

**DEPARTMENT OF AGRICULTURAL ECONOMICS
COLLEGE OF AGRICULTURE,
NAVSARI AGRICULTURAL UNIVERSITY
BHARUCH CAMPUS, BHARUCH**

1. INTRODUCTION:

With the inception of the College of Agriculture at Bharuch in 2012, the Department of Agricultural Economics has been actively engaged in teaching, research, and extension to serve both students and the farming community. The department offers academic programs at the Diploma, Undergraduate, and Postgraduate levels, with the primary objective of nurturing skilled professionals in agricultural economics. Its curriculum thoughtfully designed in accordance with the Sixth Dean's committee recommendations, ensuring relevance to contemporary agricultural and economic challenges.

2. OBJECTIVES:

- Offer core courses in Agricultural Economics at diploma, undergraduate, and postgraduate levels.
- Provide supporting courses for postgraduate programs in allied disciplines.
- Undertake independent research in priority areas of Agricultural Economics.
- Collaborate in multi-disciplinary research projects addressing agricultural and rural challenges.
- Actively contribute to the university's extension activities for technology transfer.
- Create and disseminate knowledge in Agricultural Economics for the benefit of rural communities, including farmers, farm women, emerging entrepreneurs, and associated sectors of society.

3. MAJOR ACTIVITIES:

1. Teaching:

(a) Polytechnic in Agriculture:

One course with 2 credit hours is being taught in this first semester in Polytechnic in Agriculture.

(b) Undergraduate:

Total 6 courses with 10 credit loads are being taught from First to eighth semesters B.Sc. (Hons.) in Agriculture.

(c) Post graduate teaching: The Department offers 2 non-credit compulsory courses.

2. Research:

The department undertakes research on socio economic problems of the farming community of the state in general and South Gujarat Agro-Climatic Zone in particular through various research projects.

3. Extension:

- Department is imparting training to the extension workers / officers of department of agriculture Gujarat state, field staff and farmers brought by various NGOs to develop their skills for improving crop production.
- Department staff is also actively participating in Krushi Mahotsav, Krushi Mela, Khedut Din, Khedut Shibir, Seminar, Radio and television programme time to time.
- Department is also imparting training to the students of various rural academic institutes.
- This department is also guiding farmers through publishing press notes in daily newspaper on the economic and marketing aspects of major crops of this zone.

4. Teaching:

(a) Polytechnic in Agriculture

To teach the following subjects to the students of Polytechnic in Agriculture from first to sixth semester.

Courses offered during odd semester:

S. No.	Semester	Course Number	Title of course	Credits
1	1 st	Ag.Econ.1.1	Fundamentals of Agricultural Economics	2+0

Courses offered during even semester :Nil

(b) Under graduate [B.Sc.(Hons.) in Agriculture]

To prepare theory and practical manuals for U.G.courses are being taught from first to eight semesters B.Sc.(Hons.) in Agriculture.

Under graduate courses offered during odd semester:

S. No.	Semester	Course Number	Title of course	Credits
1	3 rd	MDC-II	Entrepreneurship Development and Business Communication (6 th Dean)	2+1
2	5 th	MDC-III	Agricultural Marketing and Trade (6 th Dean)	2+1
3	7 th	Ag. Econ.7.6	Rural Entrepreneurship Awareness and Development Yojana	2+0

+

Under graduate courses offered during even semester:

S. No.	Semester	Course Number	Title of course	Credits
1	2 nd	MDC-1	Farming based Livelihood Systems (Economics Section) (6 th Dean)	2+1 (1 part)
2	4 th	Ag. Econ.4.1	Principles of Agricultural Economics and Farm Management (6 th Dean)	2+0
3	6 th	Ag.Econ.6.2	Agricultural Finance and Co-operation (6 th Dean)	2+1

Post graduate courses offered during even semester:

S. No.	Semester	Course Number	Title of course	Credits
1	1 st	PGS-503	Intellectual Property and Its Management in Agriculture	1+0
2	3 rd	PGS-502	Technical Writing and Communication Skills	0+1

5. List of M.Sc.(Agri.) students guided: Nil

6. FACILITIES:

Following facilities have been developed-

- i) Classroom cum Social Science Lab
- ii) Departmental library
- iii) Storeroom
- iv) LCD projector, desktop computers and multifunctional printers

7. RESEARCHACTIVITY:

(i) Projects

Department of Agricultural Economics is actively engaged in quality research, focusing on the economic analysis of various agricultural and horticultural crops under prevailing market conditions which would be helpful to the farmers, researchers, policymakers, and agribusinesses in understanding the viability, profitability, and sustainability of crop enterprises in the region. In addition to research, the faculty members contribute their expertise as invited resource persons during major agricultural events such as Krushi Mahotsav, Krushi Mela, Farmers' Day/Shibir, and specialized training programmes organized at KVK, SSK, ATIC, FTC etc. These engagements strengthen the department's role in bridging academic knowledge with practical applications for farmers and stakeholders.

Research projects completed:

- AGRESCO project titled Export performance of Flowers from India completed in 2025-26.
- AGRESCO project titled Comparative advantage analysis and export competitiveness of Indian basmati and non-basmati rice completed in 2024-25
- AGRESCO project on Growth performance and decomposition analysis of nutri-cereals in India completed in 2023-24.
- Economics of Pigeon pea in Bharuch District of South Gujarat completed in 2023-24.
- Research project on Estimating Total Factor Productivity of banana in South Gujarat region in 2022-23.
- Research project on "Export performance of major vegetable crops in India" completed in 2022-23.
- Completed research project on Yield gap and economic analysis of Bt cotton in Bharuch district of South Gujarat in 2021-22.
- AGRESCO research project on Economic analysis of Rabi Jowar in Bharuch district of South Gujarat completed in 2021-22.

8. RESEARCH RECOMMENDATION: 2

1. Recommendation number **19.9.2.22** from the research project on “Estimating Total Factor Productivity of Banana in South Gujarat Region.” conducted by Dr. Deepa B. Hiremath as PI during 2022-23 was approved in the Nineteenth Meeting of Combined Agricultural Research Council (AGRESCO) of SAUs And Kamdhenu University of Gujarat 2022-23. The recommendation states that “*A moderate TFP growth in the South Gujarat region suggests ample scope for increasing banana production through new technological breakthrough by means of augmenting investment in research, extension and natural resource management which were found to be important drivers of TFP growth*”.
2. Recommendation number **20.7.2.7** from the research project on “Growth performance and decomposition analysis of nutri-cereals in India” with Dr. Deepa B. Hiremath as PI was accepted in the Combined AGRESCO held during May 10-17, 2024. The recommendation states that “*A high negative area effect on the growth of nutri-cereals production over two decades suggests the need to expand its area through adequate nutri-cereals centric policy incentives and extension support.*”

9. PUBLICATION

10. Research Paper Published in National and International Journal: 2021-22 to 2025-26

2021-22

- Dubey, L.R., Sharif, M., Hiremath, D.B., Meena, D.K. (2021). Generalized status of Farmers Producer Organizations (FPO's) in India- A review. *EPRA International Journal of Research and Development*, 6 (7): 289-293. SJIF Impact factor 8.013.
- Hiremath, D.B. and Makadia, J.J. (2021). Issues in adoption of drip and conventional irrigation methods in banana orchards. A socio-economic analysis in South Gujarat region. *International Journal of Agriculture, Environment and Bio-technology*, 14 (03): 341-347. NAAS rating 4.74.
- Hiremath, D.B. and Makadia, J.J. (2021). Growth and instability of area under drip method of irrigation in South Gujarat- a district-wise analysis. *International Journal of Agricultural Sciences*, 17 (1): 9-14. NAAS rating 4.18.
- Hiremath, D.B., Rudrapur, S., Dubey, L.R. and Choyal, B. (2021). Economic performance and constraints faced by Tur dal processing units- Bharuch district, Gujarat. *International Journal of Plant and Soil Science*, 3 (20): 54-62. NAAS rating 5.07.

2022-23

- Hiremath, D.B. and Rudrapur, S. (2022). Economising resources in banana cultivation through drip irrigation: A case of south Gujarat. *Agro Economist - An International Journal*, 09 (04): 268-275. NAAS rating 4.03.
- Hiremath, D.B., Mistry, H.H., Dubey, L. R. and Netravathi, G. (2022). Estimating Economics of Tissue Culture Banana: A Case of Bharuch District in South Gujarat. *Biological Forum*, 14 (3): 1655-1658. NAAS rating 4.96.
- Mendapara, I.K. Patel, S.R., Dinisha Abhishek, Patel, D.D., Patel, H.N. and Mistry, H. H. (2022). Genetic Variability Analysis for Yield Attributes and Phenotypic Characterization of TFL1 Homologues for Growth Habit in Pigeon pea. *Legume research: An International Journal*, LR-4822(1-7).
- T. A. Parasaniya, S. R. Patel, A. Dinisha, H. H. Mistry, H. N. Patel and C. J. Gadhiya (2022). Correlation and path analysis for yield and yield component in mungbean. *The Pharma Innovation Journal*, 11(9): 316-320.
- T. A. Parasaniya, S. R. Patel, A. Dinisha, H. H. Mistry, H. N. Patel and C. J. Gadhiya. (2022). Genetic Variability analysis for yield and yield component in mungbean. *The Pharma Innovation Journal*, 11(8): 1728-1732.

2023-24

- Hiremath, D.B., Makadia, J.J., Rudrapur, S. (2023). Economic Impact and Decomposition Analysis of Income Change vis-à-vis Drip and Conventional Irrigation Technology in Bananas: A Case Study of the South Gujarat Region in India. *Journal of Irrigation and Drainage Engineering*, 149 (12):04023029-1-7, 1943-4774. NAAS rating 8.10.
- Rudrapur, S. and Hiremath, D.B. (2023). Dynamics of production and export of potato from India: Markov chain approach. *Journal of Farm Sciences*, 36 (4): 393-397. NAAS Rating 4.91.
- Rudrapur, S. and Hiremath, D.B. (2023). Export of Fresh and Processed Citrus from India: Growth and Stability Issues. *Souvenir cum conference book on International Conference on Current Advances in Agriculture, Animal Husbandry and Allied Sciences (CAAAAS-2023)*, p. 14-23.

2024-25

- Deepa Hiremath, Shrees hail Rudrapur and L. R. Dubey (2024). Appraising efficiency of resources under drip and conventional irrigation methods to enhance farmer's income in banana: A study of south Gujarat, *International Journal of Agriculture Extension and Social Development*, 9(7): 201-205. NAAS Rating 5.04.

- Deepa Hiremath, Shreeshail Rudrapur and T. N. Parmar. (2024). Financial feasibility analysis of drip irrigation technology in Banana: A case of south Gujarat. *J. Farm Sci.*, 37(3): 254-258. NAAS Rating 4.91.
- Shreeshail Rudrapur and Deepa Hiremath. 2024. Export performance of Indian Onion: Markov chain approach. *Vegetable Science*, 51(2): 269-274. NAAS Rating 5.54.
- Chudasma, V.R., Dubey, L. R., Hiremath, D.B. and Dinesh, K. (2024). Knowledge level and extent of adoption of natural farming among groundnut growers in Junagadh district of Gujarat. *Multilogic in Science*.15 (53): 143-146. NAAS Rating 4.17.
- Rudrapur, S. and Hiremath, D.B., (2024). Dynamics of Production and Export of Tomato from India: Markov Chain Approach. *Asian Journal of Agricultural Extension, Economics & Sociology*, 42 (7): 71-78. NAAS rating 4.73.

2025-26

- Hiremath, D.B., Rudrapur, S. Netravathi, G. (2025). Economics of Rabi Sorghum Production in Bharuch District of South Gujarat. *Journal of Scientific Research and Reports*,31 (9):111-119. NAAS rating 5.17
- Shreeshail Rudrapur and Deepa Hiremath (2025). Dynamics of Area, Production, Productivity and Export of Rice in India. *International Journal of Economic Plants*, 12(6): 01-05. NAAS rating 5.07.
- Netravathi, G., Deepa Hiremath, and Hemlata Saini (2026). Farmers perception towards natural disasters and crop insurance: a case study of Bharuch Gujarat, India. *Plant Archives*, 26 (1):985-994. DOI. <https://doi.org/10.51470/PLANTARCHIVES.2026.v26.no.1.135>. NAAS rating 5.59.

BOOK CHAPTERS

- Dubey, L.R., Hiremath, D. B., Padhiyar, Y. and Kulshreshta, S. K. (2021). Crop Insurance Schemes in India: Key Problems and Way Forward. Doubling Farmers' incomes, Issues, Strategies and Recommendations (Volume-4), AkiNik Publications: 19-30, ISBN 978-93-5570-054-4.
- Dubey L.R., Padhiyar, Y., Hiremath, D. B., Sharif, M., More, S. (2021). Export Scenario of Indian Fresh Fruits: Potential and Promotional Schemes. Chapter 17 in *Organic Agriculture: Soil Management Practices*. Biotech Publications: 181- 189. ISBN 978-81-7622-531-1.
- Hiremath, D.B. and Waghunde, R.R. (2022). Role of mushroom in Indian Economy. Training manual on Mushroom: Nutritious, Medicinal and Economical Farming. Publishers: Department of plant pathology, College of Agriculture, Navsari Agricultural University, Bharuch, Gujarat, University publication no. NAU/02/06/PP/032/2022: 1-5.

- Hiremath, D.B., Yadav, P., Rudrapur, S. (2024). Multicollinearity and Autocorrelation in Regression Analysis: Problems, detection and solutions. Advances in Agricultural Economics and Statistical Insights. Publishers: New Delhi Publishers. ISBN:978-81-19006-84-7.

BOOK(S)

- Netravathi, G. and Hiremath, D.B. (2025). Evaluation and Impact Assessment in Agricultural Research. Elite Publishing House, New Delhi. ISBN: 978-93-71084-9.
- Hiremath, D.B. and Netravathi, G., Shreesail Rudrapur (2025). Agricultural Economics and Extension: An Introductory Textbook for Diploma-Level Learners. South India Book Traders, Jodhpur. ISBN: 978-93-71084-9.

POPULAR ARTICLES

- Rudrapur, S. and Hiremath, D.B., (2023). Export Performance of Fresh Pomegranates from India, Vigyan Varta 4(1): 90-92. E-ISSN: 2582-9467.
- Hiremath, D.B., Rudrapur, S., and Vaishali Surve (2024). Enhancing Profitability in Indian Agriculture: Strategies and Government Initiatives. Vigyan Varta: An International E-Magazine for Science Enthusiasts. Vigyan Varta, 5(10): 01-06. E-ISSN: 2582-9467.
- Rudrapur, S., Hiremath, D.B. and Mundinamani, S.M. (2024). NITI Aayog- A Think tank for Government Policy Formulation. Vigyan Varta, 5(2): 46-49. E-ISSN: 2582-9467.
- Surve V., Abhishek, D. and Hiremath, D.B. (2024). SHG's: A Boon for Rural Poor. Agriculture and Food e-Newsletter, 6(5): 302-304. ISSN :2581 8317.
- Hiremath, D.B., Rudrapur, S., and Netravathi, G. (2025). Minimum Support Price and its Impact on Indian Agriculture. Agriculture and Food e-Newsletter, 07(10): 39-41. ISSN :2581 8317.
- Hiremath, D.B. and Mistry, H.H. (2026). Exploring the trailblazers: Nobel prize winners in economic sciences. Bharugu Krushak, 10: 63-65. NAU/02/06/002/2026.
- Hiremath, D.B. and Saravadiya, S. (2026). Seeds of Change: India's Agricultural Budget 2026. Bharugu Krushak, 10: 79-81. NAU/02/06/002/2026.

11. TRANSFER OF TECHNOLOGIES:

- Department staff is also actively participating in Krushi mahotsav, Krushi mela, Khedut Din, Khedut Shibir, Seminar, Radio and television programme time to time.
- Department staff is also guiding farmers through publishing press notes in newspapers and weekly/monthly periodicals on the economic aspects of major crops.