

Dr. Nabendu Sen



Present Designation: **Associate Professor**
Dept of Mathematics

Assam University, Silchar (A Central University) Phone: 6003499227/9435473200
E-mail: nsen08@yahoo.com,nabendu.sen@aus.ac.in

Research Interest: Operation Research, Mathematical Modelling, Multi-objective Optimization (precise and imprecise),GA, Fuzzy Optimization.

List of Publications in Peer Reviewed /Scopus indexed/web of science Journal

1. **Nabendu Sen** and Tanmoy Som,Mathematical Modeling of Transportation Related Problem of South Assam with an Approach to its Optimal Solution,*Assam Statistical Review*,Vol- 22(1),59-67,2008.
2. **Nabendu Sen** and Tanmoy Som,Mathematical Modeling of Transportation Related Fare Minimization Problem of South Assam and an Approach to its Optimal Solution,*Indian Journal of Transportation Management*,Vol- 32(3),201-208,2008.
3. **Nabendu Sen** and Tanmoy Som,Mathematical Modeling of Transportation Related Problem of Southern Assam and its Optimal Solution,*Assam University Journal of Science and Technology*,Vol-3(1),22-27,2008.
4. **Nabendu Sen** and Tanmoy Som,An Optimal Model for Daily Profit of Transporting Agency in South Assam,*Journal of Tripura Mathematical Society*,Vol- 11,42-48,2009.
5. **Nabendu Sen**,Banashri Sinha and Tanmoy Som,A Study of Transportation Problem for Essential Item of Southern Part of North-Eastern Region of India as an OR Model and Use of Object Oriented Programming,*International Journal of Computer science and Network Security*,Vol- 10(4),78-86,2010.
6. Banashri Sinha and **Nabendu Sen**, Goal Programming Approach to Tea Industry of Barak Valley of Assam,*Applied Mathematical Sciences*,Vol- 5(29),1409-1419,2011
7. **Nabendu Sen**,Banashri Sinha and Tanmoy Som,A Mathematical Approach to Transportation Related Data of South Assam for the Optimal Age of Replacement of Vehicle and Expenditure Minimization,*African Journal of Mathematics and Computer Science Research*,Vol- 4(1),6-17,2011.
8. **Nabendu Sen**, A Note on Goal Programming Approach to Tea Industry of Barak Valley of Assam.*American Journal of Mathematics and Statistics*,Vol- 2(5),108-113,2012.
9. **Nabendu Sen** and Manish Nandi,A Goal Programming Approach to Rubber –Tea Intercropping Management in Tripura,*Asian Journal of Management Science Research*,Vol- 3(1),178-183,2012.
10. **Nabendu Sen** and Manish Nandi ,Goal Programming,its Application in Management Sectors-Special Attention into Plantation Management:A Review,*International Journal of Scientific and Research Publication* ,Vol-2(9),1-6,2012.
11. **Nabendu Sen** and Manish Nandi ,A Goal Programming Formulation in Nutrient Management of Fertilizer used for Rubber Plantation in Tripura,*International Journal of Research in Commerce,IT and Management*,Vol- 2(9),142-1144,2012.
12. **Nabendu Sen** and Manish Nandi,An Optimal Model Using Goal Programming for Rubber Wood Door Manufacturing Factory in Tripura,*Mathematical Theory and Modeling*,Vol- 2(8),31-36,2012.
13. **Nabendu Sen** and Manish Nandi ,A Goal Programming Approach to Rubber Plantation Planning in Tripura,*Applied Mathematical Sciences*,Vol- 6(124)6171-6179,2012.

14. **Nabendu Sen** and Manish Nandi, A Study on Transshipment Model for Export of Rubber from Tripura to Bangladesh, *International Organisation of Scientific Researchs- Journal of Mathematics*, Vol- 6(1),31-34,2013.
15. **Nabendu Sen** ,Goal Programming Model for Personnel Management in Tea Industry ,*American Journal of Mathematics and Statistics*,Vol- 3(6),312-314,2013.
16. **Nabendu Sen** and Manish Nandi ,An Application of Goal Programming Techniques in Rubber Plantation Planning: A Comparative Study, *American Journal of Mathematics and Statistics*,Vol-3(6),394-399,2013.
- 17.**Nabendu Sen**,Laxminayaran Sahoo and Asoke Bhunai,An Application of Integer Linear Programming in Tea Industry of Barak Valley of Assam ,India under Crips and Fuzzy environments, *Journal of Information and Computing Science*,Vol-9(2),132-140,2014
- 18.Asoke Kumar Bhunia, Amiya Biswas and **Nabendu Sen**, An application of extended elitist non-dominated sorting Genetic Algorithm in multi-objective linear programming problem of tea industry with interval objectives, *Uncertain Supply Chain Management*,Vol-2(5),245-256,2014

- 19.**Nabendu Sen** and Sanjukta Malakar, A Fuzzy Inventory Model with Shortages Using Different Fuzzy Numbers, *American Journal of Mathematics and Statistics*,Vol-5(5),238-248,2015

- 20.**Nabendu Sen**.,Biman Kanti Nath and Sumit Saha,A Fuzzy Inventory Model for Deteriorating Items Based on Different Defuzzification Techniques, *American Journal of Mathematics and Statistics*,Vol-6(3),128-137,2016

- 21.**Nabendu Sen** and Biman Kanti Nath ,A NOTE ON ECONOMIC LOT-SIZE MODEL WITH REPLENISHMENT WITHOUT SHORTAGE WITH FUZZY PARAMETERS, *Asian Journal of Mathematics and Computer Research*,Vol-11(1),1-13,2016

- 22.Sumit Saha and **Nabendu Sen**,A Study on Inventory Model with Negative Exponential Demand and Probabilistic Deterioration, *Uncertain Supply Chain Management* ,Vol-5(),77-88,2017.

- 23.**Nabendu Sen**,Sumit Saha and Biman Kanti Nath, Inventory Model with Price Dependent Demand Under Permissible Delay in Payment, *Asian Journal of Mathematics and Computer Research*,Vol-20(1),1-12,2017.

- 24.**Nabendu Sen** and Sumit Saha, An inventory model for deteriorating items with time dependent holding cost and shortages under permissible delay in payment,*Int.J.Procurement Management*,Vol-11(4),518-531,2018

- 25.Sumit Saha, **Nabendu Sen** and Biman Kanti Nath, Inventory Model with Ramp-type Demand and Price Discount on Back Order for Deteriorating Items under Partial Backlogging, *Applications and Applied Mathematics*,Vol-13(1),472-483,2018.

26. Sumit Saha and **Nabendu Sen**, An inventory model for deteriorating items with time and price dependent demand and shortages under the effect of inflation, *Int. J Mathematics in Operations Research*,Vol-14(3),377-388,2019.

27. **Nabendu Sen** and Sumit Saha, Inventory Model for Deteriorating Items with Negative Exponential Demand, Probabilistic Deterioration and Fuzzy Lead Time under Partial Back Logging ,*Operations Research and Decisions*,Vol.30(3),97-112,2020.

28. Biman Kanti Nath and **Nabendu Sen**, A completely backlogged two-warehouse inventory model for non-instantaneous deteriorating items with time and selling price dependent demand, *International Journal of Applied and Computational Mathematics*, Vol.7, 2021

29. Nabajyoti Bhattacharjee and **Nabendu Sen**, Non-Separable Raw Material Inventory Model with Time Dependent Deterioration: Hybrid Algorithm, *International Journal of Applied Mathematics and Statistics*, Vol.60(1), 68-80, 2021.

30. Biman Kanti Nath and **Nabendu Sen**, A partially backlogged two-warehouse EOQ model with non-instantaneous deteriorating items, price and time dependent demand and preservation technology using interval number, *IJMOR*, Vol.20(2), 149-181, 2021.

31. Nabajyoti Bhattacharjee and **Nabendu Sen**, A Multi-Stage Model to Study Inventory Management of Raw Materials with Shortages, *IJMOR*, Vol.20(2), 207-238, 2021.

32. Biman Kanti Nath and **Nabendu Sen**, A partially backlogged inventory model using penalty cost, time dependent demand and time dependent holding cost (**communicated**).

33. Nabajyoti Bhattacharjee and **Nabendu Sen**, A Demand and Supply Chain Inventory Management with Probabilistic and Time Dependent Price, (**Accepted IJOR**).

34. Nabajyoti Bhattacharjee and **Nabendu Sen**, A Multi-Item Sustainable Production Inventory Constrained Model to Study and Analyze the Effective Green Investment and Replenishment Quantity, (**Accepted IJMOR**).

35. Biman Kanti Nath and **Nabendu Sen**, An inventory model for deteriorating items with imperfect quality under advance payment policy, **Operations research and Decisions**, Vol.31(3), 109-135, 2021

36. Nabajyoti Bhattacharjee and **Nabendu Sen**, An Inventory Model to Study the Effect of the Probabilistic Rate of Carbon Emission on the Profit Earned by a Supplier, **Operations research and Decisions**, 31(4),, 2021

37. Nabajyoti Bhattacharjee and **Nabendu Sen**, A sustainable production inventory model for profit maximization under optimum raw material input rate during production, **Opsearch**, <https://doi.org/10.1007/s12597-021-00554-0>.

38. Biman Kanti Nath and **Nabendu Sen**, A fuzzy decision making inventory model for deteriorating items under discounted partial advance-partial delayed payment strategy, (Accepted in “**Real Life Applications of Multiple Criteria Decision-Making Techniques in Fuzzy Domain**” which will be published by Springer Nature Singapore Pte Ltd.).

39. Sanjukta Malakar and **Nabendu Sen**, An Inventory Model to Study Partial Replacement Policy and Finite Shelf Life for Deteriorating Items with Carbon Tax, (**Accepted in IJMOR**)

40. Nabajyoti Bhattacharjee and **Nabendu Sen**, A Sustainable Inventory Model to Study the Mixing and Bottling Plant of Single Item for Cost Minimization (**communicated to Annals of Operations Research**)

41.Nabajyoti Bhattacharjee,Biman Kanti Nath, **Nabendu Sen**, Sanjukta Malakar and Chandra K Jaggi, A production inventory model to study the supply chain of agri-product for a time reliant population,(**Revision submitted to IJACM, Springer**).

42.Nabajyoti Bhattacharjee,**Nabendu Sen** and Sanjukta Malakar, A Sustainable Retailer’s Inventory Model to Study the Partial Replacement for Deteriorating Items with Variable Shelf-life (**Revision in progress to submit in Opsearch**)

Book Authored /Edited

Type	Title of the book	Publisher	Authored/Edited
Conference Proceeding	Trends in Mathematical Science Research	Department of Mathematics, AUS	One of the Editor

Number of PhD Supervised: 01(awarded) in 2013+03(registered) on going

Number of M.Phil Supervised: 01

Number of M.Sc Project Supervised=15(+)

Field of Specialization: Operation Rese , Mathematical Modelling, Multi-objective Optimization ,GA.Fuzzy Optimization.

Member of Academic Bodies:

1. Member of BPGS(Mathematics)Assam University, Silchar
2. Member of School Board (Physical Sciences)Assam University, Silchar
3. Life Member of Allahabad Mathematical Society.
4. Editorial Board Member of American Journal of Mathematics and Statistics.
5. IAENG Society of Operations Research
6. Operation Research Society of India(ORSI)
7. Member of Editorial Review Board on Engineering and Applied Sciences, World Academy of Science, Engineering and Technology

Biography:

M.Sc. and Ph.D. from Assam University, Silchar under the supervision of Prof .Tanmoy Som who is now Professor in the Dept of Applied Mathematics, IIT(BHU),Varanasi-221005.Prior to join in Department of Mathematics,AUS, served as a lecturer of Mathematics in S.D Jain Girls college ,Dimapur, Nagaland. He taught Mathematics in School of Technology, Assam University, Silchar. He was visiting lecturer in the Dept of Computer science, Assam University, Silchar.

Additional Information

- ❖ Reviewer of national and international Journals.
- ❖ Conversant with different softwares like MATLAB,MAPLE, MATHEMATICA, LINGO.