

# Central University of South Bihar



Report of Research Audit – 2021-2022

#### **ABSTRACT**

Research Audit aims to scientifically and systematically review the institution's quality of the research activities. This report recommends focus areas and suggests a process that enhances the quality of research activities at the CUSB.

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Research Audit aims to scientifically and systematically review the institution's quality of the research activities. This report recommends focus areas and suggests a process that enhances the quality of research activities at the CUSB. The audit was conducted during September and October, 2021 by Dr. Sunit Kumar, HoD Statistics and Dr. Ram Pratap Singh, HoD, Life Science.

### 1. Department of Psychological Science

- The Department is advised to write Quality Research articles and publish them in Care Listed journals. A good number of publications in Care Listed journals are required.
- · Faculty must apply and work on getting a Research project
- They should focus more on getting projects and emphasize interdisciplinary Research.
- · Focus on Research on local Psychological and mental health issues
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- Enhancing The Lab Experiment related to Psychological Science
- · Collaborate with other Academic institutions, hospitals, and NGOs.

### 2. Department of Historical Studies and Archaeology

- The Department is advised to write Quality research articles and publish them in Care Listed journals. A good number of publications in Care Listed journals are required.
- Faculty must apply and work on getting a Research project
- They should focus more on getting projects and emphasize interdisciplinary Research.
- Focus on Research in local history, especially on Buddhism.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- More Field Visits for students and Research scholars to local Historical sites.

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 More focus on local protagonists and their contribution to the Indian freedom movement, Vadic and Buddhist Philosophy

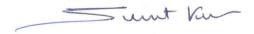
#### 3. Department of Economic Studies and Policies

- Recommends doing Quality research on local and national issues, writing
  Quality research articles and publishing them in Care Listed journals. A good
  number of publications in Care Listed journals are required.
- Faculty must apply and work on getting a Research project
- They should focus more on getting projects and emphasize interdisciplinary Research.
- Focus on Research on local issues such as Urban and rural disparity.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- Collaborate with NGO and Social development institutions.
- Enhance the Computer skill of Students

#### 4. Department of Development Studies

- Recommends, doing Quality research on local and national issues, writing
  Quality research articles and publishing them in Care Listed journals. A good
  number of publications in Care Listed journals are required.
- Faculty must apply and work on getting a Research project
- They should focus more on getting projects and emphasize interdisciplinary Research.
- · Focus on Research on local Development issues.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- Collaborate with NGO and Social development institutions.
- Enhance the Computer skill of Students

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#### 5. Department of Political Studies

- Recommends doing Quality research on local and national issues, writing
  Quality research articles and publishing them in Care Listed journals. A good
  number of publications in Care Listed journals are required.
- Faculty must apply and work on getting a Research project
- They should focus more on getting projects and emphasize interdisciplinary Research.
- · Focus on Research in local Polity, and National issues.
- · Align Programme and courses with employability, Value, and Ethics.

#### 6. Department of Sociological Studies

- Recommends doing Quality research on local and national issues, writing Quality research articles and publishing them in Care Listed journals. A good number of publications in Care Listed journals are required.
- Faculty must apply and work on getting a Research project
- They should focus more on interdisciplinary Research.
- Focus on Research in local history, especially on Buddhism.
- They should work for industry-academia collaboration and consultancy.
- · Align Programme and courses with employability, Value, and Ethics.
- Collaborate with NGO and Social development institutions.
- Enhance the Computer skill of Students

#### 7. Department of Teacher Education

- Recommends doing Quality research on local and national issues, writing Quality research articles and publishing them in Care Listed journals. A good number of publications in Care Listed journals are required.
- They should focus more on interdisciplinary Research.
- Focus on Research in local education Systems, especially on pedagogy.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- Collaborate with NGO and Social development institutions.

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Enhance the Computer skill of Students

### 8. Department of Physical Education

- Recommends doing Quality research on local and national issues, writing
  Quality research articles and publishing them in Care Listed journals. A good
  number of publications in Care Listed journals are required.
- They should focus more on interdisciplinary Research.
- Focus on Research in Sports, and Healthy Lifestyle, Yoga and Rehabilitation of physical injury.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- Collaborate with NGOs and do local health awareness program
- Enhance the Yoga, Sports complex and Gim Management skill of Students

### 9. Department of Commerce and Business Studies

- Recommends doing Quality research on local and national issues, writing Quality research articles and publishing them in Care Listed journals. A good number of publications in Care Listed journals are required.
- Faculty must apply and work on getting a Research project
- They should focus more on getting projects and emphasize interdisciplinary Research.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- Collaborate with NGO and Social development institutions.
- Enhance the Computer skill of Students

### 10. Department of English

- The Department is advised to publish good-quality Research in CARElisted journals.
- The Department should concentrate more on interdisciplinary Research and collaborate with different departments.

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- The focused area of Research should be planned through which the Department should be known as the specialized Department.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.
- They should work for industry-academia collaboration and consultancy

### 11. Department of Hindi

- The Department is advised to publish good-quality Research in CARElisted journals.
- The Department should concentrate more on interdisciplinary Research and collaborate with different departments.
- The focused area of Research should be planned through which the Department should be known as the specialized Department.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.

### 12. Centre for Indian Languages (Urdu)

- The Department is advised to publish good-quality Research in CARElisted journals.
- The Department should concentrate more on interdisciplinary Research and collaborate with different language departments.
- Focus on Research in local Dialects and linguistics.
- They should work for industry-academia collaboration and consultancy.
- Align Programme and courses with employability, Value, and Ethics.

### 13. Department of Law & and Governance

- The Department is advised to conduct empirical Research focusing on contemporary issues.
- The Department is advised to publish good-quality Research in CARE-listed journals.



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- The Department should focus more on research projects and collaborative Research.
- The Department is advised to improve their consultancy.
- Department should work for industry-academia collaboration.
- However, Department is working on a legal awareness programme for Society. Reach to these programmes need to be enhanced to local Society.

#### 14. Department of Life Science

- The department has good no of ongoing research projects, but need to focus more on consultancy project.
- The department will have to develop linkage between academia and industry.
- The department should focus on documenting Bihar's biodiversity.
- There is also a need to file patents from the department.
- More linkage and collaboration with national and international students are required through MoU.
- Department should organize seminars/symposium of relevant topics.

### 15. Department of Biotechnology

- The department should collaborate with other sister departments such as Life Science, Pharmacy and Bioinformatics.
- It is to note that department has already made Academia-industry collaboration, it need to enhance further.
- Courses of industrial application needs to be included in the program.
- Department should try to get affiliated with DBT for taking PG students through DBT entrance test.
- The department should attract consultancy grants.
- The department should focus on publishing Patents.

#### 16. Department of Bioinformatics

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- The department should focus on the specific areas of research related to Whole Genome and Proteome analysis, drug-discovery and promote research in those areas.
- The department should start one year Diploma Course in Computational Biology.
- They should focus more on research collaborations within and outside the university.
- Faculty members need to generate more funds for research through consultancy.
- The department should focus on publishing more Patents.
- They should formulate MoU with industry.

## 17. Department of Environmental Science

- The department has very experienced faculty members. They are advised to identify the areas of research in which the department can be recognized as the Centre of Excellence.
- The department should focus on local environmental issue of Bihar.
- Consultancy projects need to be brought in to the department. Research collaborations with sister departments are to be promoted.
- The department should focus on publishing Patents.
- They should work for industry-academia collaboration.

### 18. Department of Geology

- The department is advised to focus on regional geological problems such as arsenic and fluoride issues in Bihar.
- The faculty members must generate funds for research from government and non-government agencies.
- The department is newly established, therefore develop active linkages with already established institutions.

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- Formulate linkage with mining industry in Bihar and Jharkhand.
- Every faculty member should publish their research in the reputed journals.
- Map unknown geoheritage sties in the Bihar.

### 19. Department of Physics

- The department is advised to think about the specific theme for research to become center of excellence.
- The department should establish linkage with international institutes through MoU.
- All the faculty members must secure funding from government and nongovernments organisations.
- Consultancy projects need to be increased.
- The department should focus on publishing Patents.
- Department should think establishing an incubation centre.

### 20. Department of Chemistry

- The department is advised to start certificate and diploma courses in Food-chemistry and Agro-chemistry.
- Faculty members should publish their research findings in reputed journals.
- Department must develop technology and obtain patents.
- Establish national and international collaboration for cutting-edge research.
- The department is advised to take consultancy projects.
- Industry-academia collaboration needs improvement.

#### 21. Department of Mathematics

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- The department is encouraged to carry out research work in application field because it has better opportunities.
- The department should focus on popularizing Vedic mathematics.
- The department must promote research collaboration and interdisciplinary research.
- The faculty members are advised to produce more research papers in the journal of repute.
- All the faculty members should have extra-mural grants from Government and non-government agencies.

# 22. Department of Statistics

- The department is advised to increase the enrolment in their PG and PhD courses.
- The department is advised to work in applied field such as Biostatistics, Data Science, AI, and Data Mining.
- The department should formulate certificate/diploma programs on Data Science, AI, and Data Mining.
- The department should promote research collaboration within and outside the GUSB.
- Faculty members should generate extra mural funding and publish their research in reputed journals.
- The department should focus on consultancy projects.

# 23. Department of Computer Science

- The department should formulate certificate/diploma programs on software development, AI, ML, Deep Learning, and Data Mining.
- The department is advised to work for establishing industry-academia collaboration and promote consultancy.
- The department should focus research on the Government-identified





thrust areas and work in collaboration with other departments.

- The department should acquire extra mural funding from Government and non-government agencies.
- More publications and patents are required from the department.

### 24. Department of Pharmacy

- The department is advised to conduct quality research in the field of targeted drug delivery for cancer therapy and other burning issues.
- Since the department is newly established, all the faculty members are advised to get extra mural funding from government and nongovernment agencies.
- The department must get active consultancy from pharmaceutical industry.
- Establish linkage with pharmaceutical industry.
- Establish linkage with premier pharmacy institutions in India.
- Focus on quality publications and patents.

### 25. Department of Mass Communication and Media

- The department is advised to introduce employability oriented certificate and diploma courses.
- The department need to focus on the research work for the benefits of society.
- The department should focus on collaborative research and industryacademia collaborative innovation to become leader in the field.
- The department should focus on bringing extra mural research projects on identified thrust area of the department.
- The department should publish more papers in the reputed journals, and attract consultancy projects.

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