

# INSTITUTIONAL DEVELOPMENT PLAN (IDP) (2025-30)

**B. P. BARIA SCIENCE INSTITUTE**  
NEAR FUWARA, SAYAJI ROAD,  
NAVSARI – 396450  
GUJARAT



31<sup>ST</sup> MAY, 2025

## Table of Contents

<b>Sr. No.</b>	<b>Title</b>	<b>Page No.</b>
1.	Institutional Highlights	3
2.	Executive Summary	5
3.	Institutional Profile	8
4.	SWOC Analysis	12
5.	Vision, Mission and Core Values	14
6.	Strategic Goals and Objectives	15
7.	Key Focus Area	18
8.	Action Plan / Implementation Strategy	20
9.	Monitoring and Evaluation	23
10.	Risk management	25
11.	Budget and Financial Plan	27

Annexures

## INSTITUTIONAL HIGHLIGHTS

### Vision:

The emblem of the college is suggestive of its vision. The word “Excelsior” in it suggests the achievement of more and more good. The symbol on its left signifies proficiency, brilliance and excellence, while the symbol on its right signifies the awareness and exploration of the smallest to the largest mysteries of this world.

### Mission:

Our educational trust was established in 1945 with the aim of providing quality education to the young generation of this region and outside. The institution has always strived to spread higher education. It has a social commitment of overall development of the young generation and their career building. The institution is committed to equip the young generation to become prolific, productive, pro-active human resources and responsible citizens of the nation.

### Institutional Goal:

To establish ourselves as a pioneering centre of higher education, building upon our rich legacy since 1946 and transforming into a vibrant, inclusive, and multi-disciplinary institution offering affordable, accessible, and high-quality undergraduate and postgraduate programmes, fostering academic excellence, research, and innovation, and empowering youth with knowledge, skills, values, and social responsibility to meet regional, national, and global challenges.

### Institutional Profile:

B. P. Baria Science Institute				
Name and Address				
Name		B. P. Baria Science Institute		
Address		Sayaji Road, Near Fuwara, Navsari – 396445		
District		Navsari		
State		Gujarat		
E-mail		<a href="mailto:bpbaria@yahoo.co.in">bpbaria@yahoo.co.in</a>		
Website		<a href="http://bpbsinavsari.ac.in">bpbsinavsari.ac.in</a>		
Contacts for Communication				
Designation	Name	Telephone	Mobile	E-mail
I/C Principal	Dr. Farida P. Minocheherhomji	+91(02637)257310	9427135692	<a href="mailto:bpbaria@yahoo.co.in">bpbaria@yahoo.co.in</a>
IDP Co-ordinator	Dr. Anilkumar S. Pillai	+91(02637)257310	9825969614	<a href="mailto:anil_pillai_2000@yahoo.com">anil_pillai_2000@yahoo.com</a>

<b>Status of Institute</b>		
Institutional Status	Grant-in-aid	
<b>Type of Institute</b>		
By Gender	Co-education	
By Shift	Regular	
<b>Establishment Details</b>		
Year of establishment of the institute	June 1946	
<b>University to which the Institute is affiliated</b>		
State	University Name	
Gujarat	Veer Narmad South Gujarat University	
<b>Recognitions</b>		
Is the institute recognized by UGC under 12(B) and 2(f) ?	Yes	
<b>Location and Area of the Campus</b>		
<b>Campus location</b>	<b>Campus area in Acres</b>	<b>Build up area in m<sup>2</sup>.</b>
Urban	5.36 acres	4117.11
<b>Programmes Offered</b>		
UG:	B.Sc. in Chemistry B.Sc. in Microbiology B.Sc. in Mathematics B.Sc. in Physics B.Sc. in Zoology	
PG:	M.Sc. in Mathematics M.Sc. in Zoology	
<b>Fee Structure</b>		

**B.Sc.****Subjects:** Chemistry, Mathematics, Microbiology, Physics and Zoology

Semester-wise fee structure in rupees

	Semester-I	Semester-II	Semester-III	Semester-IV	Semester-V	Semester-VI
Girl's	4950	3600	3500	3650	3530	3650
Boy's	5550	4200	4100	4250	4130	4250

**M.Sc. (Zoology)**

Semester-wise fee structure in rupees

	Semester-I	Semester-II	Semester-III	Semester-IV
Girl's (Regular)	6140	5420	5200	5420
Girl's (Higher payment)	18640	17920	17700	17920
Boy's (Regular)	8640	7920	7700	7920
Boy's (Higher payment)	20465	20420	20200	20420

**M.Sc. (Mathematics)**

Semester-wise fee structure in rupees

	Semester-I	Semester-II	Semester-III	Semester-IV
Girl's (Regular)	3640	2920	2700	2920
Girl's (Higher payment)	15465	15420	15200	15420
Boy's (Regular)	6140	5420	5200	5420
Boy's (Higher payment)	17845	17920	17700	17920

## 1. Executive Summary

### i. Institutional Overview

Established in 1946, B. P. Baria Science Institute, Navsari is one of the oldest and most reputed science colleges in South Gujarat. Managed by a Parsi minority trust and permanently affiliated to Veer Narmad South Gujarat University, Surat, the college is recognized by the UGC under sections 2(f) and 12(B) and functions as a grant-in-aid institution. With a rich legacy of academic service spanning over seven decades, the college offers undergraduate (B.Sc.) and postgraduate (M.Sc.) programmes in core science disciplines.

The college currently has 21 permanent faculty members, of whom 12 hold Ph.D. degrees and 2 hold M.Phil. degrees, supported by dedicated non-teaching staff. Despite constraints in government appointments, the institution maintains academic continuity by appointing qualified staff through its management. The student population is predominantly from rural and lower-income backgrounds, reflecting the college's commitment to inclusive education.

The college has well-equipped laboratories, spacious classrooms, a library with over 18,000 books, and basic internet and ICT infrastructure. However, some facilities, such as older laboratory buildings and digital teaching aids, require urgent upgrades to match evolving academic needs. The Internal Quality Assurance Cell (IQAC), chaired by the Principal, plays a pivotal role in institutional planning, monitoring, and quality assurance.

### ii. Vision, Mission, and Strategic Goals

#### Vision:

The emblem of the college is suggestive of its vision. The word “Excelsior” in it suggests the achievement of more and more good. The symbol on its left signifies proficiency, brilliance and excellence, while the symbol on its right signifies the awareness and exploration of the smallest to the largest mysteries of this world.

**Mission:**

Our educational trust was established in 1945 with the aim of providing quality education to the young generation of this region and outside. The institution has always strived to spread higher education. It has a social commitment of overall development of the young generation and their career building. The institution is committed to equip the young generation to become prolific, productive, pro-active human resources and responsible citizens of the nation.

**Institutional Goal:**

To establish ourselves as a pioneering centre of higher education, building upon our rich legacy since 1946 and transforming into a vibrant, inclusive, and multi-disciplinary institution offering affordable, accessible, and high-quality undergraduate and postgraduate programmes, fostering academic excellence, research, and innovation, and empowering youth with knowledge, skills, values, and social responsibility to meet regional, national, and global challenges.

**Strategic Goals:**

To actualize its vision and mission, the institution has identified clear short-term (1–2 years), medium-term (3–5 years), and long-term (5+ years) goals. These are aligned with the National Education Policy (NEP) 2020 and are structured across nine key focus areas:

1. Academic Excellence
2. Research and Innovation
3. Faculty Development
4. Infrastructure Development
5. Industry Collaboration
6. Student Support and Employability
7. Digital Transformation
8. Sustainability and Green Campus Initiatives
9. Promotion of Knowledge of India

### iii. Summary of Key Initiatives in the Institutional Development Plan (IDP)

To drive these strategic goals forward, the Institutional Development Plan (IDP) outlines a series of actionable initiatives with defined timelines, responsibilities, performance indicators, and financial planning. Key highlights include:

- Introduction of Skill Enhancement Courses (SEC), Multidisciplinary Courses (MDC), and Value-Added Courses (VAC) under NEP 2020 to diversify academic offerings.
- Modernization of classrooms and laboratories, including smart boards, ICT tools, and upgraded infrastructure.
- Strengthening research culture through departmental research cells, faculty seed grants, and support for UGC-funded projects.
- Faculty development programmes (FDPs) to upskill teaching staff in digital pedagogy and contemporary teaching methods.
- Digital transformation through the establishment of an ERP system, expansion of the computer lab, and the development of a Learning Management System (LMS).
- Enhanced student support, including soft skills training, career guidance, and bridge courses for rural learners.
- Partnerships with industry and academic institutions for internships, MoUs, and joint activities.
- Sustainability initiatives, including rainwater harvesting, solar energy, and tree plantation, to promote a green campus.
- Promotion of Indian knowledge systems through special lectures, exhibitions, and curriculum integration.

The estimated financial outlay for these initiatives over five years is approximately ₹1.5 crores, with funding sourced through a combination of government grants (UGC, RUSA, DST), institutional contributions, internal revenue, and alumni and CSR support. A clear monitoring and evaluation framework, led by the IQAC, has been established to track progress, review performance indicators, and ensure accountability at each phase.

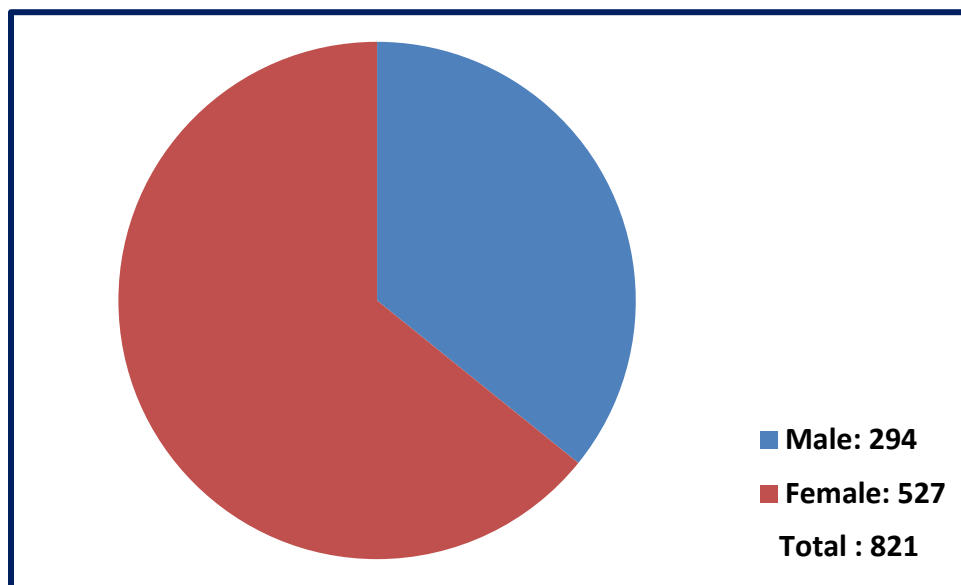
This Institutional Development Plan is a roadmap toward excellence, inclusivity, and sustainability, reinforcing the college's commitment to shaping future-ready graduates equipped with knowledge, skills, and values.

## 2. Institutional Profile

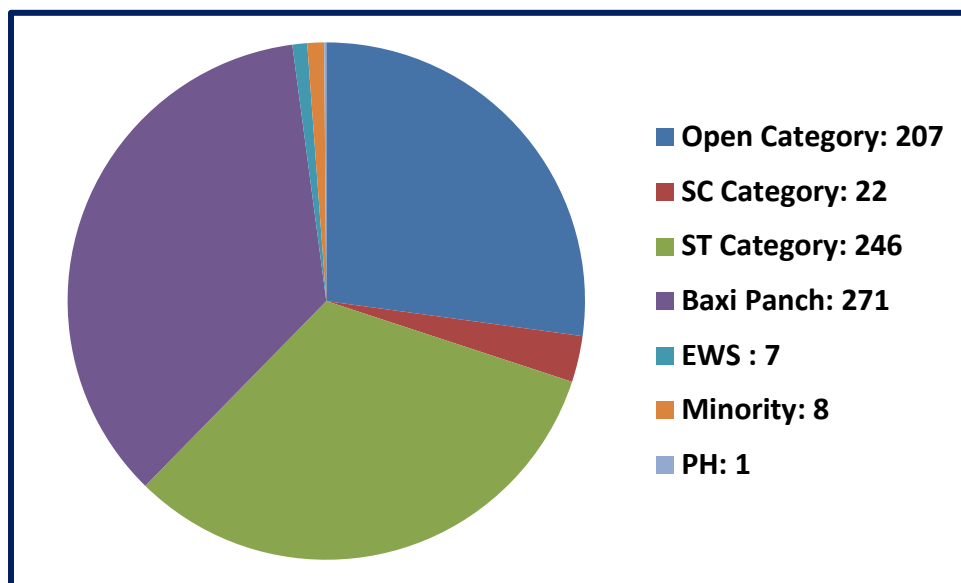
### Institutional Profile:

Name and Address				
Name		B. P. Baria Science Institute		
Address		Sayaji Road, Near Fuwara, Navsari - 396445		
District		Navsari		
State		Gujarat		
E-mail		<a href="mailto:bpbaria@yahoo.co.in">bpbaria@yahoo.co.in</a>		
Website		<a href="http://bpbsinavsari.ac.in">bpbsinavsari.ac.in</a>		
Contacts for Communication				
Designation	Name	Telephone	Mobile	E-mail
I/C Principal	Dr. Farida P. Minocheherhomji	+91(02637)257310	9427135692	<a href="mailto:bpbaria@yahoo.co.in">bpbaria@yahoo.co.in</a>
IDP Co-ordinator	Dr. Anilkumar S. Pillai	+91(02637)257310	9825969614	anil_pillai_2000@yahoo.com
Status of Institute				
Institutional Status			Grant-in-aid	
Type of Institute				
By Gender			Co-education	
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Establishment Details				
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UG:			B.Sc. in Chemistry B.Sc. in Microbiology B.Sc. in Mathematics B.Sc. in Physics B.Sc. in Zoology	
PG:			M.Sc. in Mathematics M.Sc. in Zoology	





**Total enrolled students (2024-25)**



**Demographics of the enrolled students (2024-25)**

B. P. Baria Science Institute is managed by S. B. Garda College Trust which was established on March 20, 1945 in Navsari, Gujarat with the generous donation of Rupees Two lakhs by Parsi philanthropist Shri Sorabji Burjorji Garda. His vision was to provide higher education opportunities to students irrespective of their caste, creed or nationality. In 1945 the scenario of Navsari was quite different from what it is today. The total population of Navsari was about 30,000 at that time and there were only two high schools

imparting education up to matriculate examination of Bombay University. After completing matriculation, students aspiring for higher education had to either go to Bombay or Surat, posing challenges, especially to students from the lower income group and female students whose families were hesitant to send their children to far off places.

To address this gap the trust inaugurated the S. B. Garda Arts College in June 1945. This was the first educational institution for higher learning at that time offering wide range of subjects with the establishment of departments for various subjects like Economics, Sanskrit, Persian and Gujarati in the very first year. On 18<sup>th</sup> December 1945, His Excellency the Maharaja Saheb Shrimant Pratapsinhrao Gaekwar laid the foundation stone of the science institute building and in 1946 the science faculty was inaugurated by Dr. Jivraj N. Mehta. In 1947 the subjects of English and logic was introduced followed with the introduction of Psychology and Hindi in 1952. Later on the subjects of History and Political Science were also added.

In 1948, Shri Burjorji Pestonji Baria another Parsi philanthropist donated a sum of rupees two lakh and the college was renamed S. B. Garda Arts College and B. P. Baria Science Institute.

Over the years, the trust expanded its educational offerings by establishing P. K. Patel College of Commerce in 1965 with a donation of rupees one lakh from the family of Shri P. K. Patel and with the addition of the commerce faculty, the college was again remaned as S. B. Garda College (Arts) and P. K. Patel College of Commerce and the science college B. P. Baria Science Institute was bifurcated and established as an independent institution. Later, Dinshaw Daboo Law College was established in 1972, further contributing to the regions academic landscape.

Today the S. B. Garda College Trust and its parent body, the Sir C. J. N. Z. Madresa High School is providing education from kindergarten (KG) to postgraduate (PG) level in various disciplines, fulfilling its mission of delivering quality education to students at an affordable cost – fostering their holistic development and supporting them from their early learning years through advanced studies, contributing significantly to the region's educational development.

Today, B. B. Baria Science Institute is permanently affiliated to Veer Narmad South Gujarat University, Surat and is recognized under sections 2(f) and 12(B) of the UGC Acts. The college offers UG programme in five subjects of science viz. Chemistry, Microbiology, Physics, Mathematics and Zoology and PG programmes in the subject of Zoology and Mathematics. The course includes additional subjects of Language through literature (English), and a range of multidisciplinary and skill enhancement courses along with extension activities like NSS, NCC, PT, SCOPE and Saptadhara. The college also manages a Regional Community Science Centre (RCSC) funded by GUJCOST (Gujarat Council of Science and Technology) to promote scientific literacy and foster a scientific temperament among the community and thus contribute to the dissemination of scientific knowledge, encourage critical thinking and work towards the holistic development of society through science and technology. In order to enhance creativity and support innovation, the college has setup a student start-up and innovation policy (SSIP) cell with grants from the Government of Gujarat. The college has recently proven its credentials by securing a 4-star rating for two alternate years in the Gujarat State Institutional Ratings Framework (GSIRF) carried out by the Government of Gujarat (2021 and 2023).

### 3. SWOC Analysis

#### Strengths:

- i. **Rich Legacy and Heritage:** Established in 1946, the college is one of the oldest science institutions in South Gujarat with a strong academic tradition.
- ii. **Affiliation and Recognition:** Permanently affiliated to Veer Narmad South Gujarat University and recognized by UGC under 12(B) and 2(f), ensuring eligibility for grants and quality assurance.
- iii. **Qualified Faculty:** 12 Ph.D. holders and 2 M.Phil. among 21 permanent teaching staff; average faculty experience is about 30 years, reflecting deep academic commitment and subject mastery.
- iv. **Effective Implementation of NEP 2020:** Introduction of Skill Enhancement Courses (SEC), Multidisciplinary Courses (MDC) and Value-Added Courses (VAC) enriches the academic curriculum and provides holistic student development.
- v. **Well-Equipped Infrastructure:** Spacious classrooms, department-wise staff rooms, and well-equipped laboratories in all the departments support effective teaching and practical learning.
- vi. **Library Resources:** A well stocked library with over 18,000 books, e-resources and subscriptions to research journals supports both learning and basic research.
- vii. **Supportive Management:** The managing trust proactively addresses faculty and staff shortages in the absence of government appointments.
- viii. **Sincere and Dedicated Staff:** Faculty and non-teaching staff demonstrate a strong work ethic and student commitment.
- ix. **Minority-Managed with Social Commitment:** Managed by a Parsi minority trust, the college benefits from a distinct cultural and administrative identity. Also the management is committed to serving the economically and socially disadvantaged students, especially from rural backgrounds.

#### Weaknesses:

- i. **Limited Research Output:** Despite having many recognized Ph.D. guides, only two faculty members are actively pursuing research, and publication output is relatively low.
- ii. **Inadequate Technological Integration:** Only five out of 14 classrooms have modern teaching aids; the seminar halls lack modern facilities.
- iii. **Computer Lab Constraints:** Only 10 computers are available for student use, limiting access to ICT resources.
- iv. **Old Building Infrastructure:** Physics and Chemistry labs are located in aging buildings that suffer from water seepage during monsoon seasons, affecting safety and usability.

- v. Declining Enrolment: Recent drop in student admissions due to waning interest in B.Sc. courses and increased competition from new self-financed institutions.
- vi. Faculty Shortage: Lack of adequate permanent teaching and non-teaching staff due to stalled government appointments.

**Opportunities:**

- i. Research and Collaboration: Potential to increase research activities and interdisciplinary collaborations by motivating and supporting existing Ph.D. guides.
- ii. Digital Modernization: Scope to upgrade classrooms, seminar halls, and computer labs with modern teaching-learning technologies.
- iii. Skill-Oriented Programmes: Introduction of certificate and add-on courses can enhance student employability and attract more enrolments.
- iv. Government and CSR Funding: Scope to tap into various grants from UGC, DBT, DST, and corporate CSR initiatives for infrastructure and academic development.
- v. Community Engagement: Being a rural-serving college, strong potential to offer extension and outreach programmes that build community relations and enhance institutional image.

**Challenges:**

- i. Declining Enrolments: Shift in student interest away from traditional B.Sc. programmes toward professional and technical courses presents a challenge to maintain enrolment.
- ii. Resource Constraints: Dependence on government support for faculty appointments limits long-term academic planning and expansion.
- iii. Infrastructure maintenance: Older buildings with structural issues require urgent renovation or replacement.
- iv. Competing Institutions: Rising number of private, self-financed colleges offering attractive infrastructure and placement support pose a competitive challenge.
- v. Keeping Pace with NEP Implementation: Full implementation of NEP 2020 requires extensive faculty training, digital support and necessary infrastructure which may face resource constraints.

## 4. Vision, Mission and Core Values

### **Vision:**

The emblem of the college is suggestive of its vision. The word “Excelsior” in it suggests the achievement of more and more good. The symbol on its left signifies proficiency, brilliance and excellence, while the symbol on its right signifies the awareness and exploration of the smallest to the largest mysteries of this world.

### **Mission:**

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### **Institutional Goal:**

To establish ourselves as a pioneering centre of higher education, building upon our rich legacy since 1946 and transforming into a vibrant, inclusive, and multi-disciplinary institution offering affordable, accessible, and high-quality undergraduate and postgraduate programmes, fostering academic excellence, research, and innovation, and empowering youth with knowledge, skills, values, and social responsibility to meet regional, national, and global challenges.

### **Core Institutional Values**

#### **i. Excellence**

We strive for academic, professional, and personal excellence in all our endeavors, fostering a culture of high achievement, continuous improvement, and lifelong learning.

#### **ii. Integrity**

We uphold the highest standards of honesty, ethics, and accountability in all our academic and administrative activities.

#### **iii. Inclusivity and Respect**

We value diversity and create an inclusive environment where every individual is treated with dignity, empathy, and respect, regardless of background or belief.

**iv. Curiosity and Innovation**

Inspired by the pursuit of knowledge, we encourage intellectual curiosity, critical thinking, and innovative exploration across disciplines.

**v. Social Responsibility**

We are committed to nurturing socially conscious individuals who contribute positively to the development of the community and the nation.

**vi. Empowerment**

We aim to empower students with the skills, confidence, and values necessary for personal growth, career success, and responsible citizenship.

**vii. Sustainability and Harmony**

We promote a sense of environmental and social responsibility, encouraging actions that support sustainable and harmonious living.

**viii. Collaboration and Team Spirit**

We believe in the strength of collaboration and promote teamwork among students, faculty, alumni, and the broader society.

**5. Strategic Goals and Objectives**

In alignment with its mission of providing quality science education and holistic development to students from diverse backgrounds, B. P. Baria Science Institute, Navsari has formulated a set of strategic goals and objectives. These are designed to strengthen the institution's academic foundation, enhance infrastructure, promote research and innovation, and ensure inclusive growth in accordance with the National Education Policy (NEP) 2020. The strategic framework is categorized into short-term, medium-term, and long-term goals to ensure phased and sustainable development.

**Institutional Goal:**

To establish ourselves as a pioneering centre of higher education, building upon our rich legacy since 1946 and transforming into a vibrant, inclusive, and multi-disciplinary institution offering affordable, accessible, and high-quality undergraduate and postgraduate programmes, fostering academic excellence, research, and innovation, and empowering youth with knowledge, skills, values, and social responsibility to meet regional, national, and global challenges.

**A. Short-Term Goals (1–2 years)****i. Enhance Digital Infrastructure**

- a. Upgrade more classrooms with modern teaching aids like projectors, smart boards, and audio-visual systems.
- b. Expand the number of computers in the computer lab to improve ICT access for students.

**ii. Strengthen NEP 2020 Implementation**

- a. Expand the range and quality of Skill Enhancement Courses (SEC), Multidisciplinary Courses (MDC), and Value-Added Courses (VAC).
- b. Conduct faculty orientation and training workshops for NEP curriculum implementation.

**iii. Library and Research Support**

- a. Increase the number of research journal subscriptions and promote use of e-resources among faculty and students.
- b. Initiate internal research projects and small grants for faculty to begin or revive research activities.

**iv. Student Enrolment and Outreach**

- a. Conduct awareness and outreach programmes in rural schools to boost student enrolment in science disciplines.
- b. Organize open house events and career guidance seminars for prospective students.

**v. Alumni Engagement and Endowment Building**

- a. Create an active alumni association and build a culture of giving back.
- b. Raise institutional endowments and scholarships through alumni and philanthropic contributions.

**vi. Infrastructure Maintenance**

- a. Undertake immediate repair and waterproofing of old lab buildings, especially before monsoon seasons.

**B. Medium-Term Goals (3–5 years)****i. Establish a Strong Research Ecosystem**

- a. Encourage faculty to apply for UGC minor/major research projects.
- b. Set up departmental research cells and initiate faculty-student collaborative research.
- c. Organize annual research seminars and inter-collegiate science symposia.

**ii. Institutional Collaboration and MoUs**

- a. Forge academic partnerships with nearby institutions, industries, and research centers.
- b. Establish MoUs for student internships, faculty exchange, and joint projects.



**iii. Curriculum Diversification**

- a. Introduce new interdisciplinary UG/PG elective courses aligned with job market needs (e.g., data science, environmental science, applied chemistry).
- b. Develop certificate courses in soft skills, communication, and entrepreneurship.

**iv. Faculty Development**

- a. Facilitate participation of faculty in FDPs, workshops, and national/international conferences.
- b. Encourage faculty to publish in peer-reviewed journals and participate in academic networking.

**v. Community and Extension Activities**

- a. Launch NSS/NCC or science extension activities targeting local societal issues.
- b. Promote environmental awareness and sustainability programmes involving students.

**C. Long-Term Goals (5+ years)****i. Become a Recognized Centre of Excellence**

- a. Develop the college into a regional hub for science education and research, known for quality teaching and rural upliftment.
- b. Aspire for autonomous status or deemed university status, if feasible under UGC norms.

**ii. Infrastructure Expansion and Modernization**

- a. Construct new academic blocks/labs with state-of-the-art facilities.
- b. Develop a digital campus with e-library, ERP system, and complete Wi-Fi coverage.

**iii. Increase Research Output and Funding**

- a. Establish a Research and Innovation Centre with advanced instrumentation and funded projects.
- b. Generate consistent research output in reputed national and international journals.

**iv. Inclusive and Sustainable Growth**

- a. Strengthen support systems for economically disadvantaged and rural students (e.g., bridge courses, mentoring).
- b. Implement green campus initiatives—solar energy, rainwater harvesting, and plastic-free campus.

## 6. Key Focus Areas

In keeping with its rich legacy, academic commitment, and alignment with the National Education Policy (NEP) 2020, B. P. Baria Science Institute, Navsari has identified several key focus areas to guide its institutional development in the coming years. These focus areas are designed to address current challenges, build on existing strengths, and unlock new opportunities for holistic growth. They encompass critical domains such as academic excellence, research and innovation, faculty development, infrastructure modernization, industry collaboration, student support, digital transformation, sustainability, and the promotion of India's knowledge systems. Together, the following these focus areas form the strategic foundation for achieving the college's vision of nurturing well-rounded, responsible, and future-ready graduates.

### (i) Academic Excellence

B. P. Baria Science Institute is committed to fostering academic excellence by continuously enhancing its teaching-learning ecosystem. With the effective implementation of NEP 2020, the institution has introduced Skill Enhancement Courses (SEC), Multidisciplinary Courses (MDC), and Value-Added Courses (VAC) to make the curriculum more dynamic, student-centric, and industry-relevant. Emphasis is placed on experiential learning, conceptual clarity, and academic rigour to help students develop critical thinking and problem-solving abilities. The college aims to expand academic offerings while maintaining a high standard of instruction through experienced and qualified faculty.

### (ii) Research and Innovation

Despite having several faculty members recognized as Ph.D. guides, the college recognizes the need to significantly strengthen its research culture. Future efforts will focus on encouraging active research through internal seed grants, promoting research publications, and supporting faculty in applying for UGC and other funded projects. Plans are in place to establish departmental research cells and eventually a central Research and Innovation Centre, fostering collaboration, creativity, and scientific inquiry among faculty and students.

**(iii) Faculty Development**

Faculty development is central to the institution's growth. The college aims to enhance teaching quality and research output by encouraging faculty participation in Faculty Development Programmes (FDPs), workshops, refresher courses, and conferences. Professional growth will also be supported through incentives for research, mentoring, and innovation. Continuous development opportunities will help faculty remain updated with emerging educational technologies and pedagogical practices in line with NEP 2020.

**(iv) Infrastructure Development**

The college acknowledges the urgent need to upgrade its infrastructure, especially in terms of classrooms, laboratories, and seminar halls. Priorities include renovating old buildings affected by seasonal water seepage, expanding the number of ICT-enabled classrooms, and constructing new academic blocks to support modern science education. Enhanced laboratory infrastructure will ensure safe, well-equipped spaces for practical learning and research. Infrastructure development will be approached in a phased manner, supported by grants and management contributions.

**(v) Industry Collaboration**

Forging meaningful collaborations with industries and research institutions is a strategic priority. The college aims to enter into MoUs with industry partners to facilitate student internships, faculty-industry interaction, and applied research projects. These collaborations will help bridge the gap between academia and industry, align course content with real-world applications, and improve the employability of students. Industry experts will also be invited for guest lectures and curriculum design inputs.

**(vi) Student Support and Employability**

Recognizing the rural and economically diverse background of its students, the college is focused on enhancing student support systems. Bridge courses, soft skill training, career counseling, and placement assistance will be strengthened. Additional certificate and add-on courses will be introduced to improve employability and entrepreneurial skills. Special attention will be given to mentoring first-generation learners and supporting students from disadvantaged backgrounds through scholarships and academic guidance.

**(vii) Digital Transformation**

The college is actively pursuing digital transformation to enhance academic delivery and administrative efficiency. Plans include expanding the computer lab, increasing the number of smart classrooms, implementing a campus-wide Learning Management System (LMS), and introducing an ERP system for digitizing academic and office operations. Greater integration of e-resources and online platforms will empower both students and faculty to engage with modern educational tools effectively.

**(viii) Sustainability and Green Campus Initiatives**

The institution recognizes its responsibility toward environmental stewardship and is committed to developing a green and sustainable campus. Upcoming initiatives include rainwater harvesting systems, solar panel installations, tree plantation drives, and waste management protocols. Students and staff will be encouraged to participate in eco-awareness campaigns and sustainable practices to build a culture of environmental consciousness.

**(ix) Promotion of Knowledge of India**

Aligned with the NEP 2020 vision, the college will integrate the rich heritage, scientific achievements, and cultural traditions of India into its academic and co-curricular activities. Courses and seminars highlighting Indian contributions to science, mathematics, medicine, and philosophy will be introduced. The institution aims to foster pride in Indian knowledge systems while encouraging critical engagement with its historical and contemporary relevance.

**7. Action Plan / Implementation Strategy**

To translate its vision into measurable progress, B. P. Baria Science Institute, Navsari has developed a comprehensive Action Plan aligned with its strategic objectives. This plan outlines specific activities under each focus area, along with clearly defined responsibilities, timelines, budget estimates, performance indicators, and review mechanisms. The aim is to ensure that institutional development is structured, accountable, and outcome-driven. The college's Internal Quality Assurance Cell (IQAC), under the leadership of the Principal, will play a central role in coordinating, monitoring, and periodically reviewing the implementation of this action plan. Emphasis will be

placed on evidence-based progress, stakeholder engagement, and timely mid-course corrections to ensure sustainable and inclusive academic growth.

#### i. Academic Excellence

Sr. No.	Component	Details
1.	Activity name:	Introduction and expansion of SEC, MDC, and VAC courses.
2.	Responsible unit/ Department	Academic Committee, IQAC, HODs.
3.	Timeline	2025–2026 academic year.
4.	Estimated budget	₹1,50,000 (faculty training, material, guest sessions).
5.	KPIs	Number of new courses introduced, student enrollment, feedback scores.
6.	Review interval	Bi-annual review by IQAC.

#### ii. Research and Innovation:

Sr. No.	Component	Details
1.	Activity name:	Establishment of departmental research cells and seed funding scheme.
2.	Responsible unit/ Department	Research Committee, IQAC, Department HODs.
3.	Timeline	Mid 2025 – End 2027.
4.	Estimated budget	₹3,00,000 (research support, journals, minor projects).
5.	KPIs	Number of research projects initiated, papers published, seminars held.
6.	Review interval	Bi-annual review by IQAC.

#### iii. Faculty Development:

Sr. No.	Component	Details
1.	Activity name:	Organizing Faculty Development Programmes (FDPs) and conference support.
2.	Responsible unit/ Department	IQAC, FDP Coordinator.
3.	Timeline	Ongoing from 2025.
4.	Estimated budget	₹2,00,000 annually.
5.	KPIs	Number of FDPs, faculty participation, feedback, paper submissions.
6.	Review interval	Quarterly review by IQAC.

**iv. Infrastructure Development:**

Sr. No.	Component	Details
1.	Activity name:	Renovation of old buildings and classroom modernization.
2.	Responsible unit/ Department	Principal, Management.
3.	Timeline	2025–2028.
4.	Estimated budget	₹30,00,000 (building repair, ICT equipment, furniture).
5.	KPIs	Number of renovated classrooms/labs, ICT-enabled classrooms.
6.	Review interval	Semi-annual site inspections and IQAC reports.

**v. Industry Collaboration:**

Sr. No.	Component	Details
1.	Activity name:	Signing MoUs and organizing industry-led seminars/workshops.
2.	Responsible unit/ Department	Career Guidance Cell, Placement Cell, IQAC.
3.	Timeline	Begin mid-2025, ongoing.
4.	Estimated budget	₹1,00,000 annually.
5.	KPIs	Number of MoUs signed, internships offered, industry talks conducted.
6.	Review interval	Bi-annual review by Placement Cell and IQAC.

**vi. Student Support and Employability:**

Sr. No.	Component	Details
1.	Activity name:	Soft skill, bridge and certificate courses; placement training.
2.	Responsible unit/ Department	Career Guidance Cell, Student Support Cell, IQAC.
3.	Timeline	2025–2027.
4.	Estimated budget	₹2,50,000 per year.
5.	KPIs	Student participation, placement ratio, course completion rates.
6.	Review interval	Term-wise review by IQAC.

**vii. Digital Transformation**

Sr. No.	Component	Details
1.	Activity name:	ERP implementation, LMS development, computer lab expansion.
2.	Responsible unit/ Department	ICT Cell, Principal, IQAC.

3.	<b>Timeline</b>	2025–2026.
4.	<b>Estimated budget</b>	₹15,00,000 (ERP software, new computers, networking).
5.	<b>KPIs</b>	System usage metrics, faculty/staff training completion, uptime reports.
6.	<b>Review interval</b>	Quarterly system audits and reports to IQAC.

**viii. Sustainability and Green Campus Initiatives:**

Sr. No.	Component	Details
1.	<b>Activity name:</b>	Tree plantation, solar panels, rainwater harvesting.
2.	<b>Responsible unit/ Department</b>	Green Campus Committee, NSS, IQAC.
3.	<b>Timeline</b>	2025–2028.
4.	<b>Estimated budget</b>	₹5,00,000 (in phases).
5.	<b>KPIs</b>	Trees planted, reduction in energy bills, water saved.
6.	<b>Review interval</b>	Annual review with sustainability audit by IQAC.

**ix. Promotion of Knowledge of India:**

Sr. No.	Component	Details
1.	<b>Activity name:</b>	Seminars, lectures, and curriculum modules on Indian knowledge systems.
2.	<b>Responsible unit/ Department</b>	Academic Committee, Cultural Committee, IQAC.
3.	<b>Timeline</b>	Start from academic year 2025–26.
4.	<b>Estimated budget</b>	₹75,000 annually
5.	<b>KPIs</b>	Number of programmes conducted, student feedback, content integration.
6.	<b>Review interval</b>	Annual review during IQAC academic evaluation.

## 8. Monitoring and Evaluation

Monitoring and evaluation (M&E) are essential components of any strategic implementation process. They ensure that planned initiatives are progressing as intended, resources are being utilized efficiently, and goals are being met within the defined timelines. For educational institutions, a robust M&E system promotes transparency, accountability, and continuous improvement. It also helps identify gaps early, provides data-driven insights for decision-making, and supports the achievement of institutional quality benchmarks. In the context of NEP 2020 and rising stakeholder expectations,

effective monitoring and evaluation are critical to aligning academic, infrastructural, and administrative efforts with institutional goals.

### **Institutional Mechanism for Monitoring and Evaluation**

To ensure systematic and timely implementation of the strategic action plan, B. P. Baria Science Institute, Navsari will follow a structured monitoring and evaluation process under the guidance of its Internal Quality Assurance Cell (IQAC). The mechanism will include:

#### **i. IQAC-Led Oversight**

- a. IQAC, chaired by the Principal, will function as the central coordinating body for monitoring all initiatives.
- b. A calendar of activities will be prepared annually, outlining timelines and checkpoints for each strategic area.

#### **ii. Constitution of Thematic Committees:**

- a. Specific subcommittees (e.g., Research Cell, Infrastructure Committee, Digital Task Force, etc.) will be responsible for executing and reporting on domain-specific activities.
- b. These committees will maintain documentation and progress reports for IQAC review.

#### **iii. Quarterly and Annual Reviews:**

- a. Quarterly review meetings will be conducted to assess progress against set timelines and KPIs.
- b. An annual consolidated evaluation report will be prepared by IQAC, highlighting achievements, bottlenecks, and action taken.

#### **iv. Key Performance Indicators (KPIs):**

- a. Measurable KPIs have been defined for each strategic objective to objectively assess outcomes (e.g., number of research papers, new courses introduced, student placements, etc.).
- b. These will be reviewed at regular intervals using qualitative and quantitative metrics.

#### **v. Stakeholder Feedback and Participation:**

- a. Feedback from students, faculty, alumni, and employers will be collected periodically through surveys and interactions.
- b. This feedback will inform improvements in course delivery, infrastructure, and student support services.

#### **vi. Use of Digital Tools:**

- a. Progress tracking and documentation will be digitized using spreadsheets, dashboards, and internal portals for ease of access and real-time updates.
- b. ERP and LMS systems, once implemented, will further support academic monitoring.



**vii. Corrective and Improvement Measures:**

- a. Based on review findings, corrective measures will be proposed and implemented promptly.
- b. IQAC will support departments in revising their action plans if needed, ensuring flexibility and adaptability.

**9. Risk Management**

Effective implementation of strategic initiatives requires anticipation and management of potential risks that may hinder progress. At B. P. Baria Science Institute, Navsari, a proactive approach to risk management has been adopted to ensure the sustainability and success of institutional goals. This includes identifying key risks and developing appropriate mitigation strategies to minimize their impact.

**i. Identification of key risks:**

<b>Sr. No.</b>	<b>Risk category</b>	<b>Description</b>
<b>1.</b>	Financial Constraints:	Limited funds for infrastructure, research, ICT upgrades, and faculty development activities.
<b>2.</b>	Faculty Shortages:	Delay in government appointments and reliance on ad hoc faculty may affect continuity and quality.
<b>3.</b>	Declining student enrolment	Reduced student interest in traditional science programmes due to competition and job market shifts.
<b>4.</b>	Resistance to change.	Hesitation among faculty/staff to adopt NEP reforms, digital tools, and research responsibilities.
<b>5.</b>	Infrastructural limitations:	Aging buildings, water seepage, and limited computer facilities may hinder modernization plans.
<b>6.</b>	Low research engagement:	Despite available guides, faculty may be reluctant or too overburdened to initiate active research.
<b>7.</b>	External disruptions.	Policy changes, natural disasters, or pandemics may delay project implementation.

**ii. Mitigation strategies:**

<b>Sr. No.</b>	<b>Risk category</b>	<b>Mitigation strategy</b>
<b>1.</b>	Financial Constraints:	<ol style="list-style-type: none"> <li>a. Apply for UGC, DST, DBT, and CSR grants.</li> <li>b. Mobilize alumni support and management contribution.</li> <li>c. Prioritize cost-effective phased</li> </ol>

		development.
<b>2.</b>	Faculty Shortages:	<ul style="list-style-type: none"> <li>a. Continue hiring qualified faculty on management pay.</li> <li>b. Advocate regularly with the management and government for sanctioned posts.</li> <li>c. Encourage part-time visiting faculty and retired experts.</li> </ul>
<b>3.</b>	Declining student enrolment	<ul style="list-style-type: none"> <li>a. Strengthen outreach in rural schools.</li> <li>b. Introduce career-oriented and interdisciplinary courses.</li> <li>c. Highlight student support and placement initiatives through publicity.</li> </ul>
<b>4.</b>	Resistance to change.	<ul style="list-style-type: none"> <li>a. Organize regular orientation and motivational sessions.</li> <li>b. Offer incentives for faculty engaging in FDPs, digital teaching, and research.</li> </ul>
<b>5.</b>	Infrastructural limitations:	<ul style="list-style-type: none"> <li>a. Prioritize urgent building repairs (e.g., labs with seepage).</li> <li>b. Gradually upgrade infrastructure through planned budgeting.</li> <li>c. Use hybrid models (e.g., shared ICT labs).</li> </ul>
<b>6.</b>	Low research engagement:	<ul style="list-style-type: none"> <li>a. Provide seed funding and reduced workload to active researchers.</li> <li>b. Initiate collaborative research and promote student involvement in minor projects.</li> </ul>
<b>7.</b>	External disruptions.	<ul style="list-style-type: none"> <li>a. Maintain flexible implementation plans with alternate timelines.</li> <li>b. Use digital platforms to continue academic and review processes remotely.</li> </ul>

By integrating risk management into the institutional planning process, the college ensures that its strategic objectives remain resilient, adaptable, and achievable. The IQAC, along with relevant committees, will periodically assess and update the risk matrix to ensure preparedness for emerging challenges.

## 10. Budget and Financial Plan

A well-structured financial plan is essential for the effective implementation of strategic initiatives. It ensures optimal allocation of resources, accountability in spending, and long-term sustainability. At B. P. Baria Science Institute, Navsari, the budget and financial plan has been designed to support the key focus areas such as academic enhancement, infrastructure development, digital transformation, research promotion, and student support. Given the college's status as a grant-in-aid institution, the plan integrates multiple funding sources including government grants, internal resources, contributions from the management and alumni, and potential collaborations. A sustainability approach has also been incorporated to ensure that investments lead to lasting benefits without over-dependence on any single funding source.

### i. Detailed Financial Requirement (2025–2030):

Sr. No.	Focus area	Estimated Budget (in Rupees)	Remarks
1.	Academic Excellence	1,50,000/year.	Faculty training, materials, guest lectures.
2.	Research and Innovation.	3,00,000 (seed funding).	Faculty/student projects, journals, minor equipment.
3.	Faculty Development.	2,00,000/year.	FDPs, conferences, honorarium.
4.	Infrastructure Development.	30,00,000 (in phases).	Classroom renovation, lab repair, equipments.
5.	Industry Collaboration	1,00,000/year.	MoU implementation, seminars, industry visits.
6.	Student Support & Employability.	2,50,000/year.	Career training, soft skills, mentoring.
7.	Digital Transformation	15,00,000/	ERP, smart classrooms, LMS, computer lab upgrade.
8.	Sustainability & Green Campus Initiatives.	5,00,000 (in phases).	Solar, rainwater harvesting, plantation.
9.	Promotion of Knowledge of India.	75,000/year.	Lectures, exhibitions, student activities.
	Total (over 5 years)	~₹90,00,000	Approximate phased expenditure.

**ii. Sources of Funding:**

Sr. No.	Source	Contribution Area
1.	Government Grants.	UGC (Minor Research, Infrastructure), DST/DBT (Lab equipment), RUSA.
2.	Management / Trust.	Infrastructure upgrades, ad-hoc staff salaries, building maintenance.
3.	Internal Resources.	Tuition fees, exam/revaluation fees, internal savings.
4.	Alumni Association.	Sponsorships for seminars, student scholarships, specific ICT upgrades.
5.	CSR/NGO Collaborations.	Potential support for green campus, skill training, computer literacy.

**iii. Sustainability Plan:**

To ensure the long-term financial health and sustainability of the initiatives, the following strategies will be adopted:

- i. Phase-wise Execution: All major projects (infrastructure, digital, green campus) will be carried out in phases to spread cost and allow time for fundraising.
- ii. Recurring Budgeting: Essential recurring expenses (FDPs, SECs, student training) will be included in the college's annual internal budget.
- iii. Grant Monitoring: IQAC and Finance Committee will ensure timely utilization and compliance reporting for all grant-based funds.
- iv. Cost Efficiency: Procurement will be done through competitive bidding or government-approved vendors to minimize cost overruns.
- v. Alumni Engagement: The college will actively engage alumni for financial and professional contributions through campaigns and events.
- vi. Revenue Generation: Certificate and add-on courses may be offered on a cost-recovery basis, and infrastructure may be made available for external workshops/events to generate modest revenue.

**Annexures**

1. Annexure 1: Permanent Affiliation Letter from University
2. Annexure 2: UGC 2(f) and 12(B) Recognition Certificates