CURRICULUM VITAE

Dr. Vinay H T
Scientist-B (Agricultural Statistics) at PMCE division
Central Muga Eri Research & Training Institute, Central Silk Board
Ministry of Textiles - Govt. of India, Lahdoigarh, Jorhat, Assam-785700, India.
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Educational Qualifications:

Degree	Subject	University/ Institution	Year
Ph.D.	**Agricultural Statistics**	Uttar Banga Krishi Viswavidyalaya, West Bengal.	2025
M.Sc.	**Agricultural Statistics**	University of Agricultural Sciences, GKVK, Bengaluru, Karnataka.	2020
B.Sc.	Agricultural Marketing and Co-Operation	University of Agricultural Sciences, GKVK, Bengaluru, Karnataka.	2018

Areas of Specialization:

- Advanced Time Series Modelling (ARIMA, SARIMA, ARCH/GARCH, BATS, TBATS)
- Machine Learning & Deep Learning (ANN, SVR, Random Forest, RNN, LSTM, GRU)
- Climate Risk & Agricultural Forecasting
- Regression & Econometric Modelling
- Multivariate Statistical Analysis (PCA, Cluster, Factor, Discriminant Analysis)
- Design of Experiments (CRD, RCBD, LSD, Factorial, Split Plot, Strip Plot)
- Statistical Computing using R & Python

Employment History:

- **Scientist-B (Agricultural Statistics)**
  Central Muga Eri Research & Training Institute, Central Silk Board (Present)
- **Project Scientist-C (Non-Medical)**
  Health Technology Assessment (HTA), ICMR-NCDIR, Bengaluru (1 Month)
- **Research Associate-II**
  Institute for Social and Economic Change (ISEC), Bengaluru (3 Months)
- **Young Professional-II**
  ICAR-NIVEDI, Bengaluru (1 Year)
  Project: Economic Impact of Bluetongue Virus (BTV) in Sheep

Research Experience:

- **Ph.D. Research**
Title: Studies on Rainfall Forecasting Models and Impact of Weather on Jute and Winter Rice Productivity
- **M.Sc. Research**
Title: Multivariate Approach to Classify Soil Samples of Mysuru District for Efficient Agricultural Land Use Planning

- Extensive experience in climate modelling, agricultural forecasting, and statistical analytics.
- Applied advanced statistical and machine learning techniques for agricultural price forecasting and yield modelling.

Awards & Recognitions:

1. ASRB/ICAR-NET (Agricultural Statistics), 2021
2. UGC-NET (Population Studies), 2022
3. UGC National Fellowship (NF-OBC) for Ph.D.
4. Best Research Scholar - Agri Meet Foundation, U.P.
5. Best Poster Presentation - International Conference (Tomato Price Forecasting Study)
6. Best M.Sc. Thesis - Vigyan Varta
7. Best Researcher Award - Vigyan Varta
8. Young Professional Award - Guru Kashi University (ICAR Accredited)

Research Publications:

1. Chowa Ram Sahu, Satyananda Basak, Deb Sankar Gupta, and **Vinay. H.T.** (2025). Long Memory Modelling of Weekly Jute Prices in Cooch Behar Market, West Bengal. *Agricultural Science Digest*, D-6181:1-7.
2. Niranjan Reddy P., V. Pavan, Boya Vaishnavi, **Vinay, H.T.,** Jahnavi, A.P., and Gaddala Prem. (2025). Agri-Business Decision Support through Price Forecasting: A Case Study of Tomato Market Dynamics in Kolar, Karnataka, India. *Journal of Experimental Agriculture International*, 47(8):662-669.
3. Niranjan Reddy P., Boya Vaishnavi, V. Pavan, and **Vinay, H.T.** (2025). Consumer awareness and attitude toward millet-based processed foods in urban India. *International Journal of Agriculture Extension and Social Development*, 8(10):292-296.
4. Niranjan Reddy P., V. Pavan, **Vinay, H. T.,** and Gaddala Prem. (2025). Trade Competitiveness and Market Dynamics of India's Fresh Fruit Exports: An Analysis of Grapes, Bananas, and Oranges. *Journal of Scientific Research and Reports*, 31(10):902-909.
5. Midathana Anil Kumar, Arunava Ghosh, **Vinay, H. T.,** Parthendu Poddar, and Md. Wasim Reza. (2024). Forecasting Green Chilli Prices: Using Data Analytics to Gain Market Understanding. Journal of Scientific Research and Reports, **30(10):**671-79.
6. Jagadeesh, M.S., **Vinay, H.T.,** Anil Sidaray Chikkalaki, Keerthi, G.M., Huchchappa Jamakhandi, Abhijeet Mudhale, Abhishek, G.J., and Sagar Umesh Kolkur. (2024). India's poultry Exports: Navigating global market dynamics. *International Journal of Agriculture Extension and Social Development,* **7(9):** 107-113.
7. **Vinay, H. T.,** Pradip Basak, Arunava Ghosh, Sankalpa Ojha, and Chowa Ram Sahu. (2024). Forecasting of Tomato Price in Karnataka using BATS Model. *Journal of Indian Society of Agricultural Statistics*, **78(2):** 107-113.
8. Jagadeesh, M. S., **Vinay, H. T.,** Pavithra V., Abhishek, G. J., Veershetty, Anil Sidaray Chikkalaki, and Jahnavi, A. P. (2024). India's Tea Export Potential: Stirring up Global Trade Opportunities. *Journal of Experimental Agriculture International* **46 (9)**: 309-19.
9. Pavithra, V., **Vinay, H.T.,** Jagadeesh, M.S., Ashalatha, K.V., and Premalatha, K. (2024). Influence of Climatic Factors on Sorghum Rust Severity in Dharwad, Karnataka, India. *International Journal of Plant & Soil Science,* **36 (9):**123-29.
10. Karthik, V. C., **Vinay, H. T.**, Jagadeesh, M. S., Ragini, H. R., Gaddala Prem, and Pavithra, V. (2024). Analysis of Rainfall Trends and Change Point Detection in Kodagu District, Karnataka. *International Journal of Environment and Climate Change* **14 (9):** 33-43.
11. Jagadeesh, M. S., Jahnavi, A. P., **Vinay, H. T.,** Abhishek, G. J., Abhishek, S. S., and Anil Sidaray Chikkalaki. (2024). Export Competitiveness of Indian Coffee: Analysing Trade Potential in the Global Market. *Journal of Scientific Research and Reports*, **30 (9)**: 51-61.
12. Jagadeesh, M. S., **Vinay, H. T.,** Abhishek, G. J., Anil Sidaray Chikkalaki, Veershetty and Gaddala Prem. (2024). Adapting to Climate Change: Millet Export Strategies for the Future. *International Journal of Environment and Climate Change*, **14(8)**: 535-545.
13. **Vinay, H. T.,** Mallikarjun B. Hanji, Jagadeesh, M. S., V Ramamurthy, Mohan Kumar, T.L. and K. N. Krishnamurthy. (2024). Clustering approach to group similar soils for efficient agricultural land use planning. *International Journal of Statistics and Applied Mathematics,* **9(4):** 61-64.
14. **Vinay, H. T.,** Pavithra, V., Jagadeesh, M. S., Avinash, G. and Harish Nayak, G. H. (2024). A Comparative Analysis of Time Series Models for Onion Price Forecasting: Insights for Agricultural Economics. *Journal of Experimental Agriculture International*, **46(5)**: 146-154.
15. **Vinay, H. T.,** Pavithra, V., Nishtha Pradarshika Rai, and Jagadeesh, M. S. (2024). Modelling and forecasting of onion prices in Belgaum market of Karnataka. *International Journal of Agriculture Extension and Social Development,* 7(3): 140-145.
16. Pavithra V., **Vinay, H. T.,** and Cheela Soumya. (2024). A statistical approach to forecasting potato price in Kolar market of Karnataka. *International Journal of Statistics and Applied Mathematics,* **9(2):** 32-36.
17. **Vinay, H. T.,** Arunava Ghosh, Sankalpa Ojha, Parthendu Poddar and Pradip Basak. (2024). Trend Analysis of Rainfall and Detection of Change Point in Terai Zone of West Bengal. *International Journal of Environment and Climate Change*, **14(1):** 603-613.
18. Pavithra, V., Ashalatha, K. V., Swathi, B., **Vinay, H. T.** and Ragi S. (2023). Grouping of Disease Resistant Sorghum Genotypes Based on Cluster Analysis Multivariate Tool. *International Journal of Environment and Climate Change*, **13(9):** 1843-1849.
19. **Vinay, H. T.,** Jahnavi, A. P., Patil, N. A. and Varalakshmi, A. (2023). Forewarning the outbreak of Haemorrhagic Septicaemia disease by using suitable statistical models. *International Journal of Agricultural Sciences*, **19(1):** 319-324.
20. Nagaraja, Y., Jahnavi, A.P., and **Vinay, H.T.** (2023). Analysis of Trend in Cotton Arrivals in Vijayapura, Haveri, Raichur and Ranibennur Markets of Karnataka, India. *Asian Journal of Agricultural Extension, Economics & Sociology,* 41(2): 31-37.
21. Jahnavi, A., Madhu, B., **Vinay, H.T.** and Nagaraja, Y. (2023). Yield Estimation of Dolichos Bean (*Lablab purpureus L.)* Using Different Clustering Techniques. *Journal of Experimental Agriculture International,* **45(2):** 38-46.
22. Varalakshmi, A., Nayak, G.H., Manjunath, M.G. and **Vinay, H.T.** (2023). Trend and Forecasting of Area, Production and Productivity of Mango Crop in Karnataka, India. *Journal of Experimental Agriculture International*, **45(5)**: 16-23.
23. Avinash, G., Ramesh, A.G., Rebasiddanavar, R.M., Shilpa, M. and **Vinay, H.T.** (2022). A study on temporal variation of land use pattern in Karnataka through indices. *Pharma Innovation*, **11(4):** 388-396
24. Varalakshmi, A., Mohan Kumar, T.L., Sushma, R., **Vinay, H.T.** and Harish Nayak, G. H. (2022). Statistical analysis of area, production and productivity of banana crop in Karnataka, India. *Pharma Innovation*, **11(12):** 3062-3067.
25. Sushma, R., Varalakshmi, A., **Vinay, H.T.,** Avinash, G. and S.N. Megeri. (2022). Estimation of rabi sorghum yield by using statistical models in Bellary district of Karnataka. *Pharma Innovation*, **11(12):** 1558-1560.
26. **Vinay, H.T.,** Jahnavi, A., Rebasiddanavar, R.M. and Madhu, B. (2022). Influence of weather parameters on yield of Dolichos bean (*Lablab purpureus L.). Pharma Innovation*, **11(11):** 1556-1559.

Books:

1. Jagadeesh, M. S., **Vinay, H. T**. and Abhishek, G. J., (2024). Objective Insights into Agricultural Economics, Evincepub publishers.

Book Chapters:

1. Avinash, G., Veershetty, Harish Nayak, G. H., **Vinay, H. T**. and Moumitha Baishya (2024). Improved Predictive Performance of Rainfall Using A Hybrid Statistical and Deep Learning Technique, In: A Practical Hand Book on QGIS and R Programming: An Integrated Approach towards understanding the changing dynamics in Water Resources, Eds. NagaKumar, K. Ch, Naveena, K. and Surendran, U. (NIPA GENX Electronic Resources & Solutions P. LTD).

2. Harish Nayak, G. H., Avinash, G., Veershetty, **Vinay, H. T**. and Moumitha Baishya (2024). Rainfall Prediction using Machine Learning Techniques, In: A Practical Hand Book on QGIS and R Programming: An Integrated Approach towards understanding the changing dynamics in Water Resources, Eds. NagaKumar, K. Ch, Naveena, K. and Surendran, U. (NIPA GENX Electronic Resources & Solutions P. LTD).

3. Veershetty, Harish Nayak, G. H., Avinash, G., **Vinay, H. T**. and Moumitha Baishya (2024). Rainfall Prediction using Neural Networks, In: A Practical Hand Book on QGIS and R Programming: An Integrated Approach towards understanding the changing dynamics in Water Resources, Eds. NagaKumar, K. Ch, Naveena, K. and Surendran, U. (NIPA GENX Electronic Resources & Solutions P. LTD).

Popular Article:

1. Jagadeesh, M. S., Anil Sidray Chikkalaki, **Vinay, H. T.**, Shridhar Ragi, Abhishek, G. J. (2024). The Backbone of Indian Farming: Celebrating Women's Role in Agriculture: *Krishi Science e-Magazine for Agricultural Sciences,* **05(08):** 45-49.

2. Jagadeesh, M. S., Anil Sidaray Chikkalaki, Abhishek, G. J., **Vinay, H. T.,** Keerthi, G. M., and Huchchappa Jamakhandi. (2024). Pradhan Mantri Fasal Bima Yojana: Present Status and Future Prospects, *Farm Chronicle-An Agriculture Newsletter,* **03(08):** 26-29.

3. Jagadeesh, M. S., Abhishek, G. J., **Vinay, H. T.,** Anil Sidray Chikkalaki, Keerthi, G. M. and Huchchappa Jamakhandi. (2024). Dairy Development: A Key Driver of Rural Development in India, *Agriculture and Food e-Newsletter*, **06(08):** 412-415.

4. Jagadeesh, M. S., Abhishek, G. J., Thippeswamy Danakumara, **Vinay, H. T.** and Praveen, G. (2024). Growing Together: Unleashing the Power of FPOs in Agricultural Development: *The Agriculture Magazine*, **3(7):** 475-481.

Conferences & Seminars:

1. **Clustering Approach to Classify Soil Samples of Karnataka:** International Conference on "Advances in Agriculture and Food System towards Sustainable Development Goals (AAFS-2022)" held from 22-24th, August, 2022 at University of Agricultural Sciences, Bangalore, Karnataka.

2. **A Clustering Approach for Study on variability in yield of Dolichos bean (*Lablab purpureus* L.):** National Seminar on "Horticulture for Sustainable Development, Nutritional and Livelihood Security" held at Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar, West Bengal on 26-27th May, 2022.

3. **Modelling and Forecasting of Monthly Rainfall in India using Statistical Time Series Model:** National Seminar on "Climate Resilient and Input Efficient Agriculture for Food and Nutritional Security" held at Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar, West Bengal on January 19-20, 2023.

4. **Modelling and Forecasting of Rainfall using Statistical and Machine Learning Tools for Sustainable Development:** National Seminar on "Nature-based Solution for Achieving Sustainable Development Goals (NBSSDG)" held at Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar, West Bengal on 5-5 March, 2024.

5. **Forecasting Tomato Prices in Karnataka's Kolar Market: A Comparative Analysis of Time Series Models:** International Conference on "Recent Advances in Agriculture for Atmanirbhar Bharat" organized by Agri Meet Foundation U.P. 19-21, April, 2024.

Training Programmes Attended:

- Completed "Induction Training Programme" for Central Silk Board Scientists – 2025, conducted by the Ministry of Textiles, Government of India.
- Completed NPTEL certification courses on "Python for Data Science", and "Introduction to Machine Learning" offered by IITs under SWAYAM, Govt. of India. (July- Sep, 2023)
- Completed workshop on "Statistical and Machine Learning Techniques for Agricultural Systems Modelling and Forecasting using R" organised by ICAR-Indian Institute of Rice Research, Hyderabad from 18-30 July,2022.
- Completed virtual training programme on "Statistics and Informatics in Experimental Data Management and Analysis" Organised by IASRI, New Delhi during 14-21 March, 2022.
- Completed online training programme on "Application of R-Software for Social Sciences". Organised by ANGRAU, Andhra Pradesh during 14-20, November,2022.
- Completed training programme on "Application of 'R' and 'Python' software in Agriculture" organised by UAS, GKVK, Bengaluru from 20th January to 12th March,2020.
- Completed workshop on "Big Data Analytics and Digital in Agriculture" organised by UAS, GKVK, Bengaluru from 8-9, August, 2019.
- Completed workshop on "Research Methodology and Data Analysis" organised by Karnataka Science and Technology Academy [KSTA], Dept. of Science and Technology, Govt. of Karnataka from 26-28, June, 2019.

Technical Skills:

Programming: R, Python, SPSS, STATA, SQL, SAS, and QGIS
Statistical Tools: Time Series, Econometrics, Machine Learning, Multivariate Analysis
Languages Known: Kannada, English, Telugu, and Hindi