

Research & Development Cell (RDC), Tripura University

Vision:

To create a vibrant, collaborative, and innovation-driven research ecosystem that significantly enhances research publications, externally funded projects, patents, industry engagement, and societal impact.

Strategic Action Plan (2026–2028)

Following action plan may be adopted to significantly enhance research output, research quality, innovation and societal impact.

Overall Targets

- 25-30% increase in external research funding.
- Increase Scopus/Web of Science publications by 50%.
- Increase Q1/Q2 publications by 30%.
- File at least 25-30 patents annually.
- Establish interdisciplinary Centres of Excellence.
- Increase industry-sponsored projects and consultancy
- Improve NIRF and NAAC research indicators.

1. Financial & Infrastructure Sub-Committee

Objective:

To develop world-class research infrastructure and ensure optimal utilization of resources.

Key Actions Plans:

A. Strengthening of the Central Instrumentation Facility

- New equipment procurement
- Create a university-wide equipment sharing platform.
- Online booking system for all major instruments.
- Dedicated technical staff for maintenance.

B. Research Grant / support Scheme

- Small grants for young faculty.
- Special grants for interdisciplinary projects.

C. Digital Research Infrastructure

- Institutional Research Information Management System (RIMS).
- Research repository and data management platform.
- AI-assisted literature search facilities.

D. Library Modernization

- Expand Scopus, Web of Science, JSTOR, IEEE, Springer, Elsevier subscriptions.

E. Infrastructure Audit

- Annual audit of laboratory utilization.
- Identification of infrastructure gaps and future requirements.

Expected Outcomes

- Enhanced research productivity.
 - Better utilization of equipment.
 - Increased success rate in external funding.
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2. Research Program & Policy Development Sub-Committee

Objective

Create a vibrant research culture and increase quality publications and funded projects.

Key Actions Plans:

A. Research target setup for faculty members & Department

- Must write & submit research proposals

- Must write & submit paper in a timebound manner
- Organize Seminar / conference etc

B. University Research Roadmap

Need to develop thematic research clusters involving different research group:

Examples:

Science

- Artificial Intelligence and Data Science
- Climate Change and Sustainability
- Bamboo and Bio-resource Technology
- Renewable Energy
- Health Sciences and Biomedical Devices
- Nanotechnology and Advanced Materials

Social Science

- Tribal Development and Indigenous Knowledge
- Borderland and Bangladesh Studies
- Climate Change and Community Resilience
- Digital Transformation and Society
- Gender, Equity and Inclusion
- Public Health and Social Well-being
- Youth, Education and Employment
- Sustainable Development in the North East
- Migration and Social Change
- Governance and Policy Innovation

V. Faculty Capacity Building

Need to Organize programs like:

- Research proposal writing workshops.
- Scientific writing workshops.
- AI tools in research workshops.
- Research methodology training.
- Statistical analysis training.

D. Research Mentorship Programme

Pairing of young faculty members with experienced researchers.
Proposal review before submission.

E. Annual Research Review

Departments to submit information time to time about:

- Publications
- Citations
- Grants
- Patents
- Consultancy activities
- PhD progress etc

F. Incentives / recognition / support

- Annual review of departmental & individual performances
- Incentives / recognition based on performances
- Need based Support system for quality / performance enhancement (proofreading and language editing, consulting support etc)

Expected Outcomes

- Improved publication quality.

- Higher grant success rates.
 - Stronger research culture.
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3. Collaboration & Community Sub-Committee

Objective

Strengthen national, international, industry, and societal collaborations.

Key Action Plans:

A. Establish International Collaboration Programme

Identify strategic partners in:

Japan, South Korea, Taiwan, Germany, Belgium, UK, USA etc

Activities:

- Joint projects
- Joint supervision of PhD students
- Faculty exchange
- Visiting professorships

B. National Research Network

Collaborate with:

IITs, IISERs, NITs, CSIR laboratories, DRDO laboratories, ICAR institutes, other academic institutes

C. Community-Linked Research

Encourage projects addressing:

Tribal livelihoods

Agriculture

Climate resilience

Healthcare

Rural development

Renewable energy

D. Annual Research Conclave

Organize:

Tripura University Research and Innovation Summit.

Industry-academia meet.

Research exhibition.

E. Alumni Research Network

Develop database of alumni working in:

Universities, Research institutes, Industries in India and abroad etc

Expected Outcomes

- Increased collaborative publications.
 - Enhanced visibility of the university.
 - Greater societal impact.
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4. Product Development Monitoring & Commercialization Sub-Committee

Objective

Transform research outputs into technologies, products, startups, and societal solutions.

Key Action plans

A. Technology Readiness Assessment

Review all funded projects for:

- Patentability.
- Commercialization potential.
- Industry relevance.

B. Innovation & Startup Support

- Prototype development grants.
- Student innovation challenge.
- Faculty startup support.
- Entrepreneurship workshops.

C. Industry Partnership Programme

Develop partnerships in:

- Bamboo products
- Agro-processing
- Pharmaceuticals
- Electronics
- ICT
- Renewable energy

D. Technology Transfer Office

Create mechanisms for:

- Licensing
- Revenue sharing
- Industry negotiations

E. Product Incubation

Support development of:

- Sensors
- Medical devices
- Software products
- Educational technologies
- Sustainable technologies

Expected Outcomes

- Increased patents.
 - Technology licensing revenue.
 - Startup generation.
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5. IPR, Legal & Ethical Matters Sub-Committee

Objective

Protect intellectual property and promote responsible research practices.

Key Action Plans

A. Intellectual Property Promotion

Conduct:

- Patent awareness workshops.
- Copyright awareness programmes.
- Trademark awareness programmes.

B. Patent Facilitation

Provide support for:

- Patent search.
- Drafting.
- Filing.
- Technology valuation.

C. Research Ethics Framework

Mandatory training on:

- Plagiarism.
- Research integrity.
- Data management.
- AI ethics.
- Responsible authorship.

D. Institutional Review Mechanism

Strengthen:

- Ethics Committee.
- Animal Ethics Committee.
- Biosafety Committee.

E. Research Misconduct Policy

Develop university-wide policy on:

- Plagiarism.
- Data fabrication.
- Data falsification.
- Authorship disputes.

Expected Outcomes

- Increased patent filings.
 - Reduced ethical violations.
 - Stronger institutional credibility.
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Immediate Priorities for 2026–27 may be

1. Organize two research proposal / paper Writing workshops.
2. Develop a Research Information Management System (RIMS).
3. Strengthen / establish Patent Facilitation and Technology Transfer system.
4. Create few Interdisciplinary Research Clusters.
5. Organize Tripura University Research & Innovation Summit.
6. Start Young Faculty Research Mentorship Programme.
7. Develop University Research Policy and Incentive Policy.
8. Strengthen Central Instrumentation Facility.
9. Create Annual Research Excellence Awards.

These initiatives, implemented through the RDC sub-committees, can substantially increase research funding, publications, patents, innovation, and national visibility of Tripura University while creating a sustainable research ecosystem aligned with UGC and NEP 2020 objectives.