



**INSTITUTIONAL ASSESSMENT AND ACCREDITATION
(Effective from July 2017)**

Accreditation - (Cycle - 1)

**PEER TEAM REPORT ON
INSTITUTIONAL ACCREDITATION OF
VASANTDADA SUGAR INSTITUTE
C-58976**

**PUNE
Maharashtra
412307**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA**

Section I: GENERAL INFORMATION

1.Name & Address of the institution:	VASANTDADA SUGAR INSTITUTE PUNE Maharashtra 412307	
2.Year of Establishment	1975	
3.Current Academic Activities at the Institution(Numbers):		
Faculties/Schools:	2	
Departments/Centres:	2	
Programmes/Course offered:	4	
Permanent Faculty Members:	9	
Permanent Support Staff:	11	
Students:	48	
4.Three major features in the institutional Context (Asperceived by the Peer Team):	1. State of the art infrastructure 2. Good research facilities 3. NABL and SIRO accredited research I Labs	
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	From : 18-03-2024 To : 19-03-2024	
6.Composition of Peer Team which undertook the on site visit:		
	Name	Designation & Organisation Name
Chairperson	DR. R M MISHRA	FormerVice Chancellor,APS UNIVERSITY REWA
Member Co-ordinator:	DR. VEDAMURTHY A B	Professor,Karnatak University
Member:	DR. JAYANTHI MUTHUKUMARASWAMI	Principal,Thanthai Hans Roever college
NAAC Co - ordinator:	Dr. Wahidul Hasan	

Section II: CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrics of the key Indicator under the respective criterion (This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrics(QIM) in Criterion1)	
1.1	Curricular Planning and Implementation
1.1.1 QIM	The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment
1.2	Academic Flexibility
1.3	Curriculum Enrichment
1.3.1 QIM	<i>Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum</i>
1.4	Feedback System

Qualitative analysis of Criterion 1

Vasantdada Sugar Institute (VSI), an autonomous body affiliated with Savitribai Phule Pune University, Pune (SPPU). The institute was established by the Maharashtra sugarcane-growing farmers in 1975 under the leadership of the late Vasantdada Patil. Currently, the institution offers two PG programmes (MSc-Environmental Sciences and MSc-Alcohol Technology and Biofuels, Wine Technology) and two Ph.D. programmes (Environmental Sciences and Agriculture, Biotechnology). The institute follows a CBCS curriculum designed and prescribed by the affiliating university. The institute has a well-established curriculum policy.

Vasantdada Sugar Institute (VSI) follows the curricula prescribed by its affiliating university and adheres to the academic calendar provided by the university for a continuous internal evaluation system. The institute ensures effective curriculum delivery through well-planned academic activities. The academic committee prepares the academic calendar of the institute, and the concerned departments prepare their departmental academic calendars. Feedback and suggestions received from stakeholders (students, faculty, alumni, and employers) are taken into consideration while framing the syllabus; the same has been communicated to the affiliating university through its BoS members.

In addition to regular courses, the institute also offers some value-added courses for students. The department of Alcohol Technology and Biofuels offers two short-term and one add-on courses and the Department of Environmental Science offers three short-term courses focusing on entrepreneurship for students. About 250 students benefited from these courses. The institute has published an exclusive booklet on cross-cutting issues like gender, professional ethics, the environment, and sustainability integrated into the syllabus. Good number courses that integrate cross-cutting issues into the curriculum are addressed effectively through courses like the Indian Constitution, Environmental Science, Cleaner Production, Toxicology, Climate Change, Policies and Legislations, Pollutants and Pollution, etc. The institute follows rules and regulations prescribed by the statutory bodies and the affiliating university.

Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2)	
2.1	Student Enrollment and Profile
2.2	Student Teacher Ratio
2.3	Teaching- Learning Process
2.3.1 QIM	Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT-enabled tools including online resources for effective teaching and learning process
2.4	Teacher Profile and Quality
2.5	Evaluation Process and Reforms
2.5.1 QIM	Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient
2.6	Student Performance and Learning Outcomes
2.6.1 QIM	<i>Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website</i>
2.6.2 QIM	<i>Attainment of POs and COs are evaluated.</i> Explain with evidence in a maximum of 500 words
2.7	Student Satisfaction Survey

Qualitative analysis of Criterion 2

Admission is based on the norms of the state government and affiliating University, which follows a transparent system with continuous efforts to attract students from different geographical locations. All the programs are displayed on the institutional website and notice board. Student-centric learning methods are used. The student-teacher ratio is 11:1. An orientation programme for students at entry level is conducted. Mechanism to identify slow learners and advanced learners are to be systematised. Mechanisms to address students' requirements are in place. Apart from the chalk and board method, the ICT-enabled T-L process is adopted by the teachers. The institute encourages, emphasises, and practices industrial experience as well as research-based teaching to give students experiential learning. The students are assessed using several continuous assessment methods. Environmental Sciences students get hands-on experience with baseline data collection for environmental impact assessment studies, and they also get excellent exposure to environment audit work. Ramps and lifts are available in some parts of the building to facilitate differently-abled (divyangjan) students.

Various student-centric learning methods and tools, such as field projects, internships, etc., enhance the teaching-learning processes. Guest lectures from expert faculties are regularly organised. There are nine full-time faculty, eight with Ph.D.s, and one holds a PG degree. The recruitment process for teachers is as per government and university norms. Faculty members are encouraged to participate in seminars, conferences, and workshops. To match emerging trends and industry-demanded skills, the Program outcomes (POs), program-specific outcomes (PSOs), and COs are framed in line with the vision and mission of the institute. The Institute makes sincere efforts for systematic and effective curriculum delivery.

The embedded courses, workshops with computer-based learning, industrial visits, field visits, visits to industrial fairs, and internships are the other additional efforts to upgrade the teaching and learning of the students. The institute needs to make more focused efforts to improve student-centric learning in view of the diverse backgrounds of the students.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrics(QIM) in Criterion3)	
3.1	Resource Mobilization for Research
3.2	Innovation Ecosystem
3.2.1 QIM	Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident
3.3	Research Publications and Awards
3.4	Extension Activities
3.4.1 QIM	Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.
3.4.2 QIM	Awards and recognitions received for extension activities from government / government recognised bodies
3.5	Collaboration

Qualitative analysis of Criterion 3

The institute has Research Committee with participation from academic and industry experts. The institute is recognised as a Scientific and Industrial Research Organisation (SIRO) by the DST, Govt. of India. Research budgets are allocated to departments to augment research activities and cumulative (year-on-year) expenditures incurred towards the creation and upgrade of research facilities. The institute also provides seed money to students and faculty to inculcate interest in research. A good number of externally funded projects have been taken up by the institute from agencies such as DBT, RGSTC, the Govt. of Madhya Pradesh, the Maharashtra Pollution Control Board, Mumbai, etc., with a total research fund of Rs. 743.57 lakh. However, institute can make an effort to start incubation center.

There are three research guides recognised by Savitribai Phule Pune University. Two subjects, i.e., Biotechnology and Environmental Sciences under which students undertake their Ph.D. programmes. Five students have been awarded Ph.D.s during the assessment period, and 10 Ph.D. students have enrolled for Ph.D. programme. Faculty have published 37 papers in peer-reviewed and UGC-approved journals and 46 publications in books, book chapters, and conference proceedings. The institute also published 06 patents and filed 03. However, faculty should be encouraged to publish papers in journals of repute as well as participate in more international conferences. Institute has organised 21 workshop/seminar/conferences. The institute has signed 16 MoUs and 04 collaborations to work on different research fields linked to biofuels, biochemicals, and other value-added products. The institute has generated Rs 2.0 crore out of consultancy services. The Institute has a good institute-industry interface, which has resulted in improvements in summer training and final placements.

The institute has developed well-equipped laboratories with different sophisticated instruments. The institute has developed a pilot winery facility and a pilot facility for potash recovery from boiler ash, which helps students work on pilot-scale research. The Department of Alcohol Technology and Biofuels and the Department of Environmental Sciences have accreditation from the National Accreditation Board for Testing and Calibration Laboratories (NABL) and ISO 17025:2017. The institute has specific software like AERMOD, ALOHA, and QGIS, which helps faculty and students with their research work.

The institute has undertaken 22 extension activities in the neighborhood, such as a health camp/arogya shivir, Cheetah is Back, soil testing, a cleanliness drive, Valorizing Waste from Sugar and Allied Industries, Industrial Waste Water Treatment and Water Management Solutions for the Sugar and Distillery Industry, Wild Life Week, Art of Brewing, Field visit to the eco-restoration site developed by the Ecological Society at Panshet, Pune, Report of Lecture on the United States of America Work Experience Programme in Wine, One-day awareness workshop on “Recent Developments in Environment and Safety in the Sugar and Allied Industry”, Advanced technologies for improving crop productivity and increasing water use efficiency in sugarcane, Integrated approach to enhance the economic yield of sugarcane and its by-products, Multi-Ratooning in Sugarcane and *in Situ* Trash Management, Workshop on Sugarcane Crop Management under Water Stress Conditions, etc. Faculty also received several awards.

Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics(QIM) in Criterion4)	
4.1	Physical Facilities
4.1.1 QIM	<p>The Institution has adequate infrastructure and other facilities for,</p> <ul style="list-style-type: none"> • teaching – learning, viz., classrooms, laboratories, computing equipment etc • ICT – enabled facilities such as smart class, LMS etc. <p>Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)</p>
4.2	Library as a Learning Resource
4.2.1 QIM	<i>Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students</i>
4.3	IT Infrastructure
4.3.1 QIM	<p>Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection</p> <p><i>Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words</i></p>
4.4	Maintenance of Campus Infrastructure

Qualitative analysis of Criterion 4

VSI has 57.39 sprawling green campus area with academic and research blocks with ICT-enabled classrooms, laboratories, student hostels, and sports grounds. 08 ICT-enabled class rooms (100%), auditorium, open amphitheatres, and seminar halls, as well as two central instrumentation facilities, a pilot winery, and a nanobrewery unit for M.Sc. Wine, Brewing, and Alcohol Technology students.

A spacious library with a 465 sq. m. area stocked a 16800 text of books, 36 National and international journals, 200 e-books, and 09 e-journals. The library is fully computerised and automated with iSLIM and DMS software. A Web OPAC (Online Public Access Catalogue) facility is available for retrieving books and other learning materials from the library, including CDs, project reports, and previous year's question papers. LCD facilities are available in all the classrooms. Two dedicated computer labs are provided with 3 servers and 48 computers (student-computer ratio: 1:2), two well-equipped research labs with high-end equipment's and one sensory analysis laboratory. The institute is fully WiFi-enabled with leased line connections from Hathway (100 MBPS), BSNL (40 MBPS), and Reliance Infocomm (40 MBPS).

The institute has an open stadium with a running and cricket area, a football, basketball, and volleyball court, a well-equipped multipurpose gym, and a fitness center. Other facilities, such as 40-acre farmland, to encourage agricultural practice and conduct field activities connected to course content. Two boys' hostels and one girls' hostel, staff quarters, an administrative office, a separate research block, and a controller of examinations are available within the campus

Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrics(QIM) in Criterion5)	
5.1	Student Support
5.2	Student Progression
5.3	Student Participation and Activities
5.4	Alumni Engagement
5.4.1 QIM	There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Qualitative analysis of Criterion 5	
<p>VSI has a well-defined mechanism for student support and progression. Several cells/ committees, comprising teachers and student representatives monitored by the principal, are effectively functioning to ensure the academic, economic, social/spiritual welfare and development of students. SC, ST, and OBC students receive scholarships or free ships from the government.</p> <p>The institute has offered 7 programmes based on soft skills, language and communication skills, life skills, and technology.</p> <p>Around 54.4% of students benefited from career counselling and guidance for competitive examinations offered by the institution.</p> <p>Placement Cell has a good track record of placing students in reputed companies through on-campus and off-campus interviews. 81.5% of outgoing students have been placed in reputed firms, industries, and government organizations. Some of them are also entrepreneurs. Five (13.51%) Students qualified for national-level competitive exams like the UGC NET/JRF and SET exams. An effective Grievance Redressal Mechanism is in place to ensure timely redress of student grievances, including sexual and ragging instances. An unregistered alumni association is in place. Needs active participation and periodical meetings of the association may be conducted for active involvement of the Alumni. The student council may be activated and motivated to conduct all students activities of the institution.</p>	

Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion6)	
6.1	Institutional Vision and Leadership
6.1.1 QIM	<i>The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.</i>
6.2	Strategy Development and Deployment
6.2.1 QIM	<i>The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc</i>
6.3	Faculty Empowerment Strategies
6.3.1 QIM	The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression
6.4	Financial Management and Resource Mobilization
6.4.1 QIM	Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)
6.5	Internal Quality Assurance System
6.5.1 QIM	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Qualitative analysis of Criterion 6

The institution is governed by the Governing Council. The goals and the strategic plan are well laid out in tune with the vision and mission of the institution. VSI has a decentralised and participatory organisational structure. Statutory bodies of the institute, such as the Governing Council, Technical Committee, etc., are regularly reconstituted in accordance with regulations. The college has articulated well-defined policies covering governance, quality, research, code of conduct, environment, gender, etc. Implemented e-governance in administration, finance and accounts, student admission and support, and examination enhances good governance through transparency, participation, and accountability. Faculty and students update their knowledge through the Training and Placement Cell. A systematic appraisal system for both teaching and non-teaching faculty is practiced. As welfare initiatives, the faculty and staff are given CPF, GIS, and gratuity as per norms. Financial assistance, physical and health assistance, awards and acknowledgements, career enrichment measures, and career advancement are made available. Faculty are provided with financial support to attend conferences, workshops, and other professional development programs. The salary of staff is transferred on the last working day of every month. Both internal and external audits, including CAG, are conducted annually. Autonomy is given to the principal and heads of the department to share their inputs by adopting newer technologies in teaching and learning, promoting research, and receiving funds. The online feedback system is in place. Faculty members form members of various committees. Faculty are empowered through development programs. Professional development programs for both teaching and non-teaching staff are in place. Industry-institute interaction is in place. A strategic plan with respect to quality education and lifelong learning, research, societal responsibility and extension activities, finance, and infrastructure are available.

IQAC was established recently, but the quality initiative taken by IQAC may be strengthened further. The

participation of teaching and non-teaching staff, including students, in committees like IQAC, anti-ragging, grievance redressal cells, the Industry Institute Partnership Cell, and student council shows their accountability.

Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrics(QIM) in Criterion7)

7.1	Institutional Values and Social Responsibilities
7.1.1 QIM	Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years. <i>Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words</i>
7.1.4 QIM	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)
7.2	Best Practices
7.2.1 QIM	Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual
7.3	Institutional Distinctiveness
7.3.1 QIM	Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Qualitative analysis of Criterion 7

VSI emphasises a culture that inculcates gender equity, sensitivity, and harmony. The institute has initiated measures for gender equity and sensitization. More than 40% are female students. Women’s Day celebrations, empowerment activities, and mentoring are practiced by the staff and students. Encouragement and placement of women staff in administrative positions such as Head of Department and IQAC Coordinators.

Security measures such as 24x7 CCTV cameras throughout the campus, providing I cards to both staff and students, a women's cell, an anti-ragging cell, counselling students through a grievance cell, a fully furnished girls common room with vending machine, a first aid facility, fire safety devices, and separate toilets for girls and boys are some of the measures adopted by the institution for safety and security. Women farmers across the states are empowered by conducting trainings every year based on sugarcane cultivation.

The solid waste management, liquid waste management, energy, environment, and green audits by external experts’ systems are in place. Well-trained female security staff, besides the male security staff, are available round the clock, and biometric access-enabled turnstile gates are available at the entry and exit points of the department and hostel. Vermicompost, Solar energy panels generating 800KWP, Rainwater harvesting facilities and interconnected wells, ponds, and bunds are available.

The institution has made various efforts at creating an inclusive environment, such as linguistic inclusiveness, regional and cultural inclusiveness, socioeconomic inclusiveness, etc., for multicultural and multilingual students. The student diversity profile is across India.

The college has conducted various activities and sensitization programmes to promote tolerance and harmony towards cultural, regional, linguistic, communal, socioeconomic, and other diversities among students. The

Institute conducts seminars, workshops, and outreach programs to promote communal harmony and tolerance. The institute organised various cultural programs to celebrate the cultural diversity of India. Students from various regional and cultural backgrounds participate in such programs and present their regional or cultural folk songs and dances.

Best practice-1: Green campus initiative

The college has taken exemplary initiatives to develop a green campus.

- Solar energy generates enough power to support all the air conditioning requirements on campus.
- Training for farmers (Oos Sheti Dnyanyag & Dnyanlaxmi)

Best practices-2: Central Research/Industrial Laboratory

- The institute has a state-of-the art central research and industrial laboratory that caters to current thrust areas of research.

Section III: OVERALL ANALYSIS based on Institutional strengths, Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

Overall Analysis

Strength:

- Research-based learning environment
- Well experienced competent faculty
- State of the art infrastructure
- Industry collaborations

Weaknesses:

- Maximum utilization of infrastructure
- Located in semi-urban area with limited public transport
- Academic focus competes with R&D and consultancy activities of the staff
- Only two post graduate courses under University affiliation.
- Limited participation in faculty development programs

Opportunities:

- Explore possibility of introducing some value added courses
- Academic autonomy of the Institute
- Explore optimally the linkages and collaborations
- Possibilities of student and faculty exchange at National and International level
- Scope for starting new interdisciplinary courses
- Opportunity of professional consultancy services
- Engage and explore well-placed alumni for placement opportunities in other countries/industrial sectors

Challenges:

- Usage of ICT by all teachers in their TL process beyond power point presentations

- Increasing and strengthening consultancy services Focused on sugar and allied industry
- Focusing only on sugar and allied industry
- To get better placement opportunities for students
- Delivery of quality services and maintenance of teaching standards in view of increasing demands from industry
- Procedural hurdles in making appointments of staff

Section IV: Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- Focus on getting autonomous status of the institution
- Start interdisciplinary UG programmes and more PG programmes.
- Strengthen international collaboration
- Faculty may publish papers in quality journals
- The faculty may be encouraged to participate in international forums
- Enhancing the alumni interaction for Institutional growth
- Schemes like leave travel concession may be initiated
- Focus on obtaining UGC 2f and 12B status
- The institute may prepare for Deemed to be private University status
- Transport facility may be increased by including fleet of buses

I have gone through the observations of the Peer Team as mentioned in this report

Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. R M MISHRA	Chairperson	
2	DR. VEDAMURTHY A B	Member Co-ordinator	
3	DR. JAYANTHI MUTHUKUMARASWAMI	Member	
4	Dr. Wahidul Hasan	NAAC Co - ordinator	

Place

Date