



Parvatibai Chowgule College of Arts and Science
Autonomous

Accredited by NAAC with Grade 'A' (CGPA Score 3.41 on a 4 Point Scale in 3rd cycle)
Best affiliated College-Goa University Silver Jubilee Year Award

STRATEGIC PLAN AND OUTCOME ACHIEVED
(2015-2020)

RESEARCH, CONSULTANCY AND EXTENSION ACTIVITY COMMITTEE
(PCCAS-RCEA)

I. Introduction

Besides being an academic institution focusing on quality education, Parvatibai Chowgule College of Arts and Science (PCCAS), is also actively involved in research. The college has “Research, Consultancy and Extension activities” committee (RCEA), along with the Head of the institution, which looks into the planning and execution of encouraging and enhancing research amongst faculty members and students. With the implementation of Autonomy in 2015-16, the ‘Research, Consultancy and Extension Activities committee of the college (RCEA-PCCAS) redefined it’s goals. The Research committee/Criteria III coordinator of IQAC, made a 05 year strategic plan of promoting and strengthening research on the campus and focus on quality of research. Accordingly, short term and long term goals were laid and plan for execution of the same was prepared.

II. Strategic Plan: The RCEAC developed a five strategic plan in 2015 with defined short term and long term goals. Annual action plan was prepared for achieving its objectives.

Short term goals of RCEAC:

1. Create conducive research environment
2. Promote research on the campus
3. Encourage research publications and Interdisciplinary research
4. Create Research Policies
5. Encourage community outreach activities at the departments

Long term goals of RCEAC:

6. Initiate international collaborations for research
7. Obtain funds for research infrastructure development
8. Create Portal for research.



a) Deployment:

- i) **Planning:** The RCEAC is given autonomy to prepare its annual plan considering the goals to be achieved. The plan is deliberated and approved by the Principal. Based on the annual goals, the Principal gives pointers to the Heads of the departments (HODs), for annual departmental planning for research. HODs make an annual plan in consultation with all faculty members, considering the requirements of the programme to conduct workshops, seminars, community works, benchmarking trips, field-visits, club activities, industry-academia lectures etc. Requisition for specific research space, equipments, funds for undergoing trainings or presenting research papers is also decided at the department level. The budget plan is then submitted to the principal / management for approval. Thus the college involves all faculty members in planning its research and extension activity works .

ii) Execution: The RCEA committee meets periodically to make a schedule for execution of all the works and monitor the progress. The Committee carries out the works of promoting research, creating conducive environment for research promotion, encourage extension activities and community outreach programmes at the departments. Besides, based on the research requirements submitted by the HOD, the Committee and Principal undertake initiatives to provide research space and facilities to the faculty/students.

III. Research, Consultancy and Extension Activity (PCCAS-RCEA) Committee Works and Functioning:

The IQAC/ RCEA-PCCAS initiated and conducted multiple programmes to sensitise and promote conducive research environment for faculty and students. Initially the focus was to promote research on campus. The midterm and long term goals focussed on promoting quality in research publications, facilitating interdisciplinary projects, initiating linkages for research and internships and promoting community outreach activities. A significant number of faculty members are actively involved in research by guiding PhD students in research, undertaking research projects, publishing and presenting their research findings, providing consultancy and carrying out collaborative research activities.

Objectives:

- 1) Create conducive research environment.
- 2) Promote research culture amongst teachers and students.
- 3) To create awareness on research related ethical requirements of the college.
- 4) To enhance research paper publications and presentation.
- 5) Encourage faculty to obtain research projects/funds and consultancy works.
- 6) Promote community works, extension activities by the departments

The major initiatives undertaken to promote research on the campus are listed in Fig. 1 and are discussed under eight major heads.

Milestones Achieved:

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- 1. Created Research database:** Research portal on college website gives all information and documents related to promotion of Research on the campus. It also harbors information on research publications, seminars/workshop/conferences organized and attended, books authored, research projects undertaken, consultancy works and community outreach activities.

2. Formulated Research promotion Policies: The research promotion policy of RCEA-PCCAS explains the processes used to promote research on campus. The policy document highlights research policies for faculty members and students and gives the framework for development and implementation of initiatives taken to promote research at Chowgule College. The components of 'Research Promotion policy' includes Promoting Research Culture amongst faculty and students; Submitting Project proposals to avail funding; Encouraging Completion of PhD by Faculty members; Applying for Research Awards; Availing Seed money for research/Financial aid for Presentation / Resource person; Protocol for using Central Research Laboratory facility and Procedure for Initiating Linkages/MoUs.

3. Initiatives to promote Quality Research: As an academic and research institution, the college has taken myriad measures to promote quality in all research activities conducted by faculty and students. Some of the initiatives are as follows:

- a. **'Guideline Document on Research Ethics'** was formulated to governs the standards of conduct of researchers on the campus. While carrying out research, it is important to adhere to ethical principles in order to protect the dignity, rights and welfare of research participants. It is also important to curb plagiarism, and conform to the requirements of quality of research publications. '*Guideline Document on Research Ethics*' includes importance and procedure of Ethical Clearance for research projects; Avoiding Plagiarism; Research Publication Ethics and Quality Publications (UGC- CARE list).
- b. **Constituted 'Institutional Ethics committee':** College constituted Institutional Ethics committee (IEC-PCCAS) as per the guidelines of Indian Council of Medical research (ICMR). The objective of IEC-PCCAS is to ensure that research in PCCAS involving human beings as participants shall follow the standards and principles prescribed in the Indian Council of Medical research (ICMR) Ethical Guidelines.
- c. **Conducted workshops to Promote Quality Research:** Various workshops and seminars conducted to promote quality publications are: Research Data Management to give global platform – ORCID registration; Facilitating H Index and Metric calculation – RESEARCHERID

registration; 'Writing Research papers – Academic – Mendeley'; 'Scholarly Communications- How to avoid / identify fake Predatory journals; "Connect your achievements and contributions on Global Registry'; 'Metrics as measuring scholarly articles'; "Funding Schemes' for the Temporary/Contractual faculty members; "Avoiding Plagiarism"; "Referencing Styles" and Research Orientations.

- d. **Instituted Award for quality publications:** College instituted Annual 'Certificate of appreciation' and Cash prize to faculty with publication with highest impact factor journal listed in web of science/ Scopus / ICI.

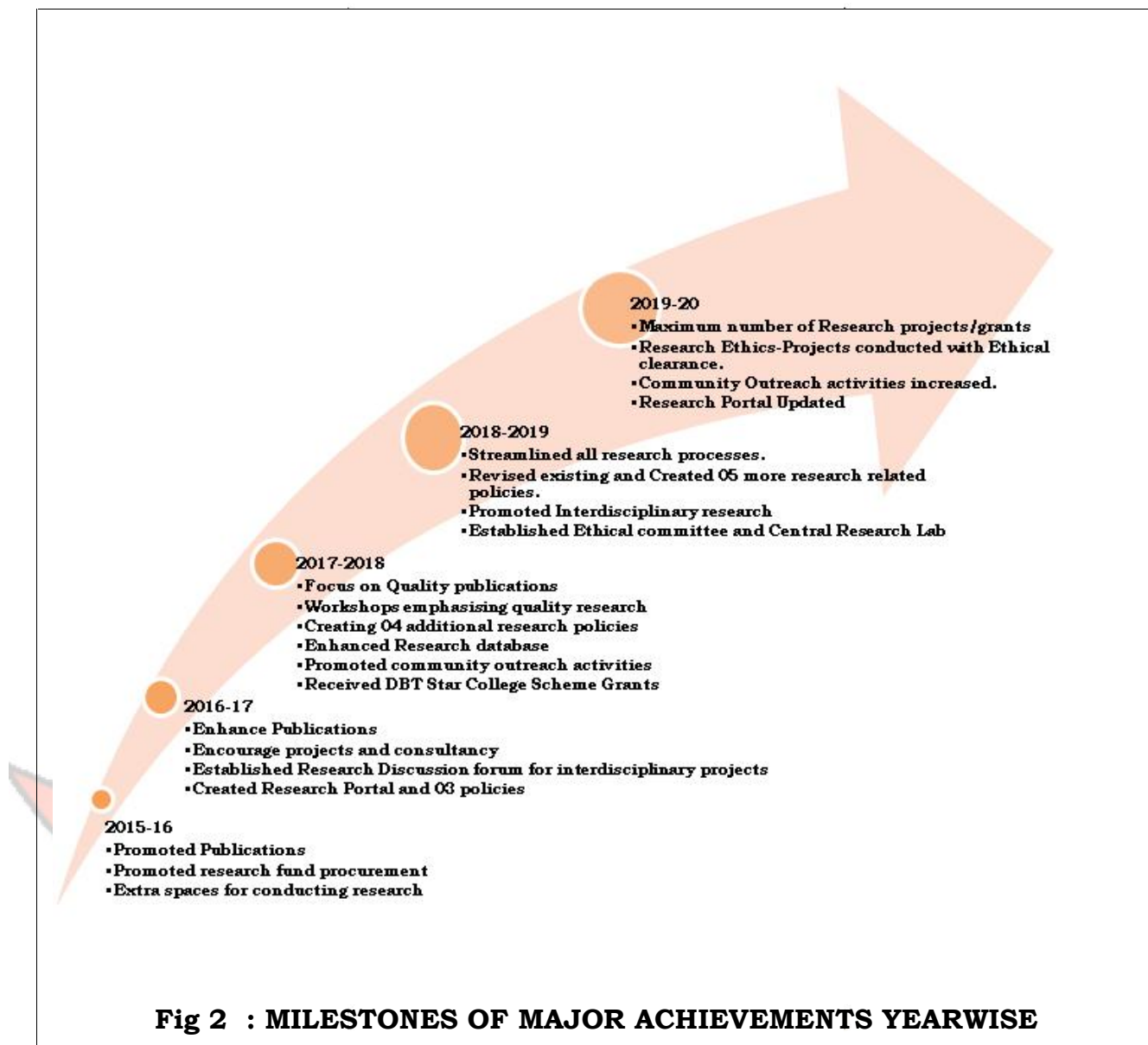
4. Initiatives to Encourage Research Project funds: To tap the research potential of the faculty members, the RCEA-PCCAS/IQAC had undertaken numerous initiatives.

- a. **Guide to Research funding:** To encourage projects, the RCEA-PCCAS has prepared policy document on 'Guide to Research funding' which is available on the research portal of the college website.
- b. **Workshops:** It also organised workshops regularly on 'Project proposal writing', Research Methodologies, 'How to formulate Good research proposal' and 'Funding Schemes for Temporary/Contractual faculty'.
- c. **Invited lectures:** College also invites renowned researchers on campus.
- d. **Proposal submission protocol:** The RCEA-PCCAS has prepared guideline for faculty members to understand the procedure of applying for funds. The committee actively participates in helping Faculty members to check for adherence of format, document attachment and organisation.
- e. **Specialised Research labs:** As research is the key focus of this institute, management of the college introduced specialized research laboratories such as Geographical information services Lab (GIS), Photogrammetry Lab, Human Genetic Research lab, Plant Physiology lab, Plant tissue culture lab, Environmental lab and Analytical lab.
- f. **Central Research Lab:** College has created central research facility with funds from RUSA and DBT Star College Scheme. This Central research Lab (CRL) harbors common high-end instruments viz Gel Doc, Tissue culture facilities etc.

- 5. Promote interdisciplinary research and sharing research findings:** Research Committee had initiated 'Faculty Hour' as a platform to promote sharing of research findings amongst researchers. Thereafter, 'Research Discussion Forum' (RDF), was initiated to encourage interdisciplinary/interdepartmental research projects. Under RDF formal and informal meetings are conducted to know about the research domain of researchers on the campus, which can then culminate into formation of a team for interdisciplinary projects.
- 6. Mous and linkages:** In addition to the breadth and depth of research conducted in the college Laboratories, the institution has and seeks to develop collaborations with international, national and local organizations and industries and hospitals. Linkages were also initiated with institutions and companies, for research activities, internships and job placement for students. After autonomy, number of MoUs and linkages with state/national /international institutions for facilitating research, encourage industry-academia research initiatives and internships, increased drastically.
- 7. Consultancy:** The institute also offers consultancy services and contributes to the society through various extension works. Consultancy services are offered in the department of Geography, Zoology, Computer science, Geology, Counselling centre and Studio. The faculty also takes up consultancy works, engaging government institutions academia, civil society and community organizations. Chowgule college is also identified as 'Technical Support Group' (TSG), by the Goa State Biodiversity Board, to enable the 'Biodiversity Management Committees' (BMC) of Panchayats in Goa, to document the biodiversity and traditional knowledge of the villages. This is a collaborative effort of faculty from department of Geography, Zoology and Botany. IQAC of the college also offers consultancy in administrative processes related to autonomy and Teaching-Learning-Evaluation' processes. Consultancy policy is framed to serve as guideline for execution and revenue sharing(Table 2)
- 8. Strengthening & promoting community outreach activities:** The RCEA-PPCAS made efforts to promote extension activities and community outreach activities. Besides the NSS unit of the college, outreach activities were promoted at various departments of the college. The activities were organised for the

benefit of the less privileged and marginalized section of society and also to bring awareness of health issues and contribute to improvising quality of education in the neighboring schools/colleges.

Figure 2 summarise, multiple initiatives were undertaken and executed year wise to achieve the end target of promoting quality and quantity of research on the campus.



OUTCOME: As a result of all these initiatives, research at the college was enhanced qualitatively as well as quantitatively. The protocols for conduct of research were streamlined and faculty members played proactive role in obtaining funds through various funding bodies, presenting and publishing papers, organising and attending conferences/seminars/ conferences and conducted multiple Industry-Academia lectures, were invited as resource persons, carried out consultancy projects (Table 1).

RESEARCH PROGRESS SUMMARY:

Academic year	Books / Chapters authored	Research Projects	Papers Published (UGC/WoS /Scopus)	Conferences/ Seminars/ Workshops organised	Papers presented	Community out reach programmes	Extension activities	Faculty as resource person	Conferences/ Seminars/ Workshops attended
2016-17	12	2	13	32	39	29	46	73	58
2017-18	9	10	9	32	32	55	62	18	18
2018-19	6	10	16	41	39	65	45	44	50
2019-20	12	17	9	24	25	51	57	60	216
2020-21	7	16	3	30	10	37	53	60	230
Total	46	29	50	159	145	237	263	255	572
Average Per year	9.2	11	10	31.8	29	47.4	52.6	51	114.4

RESEARCH PERFORMANCE FOR PAST 05 YEARS

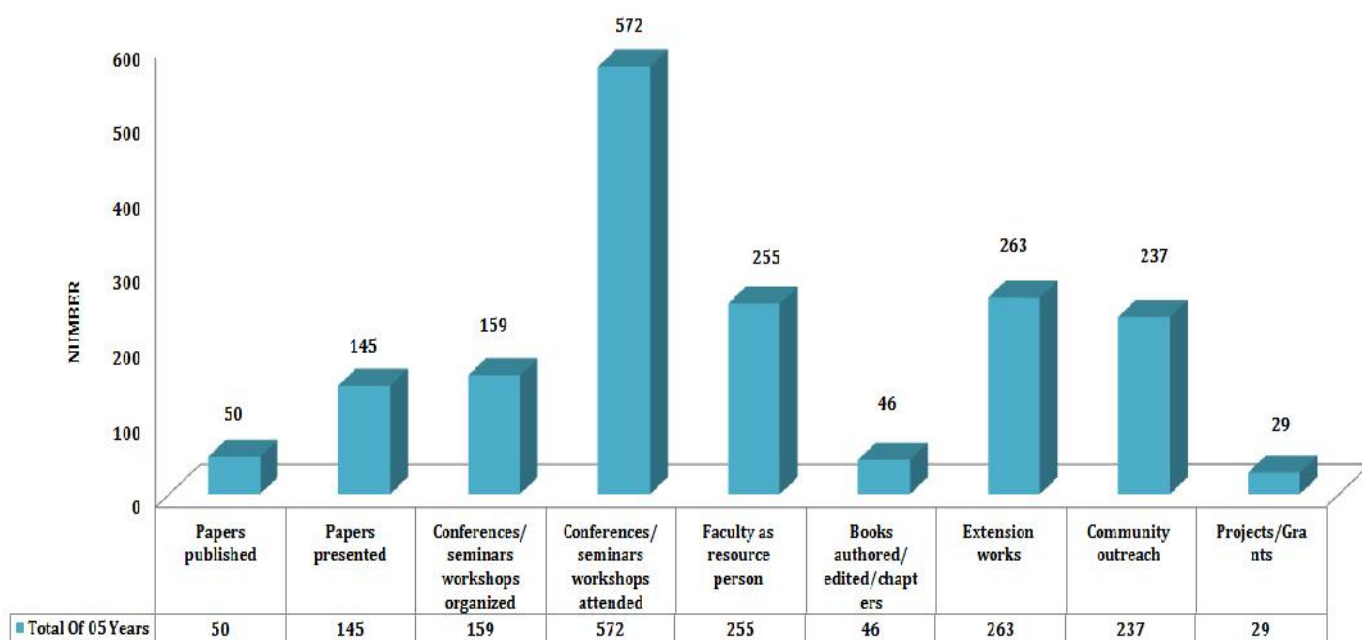
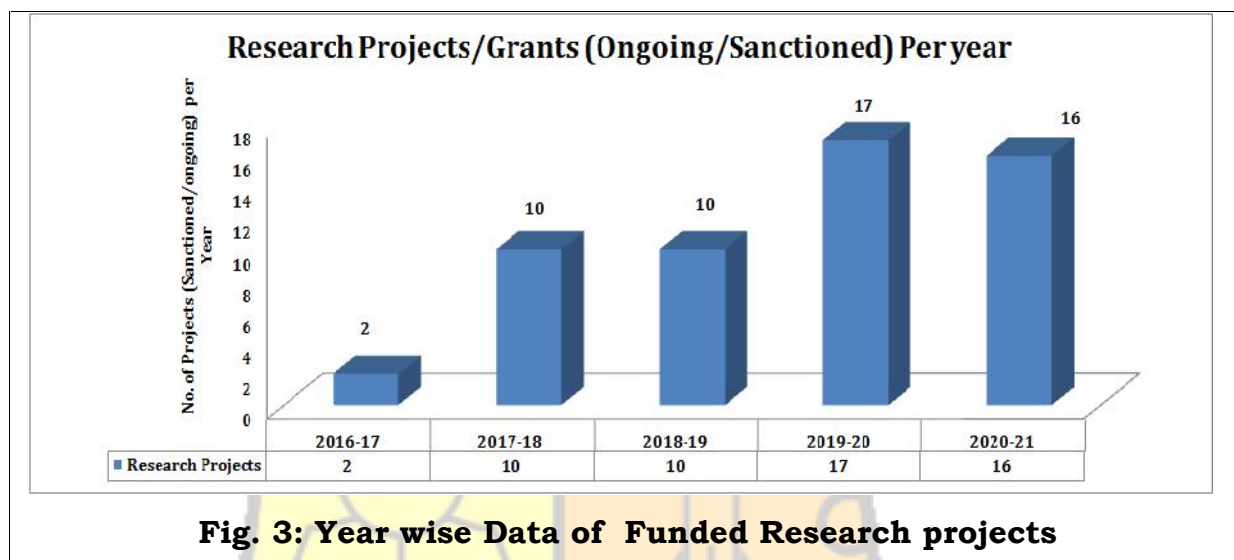


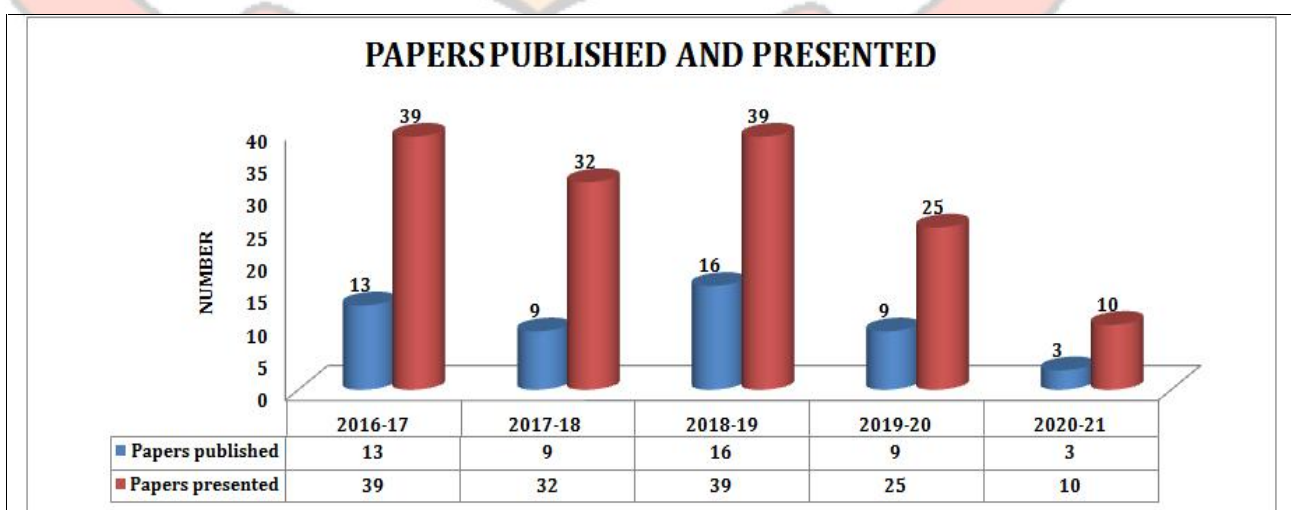
TABLE 1 and GRAPH: RESEARCH PROGRESS FOR PAST FIVE YEARS

- a) **Research projects:** As a result of promotion of research on the campus, many research proposals are submitted by faculty members and sanctioned by various funding bodies. Research findings are presented or published in reputed journals. We have received research grants for 28 research projects/grants from UGC, DST, SERB, ICSSR, DHE-Govt. of Goa, DST-Goa and DBT. Through the research work of our faculty and students we aim at addressing social issues, environmental issues and contribute to improvising environment or human health in general. College also received the prestigious **DBT Star College Scheme**, the only college to receive this fund in Goa. Under this scheme we

received fund of Rupees 123 lakhs for improvising quality of practicals conducted at six departments and for promoting interdisciplinary research and projects. The number of research projects obtained year wise is indicated in table.



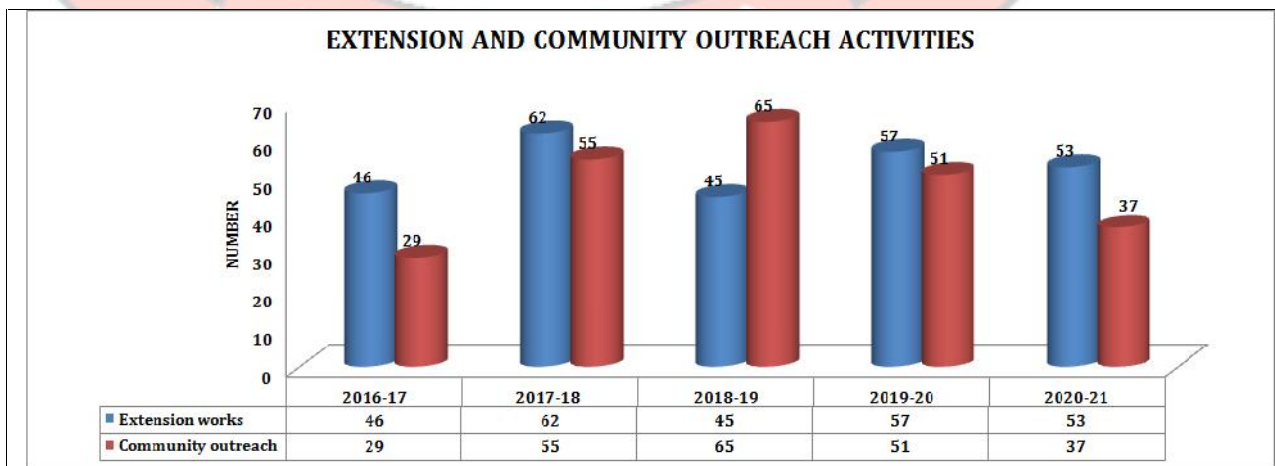
- b) **Publications:** The faculty and students are encouraged to publish research papers, present research findings and attend conferences/ seminars/ workshops to upgrade their research capabilities. 50 research papers were published in UGC listed/Scopus/WoS/Care list. Younger faculty and students present their research findings at international, national and state level conferences. Research papers presented for past 05 years are 145. Initially measures were taken to increase paper publications. In 2017, workshops were conducted to bring awareness on predatory journals and focus on publishing findings in UGC listed journals and other quality journals.



- c) **Books:** Many faculty share their knowledge and expertise through the media of books. Faculties have authored books which serve as reference books or text books for institutions and professional colleges. Some have edited books or contributed chapters for books.

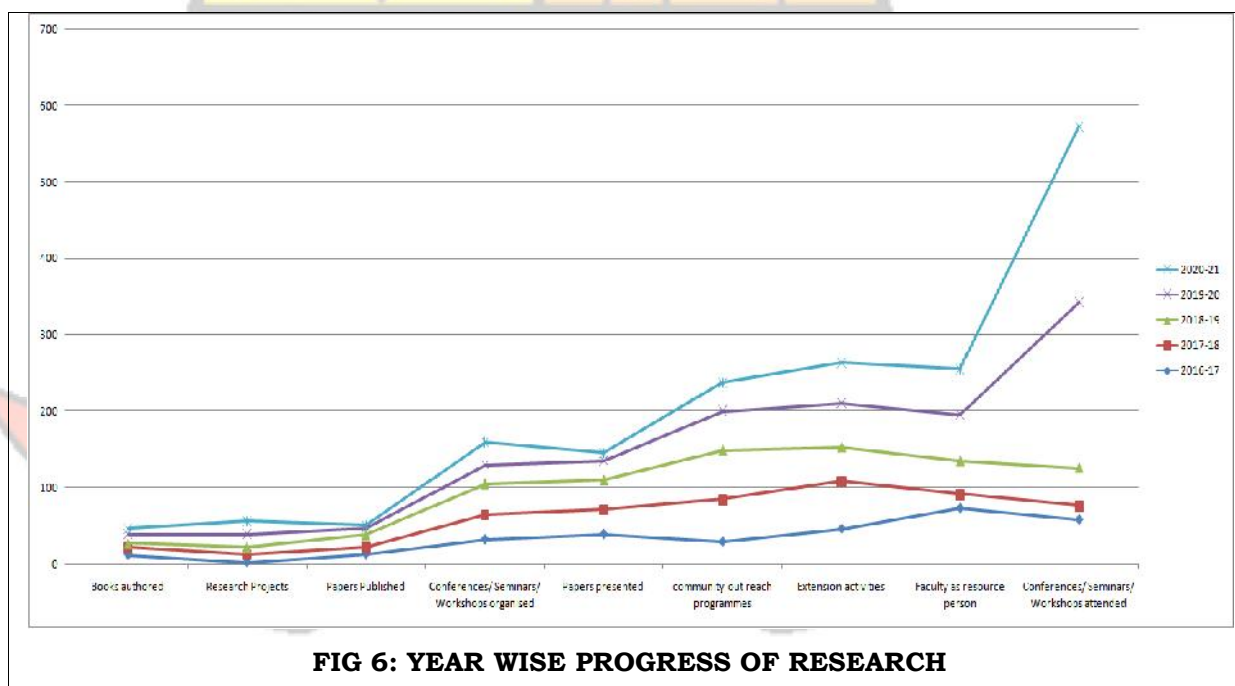


- d) **Community outreach and extension activities:** The institute also contributes to the society through various extension services and community outreach activities. Initiatives towards spread of awareness on research ethics was manifested through conduct of seminars/ talks for faculty members. Guest lecturers/Industry-Academia Lectures were organized by various departments. Our faculty members were also invited as resource persons. There were MoUs signed and new linkages created every year for the purpose of research and internships.
- Multiple activities and programmes were organized to sensitize students to the social issues and Inculcate values and commitment to society, by the NSS unit of the college as well as other departments.



- e) **Awards:** College has Instituted Research award 'Best Teacher- Excellence in Research and consultancy' to faculty members with highest 03 year cumulative API scores as per UGC guidelines of Criteria 3 (Citation and cash prize) The institution has instituted research awards since 2010. Every year, on Founders day, award for excellence in research and consultancy is given to the faculty who the highest Academic Performance Index scores (API) in Research and consultancy of three consecutive years. This is an initiative of the college for appreciating the contribution made by researchers and also to promote quality research.

To conclude, the college has made considerable progress in obtaining research grants from various funding bodies, promoting interdisciplinary projects, enhancing the quality of research publications, promoting academic integrity and research ethics, conducting multiple activities and programmes were organised to sensitize students to the social issues and Inculcate values and commitment to society.



Convener

Research Consultancy and Extension Activities Committee (RCEA-PCCAS)
Parvatibai Chowgule College of Arts & Science (Autonomous)