st Century: A Systematic Review. *Pakistan Social Sciences Review* 8. 270-281. <https://www.doi.org.10.35484%2Fpssr>
- Komalla Raju, Aparna, S.D & Muthu, M (2021). A vital role of academic library in higher education in the digital age. *Journal of Emerging Technologies and Innovative Research* 8(11) <http://www.jetri.org>
- Leonard, A., Chigwada, J. & Mushi, G. (2023), The state of embedded librarianship in the university research processes in selected African academic libraries, *Library Management*, <https://doi.org/10.1108/LM-06-2023-0045>
- Madukoma, E. & Ali G. (2022) Continuous professional development and work engagement of librarians in federal universities in North West, Nigeria. *Jewel Journal of Librarianship* 17(1). 149-161 <https://www.jeweljournals.com>
- Mahapatra, G. P. & Dash, S (2022). Round table: Talent development in a changing world of work. *Indian Institute of Management Bangalore* 34, 83–91. <https://www.elsevier.com/locate/iimb>
- Namaganda, Agnes (2020) Continuing professional development as transformational learning a case study. *The Journal of Academic Librarianship* 46(3) <https://www.sciencedirect.com/science/article/abs/pii/S0099133320300550>

- Ntogo-Saghanen, G. B. & Eson, GC (2021) Information entrepreneurship and use as a mechanism for self-employment of librarians in Rivers State, Nigeria. *Library and Information Perspectives and Research* 3(1): 104–118.
- Obi, H.E. (2023) Library Marketing Indicators on Students' Patronage of Information Services in federal universities in South-South Nigeria, *International Journal of Library and Information Science Studies*,9(1), pp.1-11
- Posigha, B. E. & Seimode E. F. (2015) Professional development of library professionals in Nigeria. *Journal of Applied Information Science and Technology* 8(2), 62-60. https://www.jaistonline.org/PosighaSeimode_Vol8no2_2k15.pdf
- Rabasa, Talatu Adamu & Abrizah, A. (2022) Academic librarians' roles and competencies in research partnership: A qualitative study. *Malaysian Journal of Library & Information Science*, 27(3) 69-95. <https://doi.org/10.22452/mjlis.vol27no3.4>.
- Shahzad, K.; Khan, S.A.; Javed, Y.; Iqbal, A. (2023) E-Learning for Continuing Professional Development of University Librarians: A Systematic Review. *Sustainability* 15, 849. <https://www.mdpi.com/2071-1050/15/1/849#B26-sustainability-15-00849>