



Name: Dr. Anima Bag

Designation:

Assistant Prof. and Head,
Rama Devi Women's University, Bhubaneswar

Date of Birth: 01.07.1982

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WOS: IIS-5046-2023

Scopus ID: 57210189441

Area of Interest

Time Series Analysis, Inventory Control, Demography, Statistical Quality Control, Survey sampling and Indian Official Statistics, Descriptive Statistics, Statistical Methods, Integrated supply chain models.

Courses taught

Survey Sampling & Indian Official Statistics, Mathematical Analysis, Statistical Quality Control, Time Series Analysis, Demography and Vital Statistics, Econometrics.

Career

Assistant Professor (25 March, 2022 - present) and Head: Rama Devi Women's University, Bhubaneswar

Lecturer in C.V. Raman Global University, Bhubaneswar (12 September, 2007 – 20 February, 2018)

Lecturer in IMAGE, Bhubaneswar (1st March, 2006 – 30 April, 2007)

Teaching Experience

13 years

Research Experience

9 years

Administrative/Executive Experience

- HOD, Dept.of Statistics, Rama Devi Women's University (April, 2022- present).
- Chairman, Board of Studies, Dept. of Statistics, Rama Devi Women's Women's University(2022-present)
- Academic Council Member, Rama Devi Women's University (2022-Present).
- Board of Studies member, Dept. of Statistics, Utkal University (2023-present)
- OIC, Self Defence, Rama Devi Women's University (2022-24)
- Nodal Officer, Census Data Research Workstation, Rama Devi Women's University (2023-present)
- Library Committee member, Rama Devi Women's University(2022-present).
- Member of SC/ST & Equal Opportunity Cell, Rama Devi Women's University (2022-present).

Book/Book chapter Publications

[1] "Forecasting the impact on crude oil prices in India during Russian Ukrain war", **Applications of Statistics & Artificial intelligence in emerging scenarios-2023**, pages:1-9, 2023.

[2] "Optimal Inventory Model for Deteriorating Items with Permissible Delay in Consideration to Default Risk", **Research Updates in Mathematics and Computer Science** , Volume 9, Pages: 69-80, 2024

Awards & Honors

- Nobel Researcher award in 2018 by International Journal for Research under Literal Access(IJRULA)
- Vij national award in 2023
- Venus International Women's Award in 2024
- Rising Women of India Award on 14.05.2024 and Leading Educationist of India award, 2024 by Friendship Forum of India(FFI), New Delhi.

Research Guidance

✓ UG Projects supervised: 18

Journal publications

- [1] "Integrated Supply Chain Model with Inflation Induced Demand and Partially Backlogged Shortage" published in the journal *Investigacion Operacional* , Volume 45, No. 3, Page 410-419, 2024.
- [2] "An inventory model for perishable goods with controllable deterioration, partially backlogged shortage and advanced payment" published in the journal *International Journal of Scientific Research in Mathematical and Statistical Sciences*, Volume 10, Issue 5,2023.
- [3] "Fuzzy inventory model with multilevel permissible delay in payments" published in the journal, *International Journal of Statistics and Applied Mathematics*, Volume 7, Issue 1, pp.146-153, 2022.

- [4] “Replenishment Model with Entropic Order Quantity for Deteriorating Items under Inflation” published in *Asian Journal of Probability and Statistics*, Volume 14, Number 3, pp.34-47, 2021.
- [5] “Optimal disposal strategy with controllable deterioration and shortage” published in the journal, *International Journal of Agricultural and Statistical Sciences*, Volume 15, Number 1, pp.271-279, 2019.
- [6] “Decision support model with price and time induced demand under multi level conditional deliveries” published in the journal, *Investigacion operacional*, Volume 40, Number 4, pp. 441-451, 2019.
- [7] “Decision support model with default risk under conditional delay” published in the journal, *International Journal of Scientific Research in Mathematical and Statistical Sciences*, Volume 5, Issue 2, pp. 40-45, 2018.
- [8] “Entropic order quantity model for decaying items with partial backlogging and lost sale” published in the journal, *International Journal of Statistics and Systems*, Volume 12, Number 4, pp. 803-812, 2017.
- [9] “A Fuzzy Non-Linear Programming Economic Order Quantity Model with Demand Dependent Unit Cost of Production under Two Constraints” published in *Journal of Supply chain and Operations Management*, Volume 13, Number 2, pp. 44-55,2015.
- [10] “Customer Satisfaction and Prediction of Government Business in State Bank of India (SBI): A Statistical Case Analysis” published in *Journal of Business and Management Sciences*, Volume 3, Number 1, pp.20-25, 2015.

CONFERENCE PROCEEDINGS

1. Fitting of logistic regression model for prediction of likelihood of India winning or losing in cricket match”, *International Conference on Management and Information Systems*, September 18-20, 2015
2. “An Optimal Policy for a Single Vendor Single Buyer Integrated Production Inventory Model with Inflation Induced Demand Under Conditional Delivery” at **9th Annual Women’s Meet**, and international Conference, 2nd March, 2024. The conference was organized by Venus International Foundation at Chennai.

REVIEWED RESEARCH PAPERS IN JOURNALS

- (1) *Investigacion operacional*
- (2) *Asian Journal of Probability and Statistics*
- (3) *Asian Journal of Sociological Research*

PROFESSIONAL ACTIVITIES

1. Convenor in one-day workshop on ‘Uses of Census Data in Social Science Research’ organized by Census Data Research Workstation, Rama Devi Women’s University on 25.07.2024.
2. Organized a National Seminar on “Use of data for decision making” at Department of Statistics, RDWU with observation of National Statistics Day on 29.06.24.
3. Edited and published Newsletters of Department of Statistics, RDWU named STATISTIKA-2021, STATISTIKA-2022, STATISTIKA-2023 and STATISTIKA-2024,
4. Represented Rama Devi Women’s University at national level by sending two students of Department of Statistics, RDWU to avail an exposure Residential Training Programme on official Statistics from 26.12.23- 29.12.23 at National Statistical Systems Training Academy (NSSTA), Ministry of Statistics and Programme Implementations, Govt. of India, Greater Noida. It helped students to understand the enormous power of statistics and its applications.

RDWU was the only university from Odisha selected for this training in 2023.

5. Organized a Self Defence Programme on 02.01.24 at Ram Devi Women’s University.

6. Put the efforts in organizing a soft skill Programme of SC/ST Equal Opportunity Cell on 10.11.2023 at University Auditorium, RDWU.
7. As a nodal officer put the efforts in organizing the inauguration of Census Data Research Workstation by Honourable Education Minister of Odisha at Rama Devi Women's University and MoU signing Ceremony between Directorate, Census Operations, Odisha and RDWU.
8. Organized a National Workshop on 'National Statistical System & Role of National Statistics Office' at Rama Devi Women's University auditorium on 23.12.2022 funded by National Statistical Systems Training Academy (NSSTA), Ministry of Statistics and Programme Implementation, Govt. of India.
9. Represented Rama Devi Women's University at national level by sending student of Department of Statistics, RDWU to avail one week free Residential Training Programme on official Statistics from 26.12.22- 31.12.22 at National Statistical Systems Training Academy (NSSTA), Ministry of Statistics and Programme Implementations, Govt. of India, Greater Noida.
RDWU was the only university from Odisha selected for this training in 2022.NSSTA offers training to ISS officers.
10. Initiated National Statistics Day celebration at Rama Devi Women's University in 2023 and organized seminar on this occasion by inviting eminent dignitaries.
11. Initiated a Practical Lab in Department of Statistics for smooth conduct of the practical of UG students.
12. **LIBRARY COMMITTEE MEMBER(2022-23,2023-24), OIC-SELF DEFENCE(2022-23), ACADEMIC AUDIT COMMITTEE MEMBER, NAAC CRITERIA-6 MEMBER, BUDGET COMMITTEE MEMBER for 2nd convocation, RDWU, HEAD(GROUND CLEANING) Intercollege women's Hokey match,2022.ST/SC equal opportunity cell member(2022-23, 2023-24).**

LIST OF PAPERS PRESENTED IN CONFERENCES/SEMINARS

- [1] "Entropic Order Quantity (EnOQ) Model for Decaying Items with Partial Backordering and Lost Sale" in *48th Annual Convention of Operational Research Society of India (ORSI) and International Conference* held at Institute of Technical Education and Research, Siksha 'O' Anusandhan University, Bhubaneswar, Odisha, on December 17-19, 2015.
- [2] "Decision support model in an environment of market demand and deterioration" in *National Seminar on "Science and Technology for Environmental Security"* on the occasion of 19th Odisha Bigyan O' Paribesh Congress organized by Orissa Environmental Society and KIIT University, Bhubaneswar.
- [3] "Fuzzy decision support model with controllable deterioration and shortages" in *National Seminar on "Operational Competitiveness in service and manufacturing sector"*, organized by Birla School of Management, Birla Global University, Bhubaneswar on 24thFebruary, 2018.
- [4] "Replenishment model with price and time induced demand under four level conditional deliveries" in *National Seminar on "Statistics In Research: Trends And Applications"* organized by P.G. Department of Statistics, Utkal University & Operations Research Society of India, Bhubaneswar chapter on 15thApril, 2018.
- [5] "Replenishment model with entropic order quantity for deteriorating items under inflation" in *Diamond Jubilee National Convention of IIIE & International Conference on "Role of Industrial Engineering in Industry 4.0 Paradigm(ICIEIND 2018)"* at Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar on September 27-30, 2018.

- [6] “Decision support model with default risk under trade credit policy” in *International Conference on Recent Advances in Statistics and Data Science for Sustainable Development* in conjunction with Indian Society for Probability and Statistics (ISPS) at Utkal University on 21st -23rd December, 2019.
- [7] “An integrated supply chain model with inflation induced demand and partially backlogged shortage” in *International Conference on “Next Generation Management” (ICNGM-2019)* at Regional College of Management, Bhubaneswar on March 15-16, 2019.
- [8] “The vendor- buyer integrated inventory model with partial backlogging under inflation” in *National Seminar on “Statistical Methodology and Data Science”* organized by P.G. Department of Statistics, Utkal University during 15-16 March, 2019.
- [9] “Replenishment model for decaying items with entropy in a fuzzy environment under inflation” in *International Conference (Virtual Mode) on Emerging Trends in Statistics and Data Science in conjunction with 40th Annual Convention of ISPS, 7-10 September, 2021* jointly organized by the Departments of Statistics of Cochin University of Science and Technology, Cochin, M.D. University, Rohtak, University of Kerala, Trivendrum, Bharathiar University, Coimbatore and The Madura College, Madurai.
- [10] “A fuzzy Inventory model for decaying items with stock dependent demand and partially backlogged shortage under preservation facility” in the *national seminar on Application of Statistics & Artificial intelligence in emerging scenarios-2023(ASAIES-2023)* held on 3rd March, 2023 organized by Department of Statistics, Sambalpur University.
- [11] “An inventory model for ameliorating items under preservation technology and conditional delay” in *National Seminar on “Statistical Thinking in Data Science and Knowledge Discovery (STDSKD-2023)”* organized by School of Statistics, Gangadhar Meher University, Amruta Vihar, Sambalpur, Odisha on 26th June, 2023.
- [12] “An integrated vendor-buyer supply chain model with inflation-induced demand under conditional delivery” in *4th International Conference on Management Research (ICMR) 2024*, held on 22-23 February, 2024 organized by KSOM, KIIT University.
- [13] “Discerning the Impact of COVID-19 Pandemic on Life Expectancy of India” in *A two day National Seminar on Data Driven Predictive Analytics & Modelling- 2024 (DDPAM-2024)* held on 19-20 March, 2024 organized by Department of Statistics, Sambalpur University.
- [14] An Optimal Policy for a Single Vendor Single Buyer Integrated Production Inventory Model with Inflation Induced Demand Under Conditional Delivery” at *9th Annual Women’s Meet*, 2nd March, 2024. The conference was organized by Venus International Foundation at Chennai.

WORKSHOPS

- [1] Participated and presented the Poster presentation of the work in REGIONAL WORKSHOP ON RESEARCH BASED PEDAGOGICAL TOOLS held in NISER, Odisha, from 27th October to 29th October 2017.

The workshop was funded by Department of Biotechnology(DBT),Govt. of India and organized by Center of Excellence in Science and Mathematics Education at IISER, Pune (Supported by

MHRD, Govt. of India) and NISER. It was conducted by a team of facilitators who were trained by experts from Sheffield Hallam University.

LIST OF FDP/ INDUCTION /ORIENTATION PROGRAMMES ATTENDED

1. Successfully completed NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of UGC organized by IIT, Kharagpur from 20.05.24 - 30.05.24.
2. Successfully completed 4 weeks faculty induction programme from 20 September, 2023 – 19 October, 2023. with grade A⁺ Organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education.
3. Successfully completed one week Faculty Development Programme on “**ACADEMIC ADMINISTRATION**” from 12-18April, 2023 with grade A⁺ Organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education.
4. Participated in 5 days FDP on “**Effective Delivery of online classes and conducting of online Examination**” held on 13-17 December,2021 organized by Dept. of I.T.M., Ravenshaw University, Cuttack.
5. Participated in ‘**seven days National FDP on Research Methodology**’ jointly organized by Indian Teacher Education Community(at Telegram) and Aravali College of Advanced Studies in Education from 5-11 August,2020.
6. Participated in **one week online FDP on Soft Computing Techniques and their applications(SCTA,2020)** organized by the Department of Mathematics of Jaypee Institute of Information Technology, Noida from July 13-18,2020.
7. Participated in one week online International FDP “**Statistical Trends and Practices in Science and Technology**” organized by Dept. of Basic Science and Humanities(Mathematics), Aditya Institute of Technology and Management from 4-8 July, 2020.

LIFE MEMBER

- **Life Member in Indian Society of Probability and Statistics (ISPS)**
- **Life Member in International Journal for Research Under Literal Access (IJRULA)**



Signature of HoD