PARADIGM SHIFT IN INDIAN HIGHER EDUCATION ACCREDITATION

Dr. Jagannath Patil

Adviser, National Assessment and Accreditation Council (NAAC), Nagarbhavi, Bengaluru-560072, India, Past President, Asia Pacific Quality Network (APQN) & INQAAHE E-mail: jp.naacindia@gmail.com

Abstract

The Indian higher educational system is witnessing a paradigm shift in accreditation. The National Assessment and Accreditation Council (NAAC) has been set up to facilitate the volunteering institutions to assess their performance vis-a-vis set parameters through introspection. Over two decades of efforts of NAAC in the area of assessment and accreditation with an objective of continuous improvement of quality in education has made significant impact. Currently NAAC is in the process of complete overhaul and reform its processes. The revised accreditation framework launched in July 2017 is ICT enabled, objective, transparent, scalable and robust. This paper presents a summary of accreditation process of Indian higher education system along with salient features of the revised accreditation framework of NAAC, which was launched in July 2017. This framework is followed not only by the Indian higher education community but also by quality assurance agencies outside the country due to various innovations and reforms brought in the accreditation process. The revised accreditation framework marks a paradigm shift which has introduced several concepts in quality assurance such as Student Satisfaction Survey (SSS), Data Validation and Verification (DVV), Quality benchmarking, Innovation Ecosystem, Alumni Engagement, Institutional Values and Distinctiveness in the accreditation process. The paper concludes by suggesting that the revised accreditation framework is a step in the right direction which is likely to usher in a new era of digital accreditation with quality indicators as a base for benchmarking-led quality improvement process in Indian higher education. The analysis of initial results indicates that reforms are achieving its main goals including improvement of objectivity, increased transparency, boost in data management and use of ICT for quality enhancement process.

Keywords: Higher Education; Quality Assurance; Revised Accreditation Framework (RAF); Higher Education Institutions (HEIs); Assessment and Accreditation (A&A); Quality Indicator Framework (QIF); Student Satisfaction Survey (SSS); Data Validation and Verification (DVV); Quality benchmarking; Innovation ecosystem; Alumni engagement; Qualitative Metrics (Q_IM); Quantitative Metrics (Q_nM); Key indicators; System Generated Scores (SGS).

Introduction

Quality education is vital for the social and economic development of any nation and thus it assumes even greater importance for humanity. Higher education is a key driver of emerging knowledge economies like India.

Accreditation is important because: 1. the institution knows its strengths, weaknesses, and opportunities through an informed review process, 2. the identification of internal areas of planning and resource allocation collegiality on the campus, 3. funding agencies look for objective data for performance funding, 4. The institution initiates innovative and modern methods of pedagogy. 5. A new sense of direction and identity for the institution, 6. Provides society with reliable information on the quality education offered. 7. Provides employers reliable information on the quality of education offered to the prospective recruits and 8. Intra and inter-institutional interactions. (NAAC, 2018)

NAAC is exploring the prospects of bringing excellence in Indian education system through innovations in accreditation. Assessment and Accreditation (A&A) by NAAC has become mandatory for all Higher Education Institutions (HEIs). This article is a determined effort to understand and analyze the revised accreditation process and its implication in making Indian higher education system a world class higher education system.

In India, the mission and goal of providing education to increasing numbers of the population has become a priority because growth and expansion in Indian higher education have been exponential in the last few decades. The revised accreditation framework launched by NAAC as described in this paper signifies a massive paradigm shift in approach towards quality assurance in higher education.

Indian Higher Education Scenario

Recently the development of higher education in India has been remarkable. The number of HEIs and enrolment capacity has posed a greater challenge to the nation in maintaining better quality of education in the country.

The Indian higher education system is facing an unprecedented transformation in the coming decade. This transformation is being driven by economic and demographic change: by 2020, India will be the world's third largest economy, with a correspondingly rapid growth in the size of its middle classes. Currently, over 50% of India's population is under 25 years old; by 2020 India will outpace China as the country with the largest tertiary-age population. (British Council 2014)

According to AISHE report 2017-18 there are 903 Universities, 39,050 Colleges and 10,011 Stand alone institutions in India. Total enrollment in higher education has been estimated to be 36.6 million with 19.2 million boys and 17.9 million girls in the same period with this, Gross Enrolment Ratio (GER) of the students has gone up to 25.8% in 2017-18. (AISHE, 2017-18). GER is far behind countries like China which has a GER of 43.39%, in Canada 88%, USA 80.9%, Australia 79.8%, UK 52 %, and France 50%. (Singh & Ahmad, 2011). There are 12, 84, 755 teachers are working in all over India. Only 3.6% colleges run PhD programme and 36.7% colleges run PG level programmes across India. 34,400 students were awarded Ph.D. level degree during 2017.

By 2030, India will be amongst the youngest nations in the world with nearly 140 million people in the college-going age group, one in every four graduates in the world will be a product of the Indian education system.

NAAC: Two Decades of Pioneering Experience

The National Assessment and Accreditation Council (NAAC) is an autonomous body which was set up in 1994 by the University Grants Commission (UGC) to address the issues of quality, i.e. to assess and accredit the HEIs in the country. The experience of NAAC in the area of A&A with an objective of continuous improvement of quality in education has made a significant impact.

In over two decades of its existence, the NAAC has continuously strived to improve its methodology for assessment and accreditation, taking into cognisance changing trends in higher education, the rapidly transforming global scenario, feedback from the stakeholders and lessons learnt from experiences.

The fundamental objective of NAAC's assessment is to improve the quality of HEIs in the country. In order to set the assessing parameters, NAAC has organised various brainstorming sessions with experts of higher education to design the methodology. To create awareness about assessment and accreditation, it has also organised several seminars and programmes. The UGC vide its Mandatory A&A of Higher Education Institutions Regulations, 2012, dated 19 January 2013, has made accreditation mandatory for all higher educational institutions.

NAAC has accredited 11,616 colleges and 554 universities as of 26th September 2018. This includes 3,321 colleges and 159 universities for Cycle II and 737 colleges and 66 universities for Cycle III and 11 colleges for Cycle IV, respectively (NAAC, 2018). Over 1600 HEIs accredited during the year 2016-2017. Currently, the NAAC is in the process of a complete overhaul and reform of its processes.

During the past 20 years, the NAAC has made a niche in the higher education scenario of India. Changes and trends in education are long-term phenomena, which must be considered in their historical context.

In its journey of two decades, the substantial positive impact of NAAC on the higher education sector in India is noticeable. Some of them are:

- Institutionalisation of the concept of self-evaluation and peer evaluation.
- Facilitating quality and excellence by establishing Internal Quality Assurance Cells (IQACs) and good practices 7000 IQACs, series of good practices and quality initiatives.
- Continuous quality enhancement and quality culture through IQACs.
- Formalisation of quality assurance mechanisms.
- State government's use of the outcomes as inputs for planning state-wise analysis.
- Many policymakers have used the accreditation results for funding and for other decisions UGC, MHRD, National Council of Teacher Education (NCTE), Dental Council of India (DCI), State governments.
- Triggered several quality initiatives Total Quality Management (TQM) Karnataka and Andhra Pradesh.
- Nationally acceptable quality criteria evolved and applied in a complex and diverse higher education system.
- 12,170 HEIs came forward for quality assurance, pitching NAAC as the only External Quality Assurance Agency (EQAA) to undertake such massive work. Despite the fact that accreditation is voluntary, institutions have moved to the second and third cycles of NAAC accreditation.
- Capacity Building Created a pool of about 2000 trained quality assurance professionals.
- New concepts of benchmarking, internal quality assurance cells, best practices, student participation in quality enhancement etc., introduced and popularised among HEIs.
- Triggered Research and Development activities and collaborations. (Self-review document of NAAC, 2013)
- NAAC is its partnership with stakeholders for pro-active measures to promote A&A in the country. So far, the NAAC has reached almost all states for A&A processes, including remote areas.

External Quality Assurance Initiatives in India

Indian higher education system is well-known, globally, for some of its premier institutions such as the Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), Indian Institute of Science (IISc) and Indian Institutes of Information Technology (IITs). The National Policy on Education (1986) laid special emphasis on advocating the importance of quality of higher education in India and strengthening the quality initiatives with the establishment of accreditation agencies in India. Presently there are three accreditation agencies functioning in India: the National Assessment and Accreditation Council (NAAC) set up by the University Grants Commission (UGC) in 1994 to monitor the quality of HEIs in general education, the National Board of Accreditation (NBA) by the All India Council for Technical Education (AICTE) for technical education, and the Accreditation Board (AB) of the Indian Council for Agricultural Research (ICAR) for accrediting agricultural institutions. The NAAC is considered as a major quality assurance agency in India as it covers all categories of HEIs (Patil and Pillai, 2016).

NAAC's International Alignment and Recognition

The NAAC and its faculty are engaged in many institutional and individual projects. The projects with European Commission, United Nations Educational, Scientific and Cultural Organization (UNESCO), International Network for Quality Assurance Agencies in Higher Education (INQAAHE), Asia Pacific Quality Network (APQN), Commonwealth of Learning (COL), Ministry of Human Resources Development (MHRD), University Grants Commission (UGC) etc. have resulted in several publications and reports.

The NAAC's international recognition is underscored by key facts given below:

- Accreditation by NAAC is recognised globally for admissions, placements and collaborations [Most universities in the USA recognise the NAAC's highest grade 3-year HEI degrees as equivalent to the 4-year US degree for higher studies].
- The NAAC is a full member and founder of several international and regional networks namely, INQAAHE and APQN.
- Training and expertise of the NAAC is extended to Quality Assurance Agencies in the Asia Pacific region.
- The NAAC facilitated the establishment of Quality Assurance Agencies in the Asia Pacific Region (Cambodia, Nepal, Mauritius, etc.)
- Joint projects/Publications with UNESCO, COL and APQN etc.
- Leadership in governing bodies of global quality networks (APQN, INQAAHE, Asia Pacific Quality Register-APQR)
- NAAC faculty have participated as international assessors for evaluating overseas HEIs.
- NAAC and its faculty have received international recognition and awards for contributions to quality assurance (APQN Quality Award, Endeavour Australia Awards, UNESCO/COL partnerships).
- Global Partnership with UNESCO, COL, European Commission and Council for Higher Education Accreditation (CHEA), USA.
- The NAAC has signed Memorandums of Understanding (MoUs) with Council of Higher Education, USA (CHEA), Tertiary Education Commission, Mauritius (TEC), Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT), National Authority for Qualifications & Quality Assurance of Education & Training, Bahrain (QQA) and Knowledge and Human Development Authority, UAE (KHDA) etc.,
- The Global Summit organised by NAAC on 16-17 September 2016 witnessed the participation of prominent global leaders in quality assurance representing apex bodies from Asia, America, Europe, the Arab region and Africa.

- Bengaluru Statement 2016 on Next-Generation Quality Assurance of Higher Education: A Shared Vision and Commitment for Fostering Partnership Beyond Borders", which was the culmination of the global summit organised by NAAC and APQN will be counted as the major landmark in the International history of higher education quality assurance.
- International recognition and awards including 'APQN Quality Award 2017' for International co-operation in Quality Assurance.
- India-EU Higher Education Benchmarking Project sanctioned by European Commission commencing from December 2017.

Value framework for Assessment of HEIs

The development of a multifunctional quality framework to meet the divergent needs of stakeholders in education is, no doubt, a challenging task. The traditional framework for quality assurance focuses more on inputs and processes and less on outcomes. There is an increasing realization of the necessity to focus more on outcomes of higher education (Prasad VS, 2005).

The five values or parameters of assessment of HEIs, i.e., (1) Contribution to National Development, (2) Fostering Global Competencies among Students, (3) Inculcating a Value System in Students, (4) Promoting the Use of Technology and (5) Quest for Excellence, it is hoped, will help us to develop a critical understanding of the contributions of institutions of higher education to society and individuals. The framework, in spite of its generality, provides a broad vision of higher education in developing countries.

Revised Accreditation Framework (RAF) of NAAC

As has been mentioned earlier, the NAAC has continuously strived to improve its methodology for assessment and accreditation, taking into cognisance changing trends in higher education, the rapidly transforming global scenario, feedback from the stakeholders and lessons learnt from experiences. Currently, NAAC is in the process of a complete overhaul and reform of its processes.

The revised accreditation framework launched in July 2017 is Information and Communications technology (ICT) enabled, objective, transparent, scalable and robust.

Highlights of RAF

- Combining Letter of Intent (LOI) and Institutional Eligibility for Quality Assessment (IEQA) formats designed and deployment as a single application called the Institutional Information for Quality Assessment (IIQA) has reduced the cycle time for accreditations.
- Existing fifty (50) Core and Desirable Indicators, about Two hundred (200) Assessment Indicators and questions in manual synthesized.
- Shift from qualitative peer judgements to quantitative indicator evaluation.
- Extensive use of ICT has enhanced scalability and robustness.
- Simplification of process has led to drastic reduction in number of questions, indicators, size of report, visit days, etc.
- Quality Indicator framework to boost benchmarking as a quality improvement tool.
- A new concept of validation of data by external agency.
- Online Student Satisfaction Survey.
- System Generated Scores (SGS) in combination with online evaluation (70%) and peer judgment (30%).
- Existing NAAC indicators compared with indicators developed for National Institutional Ranking Framework (NIRF) and other international QA frameworks. A comparable set of indicators across Universities and Colleges prepared for NAAC assessment.

- The CVs of the assessors (peer team members) will be placed in the public domain.
- Cut-off scores designed as pre-qualifiers for Accreditation and Grade qualifiers.
- The CGPA and Grades of the institutions are automated, and system-generated, based on the evaluation outcome of the 70% 30% offsite onsite assessments respectively.
- Penalty provisions will be evoked for institutions submitting fraudulent data/information/supporting documents.
- Consulted about 200 experts through national meet, workshops and Core Working Group and Sectoral Working Groups meetings.
- Conducted a pilot study across the country to test the framework and benchmarks (100 HEIs).
- Quality Indicator Framework (QIF) hosted on website and feedback sought.
- Provision of 5% optional/non applicable metrics to address diversity issue.

Quality Indicator Framework (QIF)

The QIF forms the backbone of the revised A&A process of NAAC. The seven criteria of the framework represent the core functions and activities of an HEI. In the revised framework not only the academic and administrative aspects of institutional functioning but also the emerging issues have been included. The seven criteria which serve as the basis for assessment of HEIs are given in Table 1.

Under each criterion, a few 'Key Indicators' are identified. These Key Indicators (KIs) are further delineated as 'Metrics' which elicit responses from the HEIs. These seven criteria along with their KIs explicate the aspects they represent.

Developing the Quality Indicator Framework

A series of consultations, meetings and a national workshop in February 2017 were organised to develop the QIF. A feedback collection from various stakeholders through survey was done. Core Working Group (CWG) and Sectoral Working Groups (SWGs) were set up for Universities, Autonomous Colleges and Affiliated / Constituent Colleges to evolve the QIF and a series of CWG and SWG meetings were held. A pilot study was conducted to test the QIF involving about 100 HEIs across the country to calibrate QIF benchmarks. Finally, a national consultation was organised at New Delhi in April 2017 to fine-tune and finalise the revised accreditation framework.

Key Features of the QIF

- Qualitative and Quantitative Metrics proposed under each key indicator with predetermined weights.
- Each Metric is provided with a benchmark range on a 5-point scale (very high to very low) or binary scale (Yes/No).
- The calculation method remains the same as per the current grading pattern except in case of binary scale indicators where 'Yes' results into highest value,4, and 'No' results into lowest value,0.
- Indicators are expected to be supported by a data sheet providing evidence for the quantitative response submitted by HEIs.
- To assess subjective elements such as teaching-learning process, student services, etc., a new component of online student satisfaction survey is introduced.
- The draft set of indicators is pilot-tested on select HEIs.
- Based on the analysis of pilot tests further, fine-tuning of benchmarks is done.
- The number of criteria, i.e. seven, remains the same for the new QIF; only the name of Criteria III and VII has been changed, i.e. Criterion III has been renamed as 'Research, Innovations and Extension' and Criterion VII will be called as 'Institutional Values and Best practices'.

- Introduction of new Key Indicators such as Student Satisfaction Survey, Alumni Engagement, Innovation ecosystem, Institutional values and social responsibilities, and Institutional Distinctiveness.
- The total weight of the A&A process remains the same, i.e. 1000 points. The criterionwise weight of all the seven criteria also remains the same.
- The Key Aspects will now be known as Key Indicators, and the measures/questionnaire under Key Indicator will be called as Metrics. The same has been drastically reduced from 220 to around 130.
- Pre-Qualifiers for Peer Team Visit have been pioneered. Student Satisfaction Survey

As part of QIF, the NAAC has endeavoured to conduct a Student Experience Survey, the results of which will be included in the accreditation process. The students will remain anonymous throughout the process. The institution is supposed to send a list of total student strength, with details of their student identity (ID) number, Aadhaar ID number (any other valid ID number in the absence of Aadhaar), degree programme student is enrolled in, email id and mobile number. The NAAC will send an online link of this 'Student survey' to the email address/mobile number of the student and the student will have to fill the survey before a stipulated date. The questionnaire consists of several facets of the teaching-learning process. (Metric No. 2.7.1) Analysis of the student survey will be done using a customised software which will aggregate the responses and generate the score.

Alumni Engagement

Alumni have a vital role to play in the quality improvement of the alma mater. The key indicator 'Alumni Engagement' emphasises on the association of alumni with the institution for academic and other financial matters. Various contributions of alumni are covered in this key indicator such as financial assistance in the form of gifts or donations to the institution which help significantly in the development of the institution.



Figure 1. RAF – Student Satisfaction Survey process of NAAC

Innovation Ecosystem

Innovation Ecosystem is an important key indicator in improving the quality of an institution, which describes the innovative and pioneering practices. This key indicator addresses innovative initiatives of the institution, i.e. incubation centre, workshops/seminars on Intellectual Property Rights (IPR), industry-academia innovative practices, innovation awards and encouragement of start-ups in the campus etc.

Institutional Values and Social Responsibilities

The emphasis on value and ethics in an institution's accreditation is significant as highlighted by Jain and Singh (2016) below:

The inclusion of "Values and Ethical Practices", as an independent parameter of quality assurance for assessment/accreditation of HEIs, will provide a strong momentum to quality initiatives and good governance. Our regulatory bodies and networks will have to adopt a much broader role in sharing their wisdom and practices for evolving value-based ethical practices for quality assurance.

In the revised accreditation framework, the key indicator, Institutional Values and Social Responsibilities, focuses on the institution's responsibilities towards public and social issues. The key indicator highlights the social issues and concerns such as gender equity, attitude towards the differently abled, inclusion and situatedness, human values and professional ethics. It also covers issues related to the environment.

Institutional Distinctiveness

The key indicator, Institutional Distinctiveness, refers to the differentness of an institution from other institutions. An institution is characterised by its reason for its existence, vision, mission, nature of stakeholders, access to resources, cultural ambience and physical location etc. An established institution will be recognised for its certain and distinct attributes which make it different from others with regard to its characterisation which will be reflected in its activities.

Data Validation and Verification (DVV) and Pre-qualifier Score

At the second level, data /information submitted in the SSR will be subjected to an online assessment mechanism/process with the DVV process after an online evaluation generating a pre-qualifier score. Institutions securing 30% on the quantitative metrics will qualify for onsite peer review/ assessment. The pre-qualifier scores are exclusive of the SSS.

| Criteria | Key Indicators | Universities | Autonomous Colleges | Affiliated Colleges |
|--|--|--------------|------------------------|------------------------|
| 1.Curricular | 1.1 *(U)Curriculum Design and Development | 50 | 50 | NA |
| | 1.1.*(A)Curricular Planning and Implementation | NA | NA | 20 |
| | 1.2 Academic Flexibility | 50 | 40 | 30 |
| Aspects | 1.3 Curriculum Enrichment | 30 | 40 | 30 |
| Азресь | 1.4 Feedback System | 20 | 20 | 20 |
| | Total | 150 | 150 | 100 |
| 2.Teaching- Learning and Evaluation | 2.1 Student Enrolment and Profile | 10 | 20 | 30 |
| | 2.2 Catering to Student Diversity | 20 | 30 | 50 |
| | 2.3 Teaching-Learning Process | 20 | 50 | 50 |
| | 2.4 Teacher Profile and Quality | 50 | 60 | 80 |
| | 2.5 Evaluation Process and Reforms | 40 | 40 | 50 |
| | 2.6 Student Performance and Learning Outcomes | 30 | 50 | 40 |
| | 2.7 Student Satisfaction Survey | 30 | 50 | 50 |
| | Total | 200 | 300 | 350 |

Table 1. Components of Quality Indicator Framework: Criteria, Key Indicators and Metrics

| | 3.1 Promotion of Research and Facilities | | | |
|-------------------------------------|--|------------------|------|------|
| | | 20 | 20 | NA |
| | 3.2 Resource Mobilisation for Research | 20 | 10 | 10 |
| 3. Research, | 3.3 Innovation Ecosystem | 30 | 20 | 10 |
| Innovations and | 3.4 Research Publications and Awards | 100 | 20 | 20 |
| Extension | 3.5 Consultancy | 20 | 10 | NA |
| | 3.6 Extension Activities | 40 | 50 | 60 |
| | 3.7 Collaboration | 20 | 20 | 20 |
| | Total | 250 | 150 | 120 |
| | 4.1 Physical Facilities | 30 | 30 | 30 |
| | 4.2 Library as a Learning | 20 | 20 | 20 |
| 4. Infrastructure and | Resource | 20 | 20 | 20 |
| 4. Intrastructure and Learning | 4.3 IT Infrastructure | 30 | 30 | 30 |
| Resources | 4.4 Maintenance of Campus | 20 | 20 | 20 |
| Resources | Infrastructure | 20 | 20 | 20 |
| | Total | 100 | 100 | 100 |
| | 5.1 Student Support | 30 | 30 | 50 |
| | 5.2 Student Progression | 40 | 30 | 45 |
| 5. Student Support | 5.3 Student Participation and Activities | 20 | 30 | 25 |
| and Progression | 5.4 Alumni Engagement | 10 | 10 | 10 |
| Progression | Total | 100 | 100 | 130 |
| | 6.1 Institutional Vision and | | | |
| | Leadership | 10 | 10 | 10 |
| | 6.2 StrategyDevelopment and Deployment | 10 | 10 | 10 |
| | 6.3 Faculty Empowerment | 20 | 20 | 20 |
| 6. Governance, | Strategies | 30 | 30 | 30 |
| Leadership and Management | 6.4Financial Management and Resource Mobilisation | 20 | 20 | 20 |
| g | 6.5 Internal Quality Assurance System | 30 | 30 | 30 |
| | Total | 100 | 100 | 100 |
| | 7.1 Institutional Values and Social Responsibilities | 50 | 50 | 50 |
| 7. Institutional Values and Best | 7.2 Best Practices | 30 | 30 | 30 |
| Values and Best Practices | 7.3 Institutional Distinctiveness | 20 | 20 | 20 |
| | Total | 100 | 100 | 100 |
| | TOTAL SCORE | 1000 | 1000 | 1000 |
| Eacl | *(U) - applicable only for Universities and Auto (A) –applicable only for the Affiliated/Consti h key indicator consists of Qualitative Metrics (Q ₁ M) and | nomous Colleges. | es; | |

Revised Grading System.

The revised framework will be more ICT-intensive and 'outcome-based'. The details of grading pattern of NAAC (A++, A+, A, B++, B+, B, C, D) are presented in Table 2:

| | 8 2 | | |
|-------------|--------------|----------------|--|
| CGPA | Letter Grade | Status | |
| 3.51-4.00 | A++ | Accredited | |
| 3.26 - 3.50 | A+ | Accredited | |
| 3.01 - 3.25 | A | Accredited | |
| 2.76-3.00 | B++ | Accredited | |
| 2.51 - 2.75 | B+ | Accredited | |
| 2.01 - 2.50 | В | Accredited | |
| 1.51 - 2.00 | C | Accredited | |
| ≤ 1.50 | D | Not Accredited | |

Table 2. The Revised Grading System

NAAC Accreditation Outcome Document

The NAAC Accreditation Outcome Document has three parts:

Part I: Peer Team Report

- Section 1: Gives the general information of the institution and its context.
- Section 2: Criterion-wise Analysis based on peer evaluation of qualitative indicators. This will be a qualitative analysis of descriptive nature aimed at critical analysis, presenting the strengths and weakness of the HEI under each criterion.
- Section 3: Overall Analysis, which includes institutional strengths, weaknesses, opportunities and challenges.
- Section 4: For recording 'Recommendations for Quality Enhancement of the Institution' (limited to ten major recommendations).

Part II: Graphical representation based on Quantitative Metrics (QnM)

This part will be a system-generated quality profile of the Higher Education Institution (HEI) under consideration, based on statistical analysis of quantitative indicators as evaluated by NAAC's quality indicator framework. A quality radar and graphical presentation of institutional features would be reflected in this part of the document through the synthesis of quantifiable indicators.

Part III: Institutional Grade Sheet

The third part of the accreditation document consists of the institutional grade sheet which is based on qualitative indicators, quantitative indicators and student satisfaction survey using existing calculations methods. However, this grade sheet is generated by software employed by the NAAC without any human intervention in its creation.

The abovementioned three parts would be combined to form the '*NAAC Accreditation Outcome*' document. It would be made mandatory for HEIs to display the document on the institutional website apart from hosting it on the NAAC website.



Figure 2. Chart of Revised A&A Process of NAAC

| Sl. No | Current Process | Revised Process |
|-----------|--|---|
| 1 | Accreditation Process is outcome-based on peer | Data-based quantitative indicator evaluation with |
| | judgment | combination of peer judgment |
| 2 | Elaborate process of self and external evaluation | Significant reduction in self/external evaluation |
| | covering seven criteria, 36 key aspects, 200 | covering seven criteria, 34 key indicators and about 130 |
| | indicators and about 300 questions | metrics |
| 3 | No pre-qualifier for Peer Team Visit: Visit takes | Pre-qualifier for Peer Team Visit: Institution needs to |
| | place for all HEIs after SSR submission | score at least 30% of the quantitative (system generated) |
| | | score. |
| 4 | Interaction with students - onsite | Online student satisfaction survey |
| | | |
| 5 | Onsite data verification by academic peers | Data verification and validation by external agency |
| 6 | Manual selection of peer team | System-enabled selection of peer teams for onsite visit |
| 7 | Logistics arrangement made by the institutions | Integration of logistics through external agency. Total |
| | themselves (Team constitution known quite earlier) | confidentiality till visit date. |

 Table 3. Comparative Statement of Current and Revised Accreditation Framework of NAAC

NAAC reforms: Impacts and Expected outcomes

- Expected outcomes and impact of NAAC's reforms are summarised as below:
- Reducing the subjectivity due to variance in peer team assessment.
- Inculcation of competitive spirit by providing Quantitative benchmarks as basis of assessment.
- Improvement of data management practices in HEIs.
- Increased use of ICT in Teaching, Learning and Governance for quality improvement.
- Integrating the stakeholders involvement and feedback in quality improvement. (Key Indicators like Feedback System, Student Satisfaction Survey, Alumni Engagement)
- Introduction and acceleration of Outcome Based Education (OBE).
- Encouraging the culture of innovation and start-up on campuses.
- Reinforcement of value and ethics (Criteria VII on Institutional Values and Best practices).
- Institutionalisation of quality culture (IQAC, etc)
- Promoting gender sensitivity on the campus.
- Incentivising the inclusive practices such as reservation policy, differently abled (Divyangjan) friendly campus, etc)
- Encouraging students to participate in extension activities such as Swatch Bharat, Aids Awareness, Gender Issues, etc.,
- Promoting e-resources of library for easy access to students.
- Focus on research in Universities (metrics on Patents, Citations, h-index, etc.,)
- Emphasis on skills and co-relation of academics with word of work.
- Attempt to reach the golden mean of advantages of Rankings and Quality assurance process.
- Introducing new concept of Third party validation of Data by external agencies.
- Encouraging mobility of students and teachers.
- Recognising diversity (Optional Metrics).
- Relevance of curriculum with societal needs and global trends.
- Faculty empowerment (FDP, seed money, awards, etc.,)
- Encouraging eco-friendly practices on campus.

RAF - Feedback & Issues:

On developing the revised accreditation framework, the NAAC has received feedback from the stakeholders. Some of the principal concerns of the stakeholders and responses of NAAC can be summarised as under:

• Diversity

A few institutions were concerned that some metrics are not applicable to them. Since a 'one size fits all model' is not feasible in a diverse higher education system, key elements needed to measure the quality of higher education are included in the QIF. A provision for distinctiveness is made and also a provision has been made so that HEIs can opt out up to 5% of metrics which are not applicable to them.

• Faculty Shortage/Funding Issues

Another apprehension expressed by HEIs relates to the possibility of scoring low due to reasons beyond their control such as faculty shortage/funding issues. Since the NAAC A&A is a diagnostic quality tool, these elements are essential for evaluating quality and have been incorporated.

• Systemic Limitations

A few of the stakeholders have reported that State government norms, affiliating university issues, implementation of Choice-Based Credit System (CBCS), student-teacher ratio, etc. may create limitations for institutions. Since A&A is not a homogenising tool, the issue of systemic limitations may have to be addressed at the policy level rather than excluding such factors from the evaluation framework.

• Apprehensions from Already Higher-graded HEIs

Some HEIs have expressed their concern about the data-driven quantitative process. One of the objectives of the recent reforms is to reduce subjectivity in the current process. The concern about liberal grading in some cases is expected to be neutralized with a new framework which is robust and objective.

• Methodology-related Concerns

Benchmark values, transparency, first-time introduction of DVV and penalties are a few of the other concerns. NAAC has made best efforts to develop a reliable methodology for addressing these concerns. The analysis of results in the initial windows would be critical to assess its usefulness and remedial measures if needed can be taken.

• Weightages

Another concern expressed relates to the need to further classify institutions into categories of Arts, Science and Business Management. An attempt has been made to capture the functions of undergraduate and post-graduate colleges through differential metrics and weightages (for example Research, Resource Mobilization for Research and Research Publication and Awards).

• Geographical Location

Institutions located in geographically disadvantaged areas have expressed reservations over the framework being urban biased. NAAC has addressed this issue by according a low weightage to the metric on student enrolment from outside the state. Further, the key indicator, Inclusion and Situatedness provides scope for highlighting institutional achievements concerning location.

• Technology

Quantitative measurement of quality may have limitations, which is why NAAC attempts to make a judicious blend of Qualitative Metrics (Q_1M) and Quantitative Metrics (Q_nM). Metrics related to use of ICT, e-resources etc. are deemed essential in the context of national initiatives like Digital India, SWAYAM and National data repository etc. Availability of ICT facilities (classrooms with ICT facilities) is to be evaluated vis-à-vis its usage. Fourth cycle e-assessment will be taken up based on the feedback of accreditation in the first two windows.

RAF – Challenges and Way Forward:

While implementing the RAF, NAAC has faced several challenges during the finetuning process which are discussed and addressed below:

• Resistance for change from stakeholders to complete transition to ICT based data driven model

NAAC has received feedback and concerns regarding the transition from peer review to ICT based data driven model from HEIs located in rural, hilly areas. The competent authorities are planning to set up Educational Media Centre to reach out all unreached areas. This centre will hold series of interactive sessions with HEIs and Assessors for the purpose of accreditation capacity building and training of assessors using digital communication technology. **Need for considering feedback from the field and fine-tuning the framework**

Based on the feedback received from the Stakeholders/field, NAAC has taken up an exercise to revise and fine tune the framework. Present model/methodology which is used in the field is fine tuned and tested. In near future the same framework will be re-revised and field tested based on the needs of the stakeholders.

• Suitability of framework for specialised HEIs (Sanskrit / Yoga, etc)

In order to deal with mono faculty/specialised programme institutions, NAAC has engaged in structuring the accreditation frame work for institutions offering specialised programs such as Sanskrit, Yoga, dance, music. Presently NAAC has taken up development of assessment manuals for Yoga and Sanskrit programme / HEIs.

• Concerns/litigations due to linking of CGPA with grants/recognition/status

There is a field reaction on tough results with down-grading compared to previous cycle assessment and there is also a concern regarding the linkage of NAAC results with grants from UGC, MHRD-RUSA, etc. The institution graded with better grades may get better funds but it affects the poor performing institutions, as these are already disadvantaged. This has increased number of appeals and may invite a few litigations.

Conclusion

This study shows that in 25 years of its existence the NAAC has earned substantial goodwill and appreciation from the academic community. Simultaneously, it also suggests a need for incessant effort to strengthen and fine-tune its &A&A processes and procedures.

After two decades of groundbreaking and pioneering work in establishing an external quality assurance system of higher education in India, at this juncture, the NAAC is remodelling its approach and methodology in consonance with the requirements of a digital era.

The revised accreditation framework marks a paradigm shift which has introduced several concepts in quality assurance such as Student Satisfaction Survey (SSS), Data Validation and Verification (DVV), Quality benchmarking, Innovation Ecosystem, Alumni Engagement, Institutional Values and Distinctiveness in the accreditation process. These concepts and procedures have to be understood by the stakeholders. NAAC also needs to design a strategy to take the revised accreditation framework ahead by reaching out to the stakeholders, who are having apprehensions about new form of accreditation, which is data driven.

An early results of RAF indicates that NAAC and India is ready to usher in a new era of digital accreditation with quality indicators as a base for benchmarking-led quality improvement process.

Acknowledgement

Many of the views expressed in this paper are reflections of the collective work of authorities of the NAAC, Members of Core Working Group (CWG) and Sectoral Working Groups (SWGs) constituted for development of Revised Accreditation Framework and other experts and officials. Their contribution is gratefully acknowledged. The authors have relied on official documents and publications of NAAC, UGC and MHRD for factual details. However, interpretations and suggestions reflect the views of the authors.

References

- 1. All India Survey on Higher Education, 2017-18. '*Final AISHE Report 2017-18*' (AISHE, 2017-18). Available at http://aishe.nic.in/aishe/home (accessed 10 October 2018).
- 2. British Council 2014, Understanding India The Future of Higher Education and Opportunities for International Cooperation.
- 3. J Patil and L Pillai, 2016. 'Quality Assurance in Indian Higher Education, Role of NAAC and Future Directions', in N.V. Varghese and Garima Malik (Eds.) India Higher Education Report 2015, New York and New Delhi, Routledge and NUEPA, pp. 137-162, 2016.
- 4. J Patil, L Pillai and D P Singh, 2017. '*NAAC Accreditation: Towards a Paradigm Shift*', NAAC, India (Under Publication).
- 5. National Assessment and Accreditation Council (NAAC), 'Assessment and Accreditation', (NAAC, 2018). Available http://naac.gov.in/index.php/assessment-accreditation#accreditation (accessed 10 October 2018).
- National Assessment and Accreditation Council (NAAC), 2018. 'NAAC Publications', (NAAC, 2018). Available at http://naac.gov.in/index.php/resources#publications (accessed 10 October 2018).
- 7. National Assessment and Accreditation Council (NAAC), 2018. 'Process for Accreditation', (NAAC, 2018). Available at http://naac.gov.in/index.php/assessment-accreditation#accreditation (accessed 10 October 2018).
- 8. National Assessment and Accreditation Council (NAAC), 2018. Bengaluru, (NAAC, 2018). Available at http://www.naac.gov.in (accessed 10 October 2018).
- 9. Rajnish Jain and D P Singh, 2016. 'Values and Ethics for Quality Assurance' paper submitted in Global Summit 2016, Bengaluru, India, 2016.
- 10. Self-review document of NAAC, 2013. (An unpublished document of NAAC) submitted to UGC, New Delhi, 27 May 2013.
- 11. Singh, K.P. & Ahmad, S. (2011). *Issues and challenges in higher education*. University News, 49(10), 1-5.
- 12. VS Prasad, 2005, Value Framework for Assessment of Higher Education Institutions, NAAC, India.