



# INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)

Accreditation - (Cycle -2)

# PEER TEAM REPORT ON

## INSTITUTIONAL ACCREDITATION OF TERI School of advanced Studies U-0119 Delhi New Delhi 110070

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:	TERI School of advanced Studies New Delhi Delhi 110070
2.Year of Establishment	1999
3.Current Academic Activities at the Institution(Numbers):	
Faculties/Schools:	_
Departments/Centres:	6

Programmes/Course     offered:	23
Permanent Faculty     Members:	46
Permanent Support     Staff:	42
Students:	580
4.Three major features in the institutional Context (As perceived by the Peer Team):	<ol> <li>Focus on sustainability development - environmental protection</li> <li>Efforts to generate international funding</li> <li>In spite of major paucity of space the institution is working hard to come up to the expectation of the society.</li> </ol>
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure): 6.Composition of Peer Team which	Visit Date From : 13-09-2022 Visit Date To : 15-09-2022
undertook the on site visit: Chairman:	Ravinder Kohli
Member Co - ordinator:	Prof Umesh Kumar Singh
Member:	M Khalid Azam
Member:	Sudesh V
Member:	Shreerup Goswami
Member:	Sarbajit Sengupta

	Section II: CRITERION WISE ANALYSIS	
Observations (Strengths and/or Weaknesses) on each qualitative metrices 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 Metrices(QlM) in Criterion1)		
1.1	Curriculum Design and Development	
1.1.1 QIM	Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.	
1.2	Academic Flexibility	
1.3	Curriculum Enrichment	
1.3.1 QIM	Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum	
1.4	Feedback System	

TERI is a small institution with 46 full time faculty and around 580 students. It has 6 Departments running 6 PhD programmes, 14 Masters programmes and 3 M.Tech. programmes. All the programmes are focused

around the basic theme of energy, resources and environmental sustainability: Environmental Studies and Resources Management, Climate Science and Policy, Water Resources and Governance, Water Resources Engineering and Management, Renewable Energy Engineering and Management, Sustainable Development Practice, Public Policy and Sustainable Development, Economics, Biotechnology, Infrastructure, Geoinformatics and LLM.

The curricula developed in these fields have relevance to local, national regional and global needs reflected in their POs, PSOs and COs. Some of the crosscutting issues relevant to Professional Ethics (as evidenced in their plagiarism component of research methodology) and Gender (Elective in sustainable development practice), Environment and Sustainability (across most programmes) are integrated into the curriculum

Also, the development and vetting of the courses through the Board of Studies with external experts and the Academic Council is also carried out in the standard way.

However, the small size of the Institute and limited number of Departments along with the focus around the themes of energy and environment for further expansion.

To properly address cross cutting issues integrating gender, ethics, human values and environmental sustainability there needs to be courses on Philosophy, Ethics, Sociology etc, fields which –at least at these moment-fall within the scope of this Institute.

Institute makes effort to utilize its limited resources to develop relevant need-based curricula that integrates cross cutting issues relevant to ethics, gender, human values environment and sustainability.

Faculty are Department specific rather than programme specific and some faculty members teach across Departments.

The procedure of constitution of committees -BoS etc needs streamlining. The Institute has no UG Programme and other no value added course.

Criterion2 - Teaching-learning and Evaluation
(Key Indicator and Qualitative Metrices(QIM) in Criterion2)

2.1	Student Enrollment and Profile
2.2	Catering to Student Diversity

2.2.1 QIM	The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners
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
2.3.2 QIM	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
2.5.3 QIM	IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution
2.6	Student Performance and Learning Outcomes
2.6.1 QIM	The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents
2.6.2 QIM	Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution
2.7	Student Satisfaction Survey

The Institution has an effective system in place to assess the learning level of students. There are three assessments for every course on an average (including open and closed book examinations, field work, case studies,

presentations, literature reviews etc) coupled with a midterm feedback to evaluate the students. There is a Grade Improvement Policy which contains provisions for students obtaining an F grade to pass the course. Each programme has a Master's Programme Executive Committee, which meets at least two times each semester to monitor student learning and assessment.

Participative learning methods like group presentations, hands on group exercise, role play based learning and Experiential learning such as case studies; field based assignments in the context of their Major and Minor Projects where students work with corporate, government bodies, NGOs and others to gain hands on training in respective areas and they form an integral part of the courses. Problem solving methodologies are applied such as home assignments, quizzes, laboratory-based experiments. Collaborations with other institutions and seminars also enhance the learning experience.

All classrooms have ICT enabled facilities like LCDs, smartboard, Wifi/LAN audio-video recording facilities. Online resources at the library are available at remote locations through Knimbus platform. TERI SAS is also member of library network like DELNET, which gives them access to online resources like JSTOR, ScienceDirect etc. as well as online databases like CMIE PROWESS, Indiastat etc. However, the institution does not appear to have integrated their systems with MOOCS through which their students could have obtained access to a wide variety of courses which they cannot presently get due to the small faculty size and somewhat focused structure of the institution.

The examination system is IT enabled with course selection, attendance, grading and display of marks being automated through respective student and teacher portals CCTV cameras monitor exams and plagiarism software is used to check submissions like project reports, thesis etc. Both the online teaching and examination systems were upgraded and used more intensively during the COVID 19 pandemic when teaching learning went fully online. However, the evaluation structure appears to vary across courses and there is no moderation of questions.

The Programme Specific Outcomes (PSOs) and Course Outcomes for every course are articulated extensively in class at the programme level orientation and displayed on the programme webpage. The attainment of the objectives is monitored periodically by the MPECs and reviewed by the Dean before grades are forwarded to the Controller of Examinations

*Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrices(QIM) in Criterion3)* 

3.1	Promotion of Research and Facilities
3.1.1 QIM	The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented
3.2	Resource Mobilization for Research
3.3	Innovation Ecosystem
3.3.1 QIM	Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.
3.4	Research Publications and Awards
3.5	Consultancy
3.5.1 QIM	Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.
3.6	Extension Activities
3.6.1 QIM	Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years.
3.7	Collaboration

The University has a Research Policy (as per BoM resolution) notified on its website as of 2019. It consists of a Research Advisory Committee consisting of the Vice Chancellor, Deans of Academic and Research, all Heads of Department and at least three external experts nominated by the Vice Chancellor and Registrar as Secretary to (a) set up a research agenda

(b) guide faculty and researchers on funding, (c) facilitate collaborations (d) develop research infrastructure.

Infrastructure Development: There are several laboratories like the Energy Lab, Heat Transfer Lab, Geoinformatics Lab, Combustion Lab, Laboratories/ Studios, Power Systems Lab, Solar Lighting Lab Analytical and Geochemistry Lab, Computer Lab, Language Lab, 2 Biotech Labs, Media Lab., etc.

Funding in the last 5 years the Institute obtained Extra-mural funds of Rs 9.33 Crores distributed ove 52 projects. However there appears to be a declining trend from 2016-17 (315 crores) to 2020-21 (20.80 crores). While no Governmental funds were received at the institutional level like UGC SAP, DST-FIST, DBT and ICSSR. It had received research projects of 10.67 crores over the last 5 years.

There is an innovation cell but does not seem to be active. There have been 4 awards/recognitions received by the faculty in the last 5 years although the number of patents is zero. 77 PhDs have been awarded over the last 5 years and 414 research papers have been published by the faculty.

The Institute earned Rs 131.52 lakhs from Consultancy in the last 5 years and formulated a 40:60 revenue sharing policy adopted in 2020 although it appears to have been suspended during the pandemic.

<i>Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrices(QIM) in Criterion4)</i>	
4.1	Physical Facilities
4.1.1 QIM	The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.
4.1.2 QIM	The institution has adequate facilities for cultural activities, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)
4.1.3 QIM	Availability of general campus facilities and overall ambience
4.2	Library as a Learning Resource

4.2.1 QIM	Library is automated using Integrated Library Management System (ILMS) and has digitisation facility
4.3	IT Infrastructure
4.3.2 QIM	Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility
4.4	Maintenance of Campus Infrastructure
4.4.2 QIM	There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The campus of the University is built on a 2 acre of land. The building is architecturally designed to maximise the use of natural air and light. It has been planned to provide a setting that enhances learning, while simultaneously showcasing the concept of modern smart and productive building. The building has 14 science laboratories to facilitate research, along with a small conference hall, a seminar hall, and classrooms. Laboratory describes a few key equipment, software and other such besides the research areas it supports and a contact email address digital information. The library has around seven thousand books. It uses a webenabled digital information system as a communication tool for providing updated information about other libraries, list of journals and links to eresources. On campus access and remote access to the library resources are made available to all faculty and students. The library uses bar-code technology that enables automated circulation and management of resources. Classrooms and seminar halls have IT facilities. It is equipped with a Projector System attached with a desktop.

Open lawn and amphitheatre available for many programmes and activities.

Campus is well maintained and is outsourced to an agency. The IT services are managed by System Analyst. ICT assets are maintained by IT section

& contracted service. The IT section maintains the complete inventory of all assets.

STP is not functional. Physically challenged students have the facility of ramp but up to first floor only. One small lift is there but not functional. Playgrounds are not available except for badminton and a one pole practice area for basketball. They have a room for the facility for table tennis, chess and carrom in addition to a few equipment for gym. Maintenance and security maintained by a outsourced agency. A very small crèche is claimed.

(Kej	<i>Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrices(QIM) in Criterion5)</i>	
5.1	Student Support	
5.2	Student Progression	
5.3	Student Participation and Activities	
5.3.2 QIM	Presence of Student Council and its activities for institutional development and student welfare.	
5.4	Alumni Engagement	
5.4.1 QIM	The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.	

#### **Qualitative analysis of Criterion 5**

A Student Council exists in the University to coordinate between the management and the students to generally take care of student welfare. A faculty member has the charge of the Dean, Student Welfare. The University encourages its students to be part of various organising committees that play a very active role in several activities organized throughout the year. Students are part of various clubs and take lead in planning, managing and organising extension activities, skill building and cocurricular activities. There are Anti-ragging Committee, IQAC, ICC etc. The University has a registered body of Alumni Association, which is not proactive. Alumni Association is supported by an internal Alumni Committee consisting of a Convenor (a faculty) and a secretary (an administrative staff) with representatives from all academic departments. The Alumni association supports and guides in curriculum development, teaching and placements. The Alumni was actively involved during the pandemic and some of the alumni have been commended for their efforts during the pandemic. The Alumni meet are organised at regular intervals. The alumni are also invited as speakers/facilitators/audience during seminars and conferences held by the University. They are also invited to deliver expert lectures in their field of expertise.

	<i>Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrices(QIM) in Criterion6)</i>	
6.1	Institutional Vision and Leadership	
6.1.1 QIM	The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.	
6.1.2 QIM	The effective leadership is reflected in various institutional practices such as decentralization and participative management.	
6.2	Strategy Development and Deployment	
6.2.1 QIM	The institutional Strategic plan is effectively deployed.	
6.2.2 QIM	The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.	
6.3	Faculty Empowerment Strategies	
6.3.1 QIM	The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff .	
6.4	Financial Management and Resource Mobilization	
6.4.1 QIM	Institutional strategies for mobilisation of funds and the optimal utilisation of resources	

6.4.4 QIM	Institution conducts internal and external financial audits regularly
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 by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.
6.5.3 QIM	Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

#### Criterion 6 Governance Leadership and Management

The institution has a well-defined governance structure. However, statutory positions of Vice Chancellor, Registrar and Controller of Examinations are vacant and the faculty members are sharing the responsibility.

Within each Department, there are several programmes and the faculty members appear to teach across programmes and Departments. It is true that some Assistant and Associate Professors are part of the Academic Council as well as the Board of Studies and the Masters Programme specific Masters Programme Executive Committees. However due to the funds constraints it appears that there is no financial decentralization or autonomy.

There are some problems with the financial strategic plan of the institute. This is because it is funded entirely through private sources with about 45% coming from student fees, and rest from projects, consultancies, sponsorships and endowments. Since the Institution is limited to Masters and PhD programmes the revenue obtained by private educational institutions from undergraduate teaching is not available. As the Department has no corpus and the small amount of government funds that it gets have very small provisions for overheads it must depend largely on private projects, consultancies and sponsorships to remain viable. This makes it vulnerable to corporate sponsors.

There are some shortcomings as regards to faculty appointment and service rules as it does not entirely follow the screening process outlined by the UGC in terms of API scores and external members. The Selection Committee also has some difference with UGC regulations. There is also no clearly defined rule regarding the external BOS members with fixed tenure. Faculty participate in Faculty Development Programmes and submit annual Performance and self-assessment report through online faculty appraisal system. These are then placed before the Dean and graded by a committee of Heads of Departments Dean and Vice Chancellor on a 3-point scale. For CAS it appears from 35th meeting of the BoM that until 29th July 2020 TERI SAS did not have clear rules regarding direct recruitment and promotion and it was decided to adopt the UGC rules from non-technical and AICTE rules for technical and management faculty from December 2020. Record of Implementation is not available from records.

Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QIM) in Criterion7)				
7.1	Institutional Values and Social Responsibilities			
7.1.1 QIM	Measures initiated by the Institution for the promotion of gender equity during the last five years.			
	Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)			
7.1.3 QIM	<ul> <li>Solid waste management</li> <li>Liquid waste management</li> <li>Biomedical waste management</li> <li>E-waste management</li> <li>Waste recycling system</li> <li>Hazardous chemicals and radioactive waste management</li> </ul>			
7.1.8 QIM	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words)			

7.1.9 QIM	Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).		
7.1.11 QIM	Institution celebrates / organizes national and international commemorative days, events and festivals (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		

Their focus on sustainable development goals integrated into their teaching and research.

Their efforts to secure international funding for developmental projects.

International collaboration for developmental projects

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

#### **Overall Analysis**

- Academic programs in the emerging and niche areas of sustainable development
- Research-led curriculum
- Well-articulated programme and course outcomes
- International financial support for development projects

- Attracting students from school and under-graduate level to the institute for skill-based activities
- Sensitization of its stakeholders towards Environmental problems
   and sustainability
- International funding support for developmental projects related to environment and sustainability
- Good student-teacher ratio, for teaching and research supervision
- Faculty is good
- Many sponsored research projects

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)

- As it is claimed to be research intensive institute, the high end research equipment facility should be created.
- Appoinment of regular statutory positions specially Vice-Chancellor, Registrar and CoE needs to be made urgently.
- Appointment of regular faculty members in general and senior faculty in particular.
- Establish an economically sustainable model for running the courses on long term basis.
- Need to introduce value added courses with student intake.
- Retention policy for the faculty members
- Defined process of faculty recruitment with transparency as per the UGC norms
- STP be made functional; ETP and organic waste management should be made effective.

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

## Signature of the Peer Team Members:

SI.No	Name		Signature with date
1	Ravinder Kohli	Chairperson	
2	Prof Umesh Kumar Singh	Member Co- ordinator	
3	M Khalid Azam	Member	
4	Sudesh V	Member	
5	Shreerup Goswami	Member	
6	Sarbajit Sengupta	Member	
7	Dr. Sujata Shanbhag	NAAC Co-ordinator	

Place:

Date