Archives of Current Research International

Volume 24, Issue 7, Page 30-38, 2024; Article no.ACRI.122133
ISSN: 2454-7077

A Study on Motivational Factors and the Constraints Faced by Distance Learners of ODL Certificate Course Tea Cultivation Technology

Bharathwaaj. A [a++*], Balasubramaniam. P [b#], Sriram. N [c†], Nirmala Devi. M [a†] and Gangai Selvi. R [d‡]

[a] Department of Agricultural Extension and Rural Sociology, Tamil Nadu Agricultural University, Coimbatore-641003, Tamil Nadu, India.
[b] Directorate of Open and Distance Learning, Tamil Nadu Agricultural University, Coimbatore-641003, Tamil Nadu, India.
[c] Directorate of Research, Tamil Nadu Agricultural University, Coimbatore-641003, Tamil Nadu, India.
[d] Department of Physical Sciences & Information Technology, AEC&RI, Tamil Nadu Agricultural University, Coimbatore-641003, Tamil Nadu, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: https://doi.org/10.9734/acri/2024/v24i7826

Open Peer Review History:
This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc. are available here: https://www.sdiarticle5.com/review-history/122133

Original Research Article

Received: 14/06/2024
Accepted: 16/08/2024
Published: 21/08/2024

[++] PG Scholar;
[#] Director;
[†] Professor;
[‡] Professor and Head;
**Corresponding author: Email: bharathashok23@gmail.com;*

Cite as: *A, Bharathwaaj., Balasubramaniam. P, Sriram. N, Nirmala Devi. M, and Gangai Selvi. R. 2024. "A Study on Motivational Factors and the Constraints Faced by Distance Learners of ODL Certificate Course Tea Cultivation Technology". Archives of Current Research International 24 (7):30-38. https://doi.org/10.9734/acri/2024/v24i7826.*

ABSTRACT

Purpose and Scope: The purpose of this study is to explore the motivational factors that influence distance learners to enrol in the ODL Certificate Course in Tea Cultivation Technology, as well as to identify the constraints they face during the learning process. The scope of this study encompasses a detailed analysis of the personal, social, economic and educational motivations of the learners, alongside the challenges related to accessibility, resources, and support systems that may hinder their learning experience.

Research Design: An Ex-post facto research design was used in this research.

Methodology: This study was carried out in the Nilgiris district and Coimbatore district of Tamil Nadu which is one of the major tea growing regions in India. The Tea Cultivation Technology certificate course was purposefully selected for the research because of its popularity among tea growers and its maximum enrolment. Out of 174 learners who have attended this course, 120 respondents were chosen as a sample using Simple random sampling method. A well-structured interview schedule was prepared and the data was collected using personal and telephonic interviews. Frequency and Percentage analysis followed by Garrett ranking were employed to analyse the motivational factors and the constraints of the distant learners.

Results: The findings of this study revealed that the motivational factors behind the learners' enrolment in the certificate course were determinant factors (course convenience and situational factors), job aspiration, attitude toward ODL courses and attitude toward entrepreneurship. Majority of students (69.17%) indicated a moderate level of determinant factors that affected their choice to enrol in a distance-learning certificate program. Nearly half of the Learners (45.00%) enrolled in the certificate program is for private employment. More than three-fourth of the learners (78.33%) have favourable attitude towards the ODL courses and 63.33 percent have a moderate attitude towards entrepreneurship. The research also highlights significant constraints, such as limited practical classes, monetary constraints, reduced access to resources, technological difficulties, and the struggle to balance education with other responsibilities.

Conclusion: Addressing these constraints is essential for improving the overall effectiveness and accessibility of the ODL certificate course, ultimately leading to better learning outcomes and greater satisfaction among the participants in agricultural and allied sectors. Since the majority of learners had higher level of job aspiration and an entrepreneurial mindset, the provision of financial facilities to launch new businesses may serve as a motivational factor for members of the low-income group to enrol in certificate programmes.

Keywords: Distance education; tea cultivation technology; certificate course; agribusiness.

1. INTRODUCTION

Distance education is a form of education characterized by the quasi-permanent separation of teacher and learner throughout the length of the learning process. This separation distinguishes it from conventional face-to-face education [1]. The educational process is facilitated through the use of technical media, such as print, audio, video, or computer technologies, which are used to bridge the gap between the teacher and the learner. Additionally, there may be the possibility of occasional face-to-face meetings to support the learning process [2]. Distance education is the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical or other devices [3]. The term 'distance education' covers the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organisation [4].

Approximately 75% of households in India rely on rural income. The country's food security hinges on the production of cereal crops, as well as fruits, vegetables, and milk, to meet the demands of a growing population [5]. A competitive, productive, diversified, and sustainable agricultural sector is crucial to achieve this goal. In this context, the Indian agricultural economy and farming communities place a high value on the dissemination of

agricultural knowledge and the advancement of farming practices [6]. Open and distance learning is therefore regarded as a tried-and-true educational strategy for reaching the unreached. Distance education in agriculture is essential since it provides farmers all around the nation with affordable, flexible, and easily available learning possibilities for the rural development. It fills up the knowledge gap for farmers in isolated places by giving them access to the most recent information on technology, sustainability, and contemporary farming methods [7]. Through the empowerment of women and other small and marginal farmers, distance education boosts economic growth, encourages sustainable farming, and increases productivity. By making sure that the newest innovations reach those who need them the most, this strategy also improves agricultural extension services and, in the end, promotes a more knowledgeable and resilient agricultural sector [8,9,10].

Tea cultivation is of immense importance in India, serving as one of the country's most significant agricultural sectors. India is one of the largest producers and consumers of tea globally, with regions like Assam, West Bengal, and Tamil Nadu being key tea-growing areas [11,12,13]. The tea industry is a major source of employment, providing livelihoods to millions of people, especially in rural areas. It also contributes significantly to India's economy through export revenues. Beyond its economic impact, tea holds cultural significance in India, being an integral part of daily life and social customs [14]. Distance learning enables the tea growers to access the latest research, innovations, and best practices in tea cultivation [15-17]. This knowledge can help them improve crop yields, enhance the quality of their tea, and adopt more sustainable farming practices. In this regard, this study has made an effort to document the motivational factors of learners that are responsible for enrolling them in ODL Certificate course Tea Cultivation technology offered by TNAU and the various challenges faced by the distance learners during the course period.

2. MATERIALS AND METHODS

The purpose of this study was to explore the motivating factors and the challenges encountered by the distant learners on the ODL Certificate course Tea Cultivation Technology offered by the Directorate of Open and Distance Learning (DODL) in Tamil Nadu Agricultural University (TNAU). The DODL of Tamil Nadu Agricultural University was specifically chosen for this research. Tea Cultivation Technology certificate course was selected for the study due to its highest enrolment rate among all the courses. An Ex-post Facto research design was used in this research. Using the Simple random sampling method, 120 respondents were selected, out of 174 students who studied this Tea Cultivation technology certificate course during the period of 2019-2023. Under the Tamil Nadu Agricultural University, the Kothari Agricultural Management Centre situated at Coonoor, Nilgiris provides this certificate course to the learners. Data collection from distant learners was carried out directly, encompassing various blocks of Nilgiris district and Coimbatore district. A well-structured and pre-tested interview schedule was used to gather information from the selected respondents through personalised telephonic interviews. The collected data were processed using Statistical Packages of Social Sciences including descriptive statistics, cumulative frequency and Garrett Ranking.

3. RESULTS AND DISCUSSION

3.1 Motivational Factors

Motivation in open and distance learning influences what, how, and when students learn. The best factor influencing a student's ability to learn is motivation. Numerous studies discovered a strong relationship between students' motivation and their engagement and performance in the classroom.

3.1.1 Determinant factors

The main reasons why students enrol in certificate programs are known as determinant factors. The reasons why students choose to pursue the certificate program through Open and Distance Learning (ODL) were ascertained by looking at a specific response from the course participants. The survey instrument, which consisted of questions 1 to 16, was designed to investigate the factors that encouraged students to enrol in the ODL course. The survey was designed to gather information on a wide range of topics related to the reasons students participate in certificate programs, with two main areas of interest being course convenience and environmental and situational considerations.

The statements were rated using a 5-point continuum scale with the options strongly

disagree, disagree, agree, disagree, and undecided. Totalling the scores for all sixteen statements yielded the respondent's determinant factors score, which represents their motivation level. Sankaran (1985) created this scale first, then Prashad (2014) made modifications for this study. The respondents were divided into three groups based on their motivation levels: low, medium, and high. This was accomplished by using the cumulative frequency distribution technique. The distribution of the learners based on the determinant factors and the ranking of the determinant factors are shown in the Table 1 and Table 2.

From the Table 1, it could be inferred that the majority of the distance learners (69.17%) had a medium level of determinant factors followed by learners with high level (20.83%) of determinant factors and learners with low level (10.00%) of determinant factors that influenced their decision to enrol in the certificate course. This can be the result of constant desire of tea growers to increase their earnings and output. In addition, a variety of exotic pests and diseases have recently begun targeting tea gardens. To tackle the problems of pests and diseases in the tea sector, as well as to boost their economics, they have decided to participate in the ODL course. The outcomes discussed above align with the findings of Krishnaveni et al. (2017b).

Table 1. Distribution of the ODL learners based on their Determinant factors (n=120)

S. No.	Category	Frequency	Per cent
1.	Low	12	10.00
2.	Medium	83	69.17
3.	High	25	20.83
Total		**120**	**100.00**

3.1.2 Job aspiration

An individual's intended future professional path is typically referred to as their aspiration. It can be characterized as the extent to which a person deliberately makes an attempt to actively pursue a particular degree of success in a known task, taking into consideration their prior performance in that field. The distribution of learners based on their progressiveness is presented in Table 3 and Fig. 2. It shows that 45.00% of the students enrolled in the certificate program is for private employment. In the meantime, 18.33% of students said that they wanted to become entrepreneurs, and 23.33 per cent of students said that they wanted to start their own firm. A small percentage of students, at 13.33%, stated that they wished for others.

Table 2. Ranking for the determinant factors (n=120)

S. No.	Statements	Mean score	Rank
	Course convenience		
1.	Of the flexibility and convenience	4.53	**I**
2.	Of the independent structure of the course	4.41	**II**
3.	I do not have to travel to campus	4.18	**IV**
4.	I feel out of place in a traditional classroom	3.56	**VI**
5.	It was the only course format available for the required subject matter	2.88	**VII**
6.	Of my desire to experience this course format	4.34	**III**
7.	Affordability of the course	3.88	**V**
	Situational and Environment factors		
1.	Of my family obligation	2.86	**VIII**
2.	Of my employment obligation	3.24	**VII**
3.	To seek self-employment based on this qualification with bank loan	3.77	**III**
4.	To become an entrepreneur in Agri business	3.31	**VI**
5.	To get more profit from my farm due to knowledge acquisition from the course	4.48	**I**
6.	To become a model farmer of a village for emulation by other fellow farmers	4.16	**II**
7.	To become competent so as to give advisory services to others	3.64	**V**
8.	The fellow youths encourage me to join this course	3.72	**IV**
9.	Finding no other opportunity just joined the course	2.32	**IX**

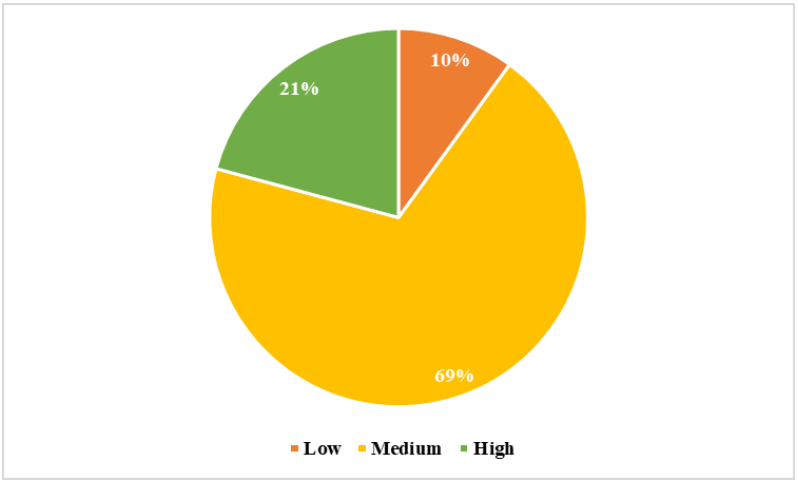

Fig. 1. Distribution of respondents based on their Determinant factors (n=120)

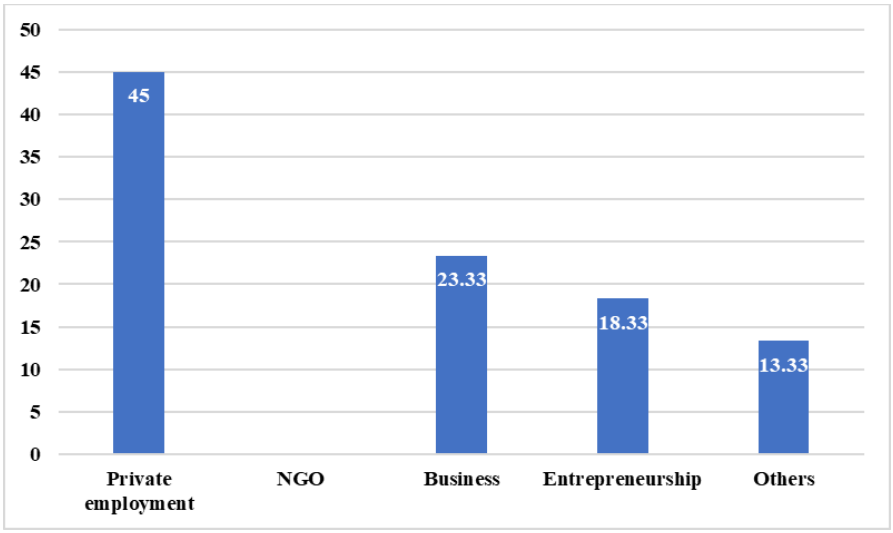

Fig. 2. Distribution of respondents based on their Job Aspiration (n=120)

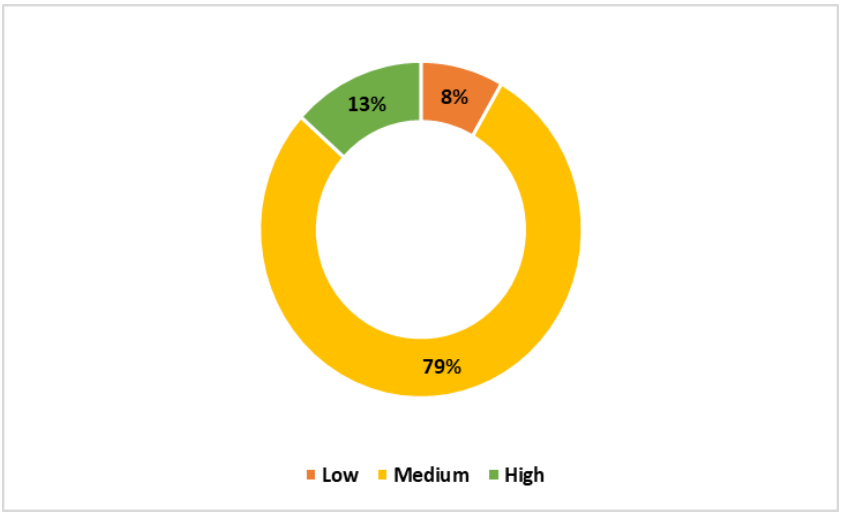

Fig. 3. Distribution of respondents based on their Attitude towards ODL course (n=120)

Table 3. Distribution of the learners based on their Job aspiration (n=120)

S. No.	Category	Frequency	Per cent
1.	Private employment	54	45.00
2.	NGO	0	0.00
3.	Business	28	23.33
4.	Entrepreneurship	22	18.33
5.	Others	16	13.33
Total		**120**	**100.00**

Table 4. Distribution of respondents based on their Attitude towards ODL course (n=120)

S. No.	Category	Frequency	Per cent
1.	Low	16	8.33
2.	Medium	94	78.33
3.	High	10	13.33
Total		**120**	**100.00**

This could be because the ODL certificate program in tea cultivation technology emphasizes technologies for production and value addition together with other areas related to entrepreneurship, perhaps motivating students to explore entrepreneurship and start their own business. As a result, slightly over half of the students desired to start their own businesses or work in private tea-growing roles. The aforementioned results aligned with the discoveries made by Krishnaveni et al. (2017b).

3.1.3 Attitude towards ODL course

A shift of perspective about any idea from positive to negative or vice versa is referred to as an attitude. The respondent's attitude regarding enrolling in the ODL course served as an operationalization of their standpoint. Using a test that the teacher designed, 11 statements representing respondents' attitudes on enrolling in the certificate program were created for the study. The respondents' attitudes regarding taking the course are gauged using a five- point scale: strongly agree, agree, uncertain, disagree, and disagree strongly. Table 4 shows that a majority of the students (78.33%) had a moderate attitude toward the ODL course. A smaller percentage (13.33%) had a high attitude, and the remaining (8.33%) had a low attitude. This could be as a result of the ODL course producing a lot of success stories and many ODL students starting their own companies in the agricultural sector. The results agreed with those of Al-Yamini and Jabali (2021).

3.3.4 Attitude towards entrepreneurship

An attitude is a change in viewpoint that can happen when someone adopts a negative or positive perspective on a certain idea, or vice versa. The attitude toward entrepreneurship in this study was operationalized based on the respondent's perspective on pursuing entrepreneurship. A list of ten statements were used to represent the respondents' perspectives on entrepreneurship. A five-point Likert scale is used to assess respondents' opinions about entrepreneurship: strongly agree, agree, uncertain, disagree, and disagree strongly. Each respondent's overall score was determined by summing their results for each of the five statements and were categorised into low, medium and high.

Table 5 shows that a majority of students, 63.33 percent, have a moderate attitude toward entrepreneurship, while 21.67% of respondents had a high attitude and 15.00% had a negative attitude. To become an agricultural entrepreneur, one needed to be able to recognize opportunities in the current environment, have the courage to start a business through teamwork, and be willing to attempt new things. Those with a strong entrepreneurial spirit were able to launch profitable companies despite potential resource limitations. These Agri-preneurs also displayed a remarkable and potent trait by bouncing back fast from setbacks. The preceding observations were consistent with Akila's (2015) findings.

Table 5. Distribution of the ODL learners based on their Attitude towards Entrepreneurship (n=120)

S. No.	Category	Frequency	Per cent
1.	Low	18	15.00
2.	Medium	76	63.33
3.	High	26	21.67
Total		**120**	**100.00**

3.3 Constraints Faced by the Distant Learners

Every situation has its own advantages and disadvantages. With this perspective, this study examined the constraints perceived by learners during the course. The challenges faced by learners throughout the course are outlined in Table 6.

The majority of tea growers cited a lack of exposure visits and practical lessons as one of the main obstacles, and rank I (14.72%) is attributable to a lack of practical training for

activities including planting, pruning, pest control, and harvesting. The best way to gain these skills is by hands-on experience. Tea growers with rank II (14.64%) indicated an inadequate home learning environment because of several distractions that can interfere with study time, including family obligations and household tasks. Students actively engaged in farming and other activities may be the cause of their rank III (14.53%) lack of study time, which makes it challenging to set aside enough time for studying and finishing course obligations. The learners ranked the difficulty of attending in-person sessions as having rank IV (13.87%), with the main causes being cost, distance, and availability of transportation. It also takes a lot of time, which may not be possible for farmers who lead busy lives.

The reason for the rank V (11.31%) on the list of distances from house to study centres could be that the centres are far away and need a lot of travel time, which can be exhausting and cut into the amount of time available for study and farm work. Some learners may live in areas with poor road infrastructure, making travel difficult and unreliable. Some students might reside in places with inadequate road systems, which would make travel challenging and unpredictable. Financial Limitations was ranked VI (11.12%) because some students may find the expense of enrolment in the course to be prohibitive. The reason why insufficient experience or training with instructional technologies was ranked VII (10.17%) could be that more assistance or training is required to enable learners to use them effectively. Effective participation may be hampered by the fact that certain students may not feel at ease or familiar with using digital platforms for education. Lack of support from friends, family, the employer, and other sources was ranked VIII (9.65%). This could be because employers don't give their staff the flexibility, they need to balance job and school. This result agrees with Sridevi Krishnaveni (2015).

Table 6. Constraints encountered by the learners during the course period (n= 120)

S. No.	Constraints	Average Score	Percentage	Garrett Rank
1.	Less exposure visits and practical classes	58.87	14.72	I
2.	Inadequate home learning environment	58.56	14.64	II
3.	Insufficient time for study	58.10	14.53	III
4.	Challenges in attending in-person sessions	55.48	13.87	IV
5.	Distance from home to study centers	45.25	11.31	V
6.	Monetary limitations	45.25	11.12	VI
7.	Insufficient experience or training with instructional technologies	44.46	14.64	VII
8.	Absence of support from family, friends, employer, and others	38.59	9.65	VIII
Total		400	100	

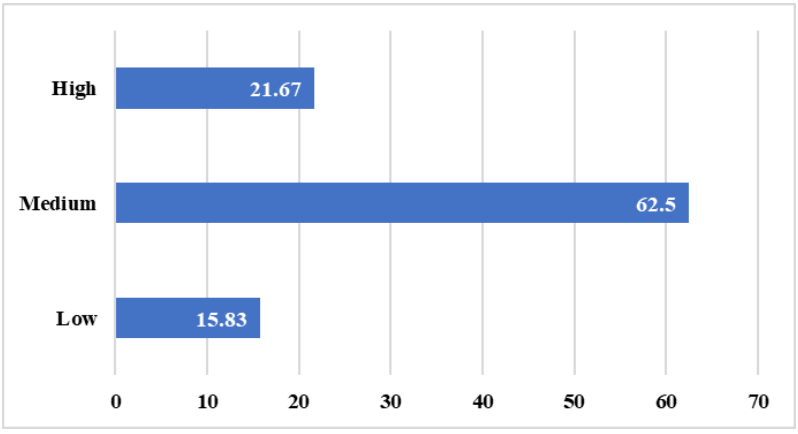

Fig. 4. Distribution of respondents based on their Attitude towards Entrepreneurship (n=120)

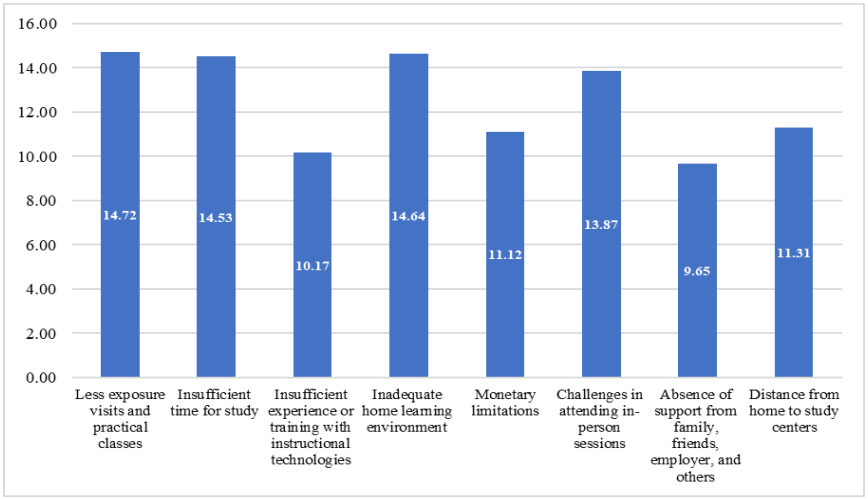

Fig. 5. Constraints faced by the learners during the course period (n=120)

4. CONCLUSION

This study on motivational factors and constraints faced by distance learners of the ODL certificate course Tea Cultivation technology reveals that learners enrolling in the courses are primarily driven by the determinant factors (Course convenience and Situational factors), job aspiration, attitude towards ODL courses and attitude towards entrepreneurship which enhance their skills, improve their livelihoods, and adopt modern agricultural practices. However, the research also highlights significant constraints, such as limited practical classes, reduced access to resources, technological difficulties, and the struggle to balance education with other responsibilities.

To maximize the impact of such distance learning programs, it is crucial for educational institutions and policy makers to address these constraints by providing better technological support, accessible resources, and flexible learning options. By doing so, the effectiveness of distance education in the agricultural sector can be greatly enhanced, leading to improved productivity, sustainability, and economic growth in the tea industry. This study underscores the importance of distance learning programs to meet the specific needs of learners, ensuring their success and contributing to the overall development of the agricultural sector.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

ACKNOWLEDGEMENT

I would like to extend my deepest gratitude to Professor Dr. P. Balasubramaniam, my major advisor and the members of my advisory committee for their immense support and guidance throughout my research. Furthermore, I am deeply thankful to Tamil Nadu Agricultural University (TNAU) for providing financial assistance for my research endeavours through the Think Tank fellowship during 2023–2024.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Keegan DJ. On defining distance education. Distance Education. 1980;1(1): 13–36. Available:https://doi.org/10.1080/0158791800010102
2. Moore M. Recent contributions to the theory of distance education. Open Learning: The Journal of Open, Distance and e-Learning. 1990;5(3):10–15. Available:https://doi.org/10.1080/0268051900050303
3. Singh S, Singh A, Singh K. Education systems and academic satisfaction: A study on rural and urban students of

traditional vs open education system in India. Turkish Online Journal of Distance Education. 2012;13(3):390-406.
4. Dileepkumar G, Dixit S, Balaji V. Agricultural extension with information and communication technology (ICT) mediated open distance learning (ODL) methods: A case study from rural South India. Educomm Asia. 2005;10(4):8-11.
5. Demiryürek K, Atsan T. Distance education through Television for Farmers in developing countries: The case of Turkey. The Anthropologist. 2015;21(3):374-379.
6. Letseka M. Stimulating ODL research at UNISA: Exploring the role and potential impact of the UNESCO Chair. Open Learning: The Journal of Open, Distance and e-Learning. 2021;36(2):133-148.
7. Sridevi Krishnaveni TR, Balasubramaniam P, Anusuya A, Vasanthapriya S. Extent of awareness of distance learners of Tamil Nadu agricultural university. Journal of Extension Education. 2017;29(4):5668–5676.
8. Murai AS, Vijayragavan K, Singh P, Balakrishnan R. Farmers' preferences of e-learning courses: Implications for extension professionals. Journal of Community Mobilization and Sustainable Development. 2018;13(3):589-594.
9. Nimbalkar SA, Patil VD, Ingle PO. Distance agricultural education: Perspectives in agricultural development in India. In Third PAN Commonwealth Forum on Open Learning: Building Learning Communities for our Millennium: Reaching Wider Audiences through Innovative Approaches, New Zealand; 2004.
10. Tiwari SP. Information and communication technology initiatives for knowledge sharing in agriculture. ARXIV preprint arXiv:2202.08649; 2022.
11. Hazarika K, Borah K. Small tea cultivation in the process of Self Employment: A study on the indigenous people of Assam (India); 2013.
12. Paltasingh KR, Goyari P. Impact of farmer education on farm productivity under varying technologies: Case of paddy growers in India. Agricultural and Food Economics. 2018;6(1):1-19.
13. Sinha AK. Information seeking behaviour and role of mass media in socioeconomic of the santals of Birbhum, West Bengal. Journal of Library and Information Sciences. 2018;8(2):237-246.
14. Shah SK, Pate VA. Tea production in India: Challenges and opportunities. Journal of Tea Science Research. 2016;6.
15. Haldhar SM, Hussain T, Thaochan N, Bana RS, Jat MK, Nidhi CN, Sunpapao A. Entrepreneurship opportunities for agriculture graduate and rural youth in India: A scoping review. Journal of Agriculture and Ecology. 2023;15:1-13.
16. Pattabhi SG, Prashanth P, Sreenivasulu M, Madavilata A. Effectiveness of social media agricultural information on farmer's knowledge. Environment Conservation Journal. 2023;24(1):123-129.
17. Virani SR, Saini JR, Sharma S. Adoption of massive open online courses (MOOCs) for blended learning: The Indian educators' perspective. Interactive Learning Environments. 2023;31(2):1060-1076.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/122133