

Effect of Publications on Career Advancement of Agricultural Teachers of ANGRAU

M. Sindhuja^{1*}, V. Sailaja¹, K. Raghavendra Chowdary², S. Ujwala Rani³ and T. Lakshmi¹

¹Department of Agricultural Extension Education,

S.V. Agricultural College, Tirupati (Andhra Pradesh), India.

²Scientist, Extension, DAATT Centre, Chittoor (Andhra Pradesh), India.

³Scientist, Agricultural Economics, R.A.R.S., Chintapalle (Andhra Pradesh), India.

(Corresponding author: M. Sindhuja*)

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ABSTRACT: This study examines the impact of publications on the career advancement of faculty members at Acharya N.G. Ranga Agricultural University (ANGRAU), a prominent institution for agricultural education and research. The research focused on Andhra Pradesh state and the five constituent agricultural colleges under ANGRAU, selecting 102 respondents through purposive random sampling procedure. Data collected via close-ended questionnaire explored factors like number of publications, citation metrics, leadership roles, awards, editorial positions, collaborations and research funding. The findings revealed that many teachers actively participated in research and knowledge sharing which is evident from their moderate publication and citation metrics. Leadership roles, awards and editorial positions were found to significantly improve career prospects. Collaborative efforts particularly with students positively influenced research quality and career advancement. However, the ongoing difficulty in obtaining research funding suggests areas for improvement. To enhance ANGRAU teacher's career trajectories fostering a culture of impactful publishing, facilitating leadership avenues, nurturing collaborative networks and addressing the issue of limited research funding are all imperative.

Keywords: Teachers, ANGRAU, publications.

INTRODUCTION

Agriculture plays a vital role in India's economy, 54.6 per cent of the total workforce are engaged in agriculture and allied sector activities (Census, 2011) and accounts for 18.6 per cent (Economic survey, 2022-23) of the country's Gross Value Added (GVA) for the year 2021-22 (at current prices). State Agricultural Universities (SAUs) play an important role in enhancing crop production and productivity within states, thereby ensuring food and nutritional security for both rural and urban populations. SAUs are dedicated to deliver transformative education and sustainable research solutions to the farming community. They offer education in the various disciplines of Agriculture, Horticulture, Forestry, Fisheries Science, Food Technology, Veterinary and Animal Husbandry, Agricultural Engineering, Dairy Science, Agri. Business Management etc. at diploma, degree, master and doctoral level (Annual Report, 2020-21, DAC&FW). Around 35,000 full-time faculty members involved in agricultural and allied sciences teaching, research, and extension are scattered among these universities, and an estimated 1.65 lakh students are enrolled in various UG, PG, and PhD programmes in these institutions (Source: ICAR –NAHEP, 2020). Publication is recognized all over the globe as an

integral part of an academic's career. Research publications are crucial for advancing knowledge in various fields. In the competitive academic landscape, publications play a vital role in advancing the career prospects of teachers. This is especially true for the faculty members of Acharya N.G. Ranga Agricultural University (ANGRAU), a prestigious institution committed to excellence in agricultural education and research. The ability to generate and disseminate knowledge through scholarly publications is not only essential for personal growth but also contributes to overall development and reputation of ANGRAU as an institution.

Abramo *et al.* (2023) observes a bandwagon effect since the research performance gap between the two observed cohorts decreased after the introduction of the publication requirements. The statistical difference in differences tests revealed that in general, the incentive to produce more indexed publications worked. Nevertheless, it did not always led to higher research performance. Consequently, several state agriculture universities have introduced Scopus (S) and Web of Science (WoS- (S&W) indexed publication thresholds for doctoral degree, professorship, research funding allocation (Grancay *et al.*, 2017; Hladchenko & Moed 2021a). However, publishing in journals indexed in S&W does not necessarily imply high-quality research

(Abramo *et al.*, 2019a; Bornmann & Daniel 2008). Prior studies highlight that the incentive schemes linked to only the number of publications can result in academics increasing the number of publications by publishing in lower-impact journals, e.g. Australia (Butler, 2003a), Denmark (Ingwersen & Larsen 2014). It was also reported that research publications were relevant to the career progress of librarians and to further buttress the relevance of publication output of librarians to their career progression the respondents opined that promotion as an academic librarian was strictly by number of publications (Adegbaye *et al.*, 2019). The effect of publications on career advancement cannot be overstated. A steady publication output was an important condition for continued employment and advancement of scientists (Johanlor, 2005). The present study carried out with objective of effect of publications on career advancement of teachers. Publications enhance the visibility and credibility of ANGRAU teachers but also open avenues to various professional opportunities. A strong publication record is often a critical criterion for promotions, tenure, and recognition within academic circles among the teachers.

METHODOLOGY

Andhra Pradesh state was purposively selected as the researcher hails from the same state and Acharya N.G. Ranga Agricultural University is situated in the same state. All the five constituent agricultural colleges under Acharya N.G. Ranga Agricultural University were selected purposively for the study. From the five constituent agricultural colleges 120 teachers were selected for the study by following proportionate random sampling procedure. However, due to lack of vital information essential for the study objectives, 18 questionnaires were regrettably excluded from the final analysis. Though the researcher encountered some challenges with incomplete responses from some of the teachers of ANGRAU, the study's final sample of 102 respondents enabled to draw valuable conclusions regarding their publication behaviour.

A descriptive analysis was employed to study the effect of publications on career advancement of teachers of ANGRAU. The study explored several key factors viz., 'number of publications', 'citation metrics', 'leadership roles', 'awards received', 'editorial positions', 'collaborations' and 'research grants secured', to better understand their influence on teacher's career progression.

Teachers were presented with a close-ended questionnaire focusing on the factors mentioned above. Their responses were then analyzed to explore these factors. The data obtained from the teacher's responses was used to calculate frequency and percentage of each factor.

RESULTS AND DISCUSSION

In order to study the effect of publications on career advancement of teacher's various factors such as the 'number of publications', 'citation metrics', 'leadership roles', 'awards received', 'editorial positions',
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'collaborations' and 'research grants secured' were examined.

More than two third (67.65%) of the respondents had medium number of publications which indicates that a significant portion of respondents were actively engaged in research knowledge dissemination. Majority (83.33%) of the respondents showed medium citation count. Higher citation counts generally suggest that teachers work is influential and widely recognized by their peers which can lead to benefits like promotions and tenure, recognition and awards, job opportunities etc.

More than half (60.78%) of the respondents had performed roles in institutional committees followed by academic advisors (56.86%), head of the departments (52.94%), program director/coordinator (35.29%) and research project leaders (27.45%). Serving in institutional committees, as academic advisors, head of the departments, program director/coordinator and research project leaders provides teachers with valuable leadership experience. Such experience is often highly regarded by the university and can be beneficial for career advancement opportunities such as promotions to higher administrative positions.

More than half (57.84%) of the respondents belonged to low category in receiving awards. The results were in accordance with Fazely (2016) and Veldandi *et al.* (2023). Winning awards can position teachers as leaders in their field and enhance their chances of career advancement. Awards won may be considered for promotions within the institution. An overwhelming (87.25%) of the respondents were referees followed by members (54.90%), associate editors (23.53%) and chief editors (19.61%). Serving as an editor or editorial board member for a reputable journal or publication can enhance a teacher's academic visibility and recognition within their field. Hence measures can be taken to upsurge the editorial position from referee and member to associate and chief editors. The results were in accordance with Makwan and Trivedi (2011).

More than two fifths (41.17%) of the respondents had collaborations with students followed by interdisciplinary collaborations (26.47%), collaborations with cross institutions (20.58%) and the 14.70 per cent had collaborations with Government agencies, funding agencies, Non-Government Organizations (NGOs) and international collaborations. More than two fifth (41.17%) of the respondents had collaborations with students, this might be due to the reason that working with students provides an opportunity for teachers to guide and mentor them. As a result, research quality often improves leading to more impactful publications and contributions to the academic community. Collaborations can be enhanced which increases the publications and sequentially results in career advancement of teachers.

Majority (82.35%) of the teachers were medium in securing research funding followed by high (17.65%). The possible reason might be that research funding in the education sector may be limited, and competition for these resources can be intense. As a result, only a small percentage of teachers were able to secure

research funding due to the limited pool of available funds. Some of the teachers also put forward that incentives or research grants should be provided at adequate time which in turn facilitates them to publish

in high National Academy of Agricultural Sciences (NAAS) rated journals and Scopus and Web of Science indexed journals.

Table 1: Various factors used to study the effect of publications on career advancement of ANGRAU teachers.

Sr. No.	Variables	Category	Frequency	Percentage
1.	Number of publications	Low	10	9.80
		Medium	69	67.65
		High	23	22.55
		Mean	0.54	
		SD	0.33	
2.	Citation count	Low	0	0.00
		Medium	85	83.33
		High	17	16.67
		Mean	0.25	
		S.D	0.30	
3.	Leadership roles	Institutional committees	62	60.78
		Academic advisors	58	56.86
		Head of the departments	54	52.94
		Program director/coordinator	36	35.29
		Research project leaders	28	27.45
4.	Awards received	Low	59	57.84
		Medium	0	0.00
		High	43	42.16
		Mean	0.42	
		S.D	0.49	
5.	Editorial positions	Chief editor	20	19.61
		Associate editor	24	23.53
		Member	56	54.90
		Referee	89	87.25
6.	Collaborations	Collaborations with students	42	41.17
		Interdisciplinary collaborations	27	26.47
		Collaborations with cross institutions	21	20.58
		Collaborations with Government agencies	9	8.82
		Collaborations with funding agencies	3	2.94
		Collaborations with Non-Government Organizations (NGOs)	2	1.96
		International collaborations	1	0.98
7.	Research grants secured	Low	0	0.00
		Medium	84	82.35
		High	18	17.65
		Mean	0.18	
		S.D	0.38	

CONCLUSIONS

This study explored how scholarly publications shape the career advancement of ANGRAU teachers. The results emphasize the pivotal role of publications in shaping the teacher's professional growth. A noteworthy percentage of teachers were actively engaged in research and knowledge dissemination, reflected by their medium number of publications and citation metrics. Additionally, the study highlighted the significance of leadership roles, awards and editorial positions in bolstering career prospects. Notably, collaborative endeavors of Ph.D. Scholars with national agricultural research institutes be identified as positive influence on research quality and subsequent career progression. Nevertheless, the persisting challenge of securing research funding points toward potential areas for enhancement. To enhance ANGRAU teacher's career trajectories fostering a culture of impactful publishing, facilitating leadership avenues, nurturing

collaborative networks and addressing the issue of limited research funding are all imperative.

FUTURE SCOPE

The study would contribute to the existing theoretical knowledge and understanding of the dissemination of agricultural findings through publications. Thus, the study would be of great use to the educators, scientists, extension personnel, funding agencies, collaborators, administrators etc., who are directly or indirectly involved in the institution. The eventual goal of this research was to assess the publication behaviour, to find out the constraints faced by teachers in publishing their research work and to elicit suggestions so that the university may employ these suggestions to overcome the constraints. Finally, the comprehensive study aims to gain insights into ANGRAU's research landscape, strengths and opportunities, fostering academic growth and development.

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Conflict of Interest. None.

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