



Research Article

CHANGING ROLE DYNAMICS OF LIBRARY & INFORMATION SCIENCE (LIS) PROFESSIONALS IN THE DIGITAL ERA: STUDY OF NAVSARI AGRICULTURAL UNIVERSITY

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Abstract: The new face of the higher education landscape in India and across the world has come up with profound changes in the working of the libraries and consequently 'Library and Information Science (LIS) Professionals'. Gone are the days of the widely prevalent and equally criticized traditional academic setups; wherein the LIS professional, typically termed as Librarian, was considered as yet another 'avoidable cost centre and administrative function' and he/she was not taken seriously enough as a 'valued contributor' to the overall process of imparting quality education. Today in the digital era, Library and Information Science (LIS) professionals are ideally considered as one of the strongest pillars of any premier academic setup. Given the multitude of roles being played by these LIS professionals and considering the ever increasing importance of multifaceted evaluation of quantitative and qualitative aspects of library in institutional ranking at the national and international level, the institutions of higher education like Universities will have to create congenial work culture for the LIS professionals. In this context, this Conceptual Review Paper, utilizing the published theoretical literature analyzed with a practical orientation, discusses the changing face of libraries and changing role dynamics of LIS professionals in general and in Agricultural Universities in particular. The paper highlights salient features and achievements of consistent National Award winning Central Library of one of the State Agricultural University (SAU) located in the coastal region of the vibrant Gujarat State in India, that is, Navsari Agricultural University.

Keywords: Digital Era, Institutional Ranking, Library, Library and Information Science (LIS) Professionals, State Agricultural University (SAU)

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Introduction

As the heart and central nervous system of any progressive educational institute, the true knowledge resource centre library plays an important role in fulfilling the overall mission of quality education. With changing times, educational systems are changing from classroom to open learning and consequently user needs are also changing. Hence, in the digital era, libraries need to manage not only print resources but they have to provide information services to users with the help of online electronic resources. With open access moment information is now available at the finger tips. Publishers are also one step ahead in using new technologies in distributing information. They prefer to publish the reading material in electronic form rather than print form. Technology is changing fast and new tools like web 2.0 and web 3.0 are being used for scholarly communication both by users and libraries and interacting communication [1]. Today, it is a widely accepted phenomenon that libraries and their real gardeners - the Library and Information Science Professionals, popularly abbreviated as LIS Professionals - are the real backbone support and valued contributors to the students and staff in the overall mission of ensuring quality educational inputs. Yes, in its renovated avatar, the library is a refreshing example of the changing space and role of libraries in India.

It would not be an exaggeration to refer to the library as a 'Temple of knowledge' and the librarian as its 'Custodian'. However, the knowledge resources of a rich library should not be thought of being restricted to books or printed material only. Nor is the librarian only a custodian in the traditional sense. Today both library and librarian have seen a major transformation in their role. No profession has changed as much as the LIS profession. It has changed for the past two decades due to emerging trends in digital technologies and their applicability to information handling activities. During the passage of time, it shifted from closed access to open access; traditional libraries to automated libraries, electronic, digital and

finally to virtual libraries and future developments may occur as technology advances. As technology is changing fast and new tools based on web 2.0 and web 3.0 technologies are available on the net, libraries need to manage not only print resources but they need to provide information services to users with the help of online electronic resources too.

In the past the librarian played the role of a facilitator in the transaction of books and maintaining their records. Today there is a tremendous growth in the number and variety of information resources available on the Internet. Users are getting several services in day-to-day life without physically visiting the library and are increasingly relying on Internet based information for their regular tasks and spending considerable time in finding such information. Books and journals are now increasingly being published in electronic form than before. Therefore, libraries are also changing in terms of their collection, services, facilities and practices. Students are using digital libraries in place of traditional libraries for searching information. Libraries are providing them the information at their desktops through emails, interactive library website, blogs and social networking sites, etc. Librarianship also is gradually changing from traditional practices and the role of academic librarian is redefined as information mediator, media specialist, IT managers and curators, information manager, etc.

People are the real assets that can make or mar an organization. In today's ever-competitive scenario, only this people dimension can be a long term competitive advantage for any organization. The same is true even for the institutions of higher education and learning like University.

When we talk about the strongest pillars of an institution of higher learning like University, we usually consider the teachers. No doubt, teachers are the 'most active', 'most important' and 'irreplaceable' component of the education system. Even the research output of the University, Industry-Academia Interface, Capacity

Building, the Quantity and Quality of Student Enrolment, so on and so forth get due attention and focus as a yardstick to measure the quality of the University. But, the employees who are serving in the Library of any academic setup are mostly side lined or their contributions are not given its due share of credit, as if it's a 'necessary evil'. The Library and Information Science (LIS) professionals are made to feel like 'neglected children', despite their centrality for a University. On the contrary, the significance of having competent (able), motivated (happy and willing - happily willing), dedicated (involved) and committed (with organizational loyalty) LIS professionals has multiplied in the present era of digitalization. In the present digital era, these LIS professionals are serving as the "Knowledge Managers" by successfully managing the knowledge centres - the library of any academic institution and satisfying the hunger of the true knowledge seekers on one hand and as the "Strategic Partner" by coordinating the development plan on the other. Given the multitude of roles being played by these LIS professionals and considering the ever increasing importance of multifaceted evaluation of quantitative and qualitative aspects of library in institutional ranking at the national and international level, the institutions of higher education like Universities will have to create congenial work culture for the LIS professionals. This will ultimately pave way for transforming the institute/university into a world class institute/university. In this context, this Conceptual Review Paper, utilizing the published theoretical literature analyzed with a practical orientation, discusses the changing face of libraries and changing role dynamics of LIS professionals in general and in Agricultural Universities in particular. The paper highlights salient features and achievements of consistent National Award winning Central Library of one of the State Agricultural University (SAU) located in the coastal region of the vibrant Gujarat State in India, that is, Navsari Agricultural University.

Higher Agricultural Education in India

Role of State Agricultural Universities (SAUs) in India

As far as higher education in the domains of agriculture and allied disciplines is concerned in India, the State Agricultural Universities, popularly abbreviated as SAUs, are dominating the academic landscape under the ambit of the Indian Council for Agricultural Research (ICAR), New Delhi. The ICAR is the top most central autonomous organization, functioning under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers' Welfare, Government of India. Formerly known as Imperial Council of Agricultural Research, it was established on 16th July, 1929 as a registered society under the Societies Registration Act, 1860 in pursuance of the report of the Royal Commission on Agriculture. This Council is serving as the apex body for coordinating, guiding and managing research, education and extension activities in agriculture and allied disciplines across the country. With 101 ICAR institutes and 71 agricultural universities (3 Central Agricultural Universities, 4 Deemed Universities and 64 SAUs) spread across the country, this is one of the largest national agricultural systems in the world. The ICAR has played a pivotal role in ushering Green Revolution in the country with increase in the production of food grains by 5.4 times, horticultural crops by 10.1 times, fish by 15.2 times, milk 9.7 times and eggs 48.1 times since 1951 to 2017, so on and so forth. In and all, it has made visible impact on the national food and nutritional security; and played a major role in promoting excellence in higher agricultural education in India. It is engaged in cutting edge areas of science and technology development and its scientists are internationally acknowledged in their fields [2].

Background of State Agricultural Universities (SAUs) of Gujarat

The Government of Gujarat has established four State Agricultural Universities (SAUs) viz., Anand Agricultural University at Anand, Sardarkrushinagar Dantiwada Agricultural University at Dantiwada, Junagadh Agricultural University at Junagadh and Navsari Agricultural University at Navsari; for imparting education in agriculture and allied disciplines under the Gujarat Agricultural Universities Act, 2004 - Gujarat Act. No. 5 of 2004. To create quality professional manpower and provide technological backup for the growth and development of agriculture, these SAUs are entrusted with major responsibilities of carrying out education, research and extension education activities. For effective realization of this, all the four SAUs of Gujarat are imparting quality education up to Ph. D. level in Agriculture

and allied disciplines. Another unique feature of these SAUs is regarding imparting vocational education and training through Diploma / Certificate Courses in Agriculture, Horticulture, Animal Husbandry, Bakery, Landscaping & Gardening and Fisheries through Agricultural Polytechnics and Agri-clinics for Horticulture and Agricultural schools, Bakery, Mail and Fisheries training centers respectively. In addition to academic programmes, these SAUs also undertake fundamental, applied and verification research in Agriculture and related disciplines. Strong and effective extension education network has also been built up over the years to cater transfer of technology to the farmers and agricultural entrepreneurs. These SAUs have a strong extension network of Krishi Vigyan Kendras (KVKs) and a very efficient ICT backup [3].

Navsari Agricultural University (NAU) at a Glance

Commencing with a college of agriculture established in 1965 on a sprawling farm land of 400 hectares, the Navsari Agricultural University (NAU) of the erstwhile Gujarat Agriculture University has been bestowed with the status of a full-fledged independent State Agriculture University with effect from May 1, 2004. In its glorious history of furthering the noble cause of education, research and extension activities in agriculture, NAU has always been the forerunner in academic endeavors by establishing various reputed institutes. NAU can be elicited as a shrine for any educational campus. Within a short span of time, NAU has emerged as a high tech education hub with entire spectrum of courses right from Diploma to Doctorate Level. NAU's jurisdiction covers seven districts of South Gujarat viz., Surat, Navsari, Bharuch, Valsad, Narmada, Tapi and Dangs. To provide professional manpower and technological backup for the growth and development of agriculture, this iconic educational and farmers' welfare institute of the South Gujarat, presently runs 14 Colleges (8 Degree Colleges and 6 Polytechnics) imparting Diploma, UG, PG and Doctoral Degree Programmes in the Faculty of Agriculture, Horticulture, Forestry, Agribusiness Management, Agricultural Engineering and Biotechnology. Most of these Degree Colleges of NAU are duly accredited by "National Agricultural Education Accreditation Board" of ICAR, New Delhi. Another unique feature of this university is that it imparts vocational education and training to rural youths through Short Term Certificate Courses in Agriculture, Horticulture, Livestock Inspection, Animal Husbandry, Bakery, Landscaping & Gardening, Photography, Turf Grass Management and Fisheries through Agri-Clinics for Horticulture and Agricultural Schools, LITC, Bakery and Gardner training centres. Further, there are 25 Research Centres at 15 locations to carry out need based fundamental, applied and verification research on mandate crops viz., paddy, sugarcane, cotton, sorghum, small millets, mango, banana, sapota and vegetables. Giving top priority to agricultural research, NAU Scientists have developed 70 varieties in 21 crops and 542 technologies. The research stations of NAU have received Best Performing AICRP Centre on Fruits (2016), Small Millets (2017) and Tuber Crops (2018) and Sugarcane (2018). At present, a total of 19 AICRPs including 3 voluntary centers are operational at NAU. NAU extensively reach to the farmers and cover sprawling South Gujarat through 5 Krishi Vigyan Kendras located at Navsari, Surat, Waghai, Vyara and Dediapada; and Sardar Smruti Kendra (Navsari), Agricultural Technology Information Centre-ATIC (Navsari), Agriculture Educatorium (Navsari), Tribal Women Training Centre (Dediapada), Agro ITI (Navsari) and a Training & Visit scheme (Navsari). NAU has organized 30,000+ activities including FLDs, Farmer's Day/Field Day, Farmer's Shibir, Educational Tour/Field Visit, Farmer's Meeting, Krishi Goshthi, Seminars/Workshops for Farmers, On Farm Trials, Veterinary Clinical Camps for benefitting enumerate farmers and farm women since its inception. In fact, the phenomenal growth of farming sector in Gujarat is largely associated with exemplary mode of transfer of technology activities, delivered at the farmers' doorsteps, as well as supply of essential inputs and literature through single window delivery system. Central Library of University has consistently received National Awards including two most coveted recognitions by ICAR-CeRA viz. Best Usage of "J-Gate@CeRA" award (2018) and Best CeRA Ambassador Award (2019) for West Zone. NAU, Navsari has recently signed an International MoU with Accrued Gains Pvt. Ltd., Botswana for the commercial scale production and marketing of Banana Pseudostem based Organic Liquid Nutrient "NOVEL" (internationally patented technology) in entire Africa.

Further this technology has also been licensed to 11 private companies of Gujarat and 8 of Maharashtra. Moreover, a World Bank funded and ICAR implemented project under CAAST component of NAHEP entitled "Establishment of Secondary Agriculture Unit at NAU, Navsari for PG Students and Farmers" has been implemented since 2018. At present, total of 11 Experiential Learning Units (ELUs) funded by Education Division of ICAR are functioning for imparting 'hands on training' and providing an opportunity to 'earn while learn' to students of various faculties. Truly speaking, with the forward looking initiatives of NAU in education, research and extension activities; NAU is serving as the instrument of bringing social transformation in and around South Gujarat region. All these activities basically focus on productivity, sustainability, and improving the socio-economic conditions of the farming community.

Changing Role Dynamics of LIS Professionals In Digital Era Changing Face of Libraries and Librarians

Today, in the nail biting competitive post globalized landscape, we are living in the age of discontinuity. Hence, the scenario across the world is undergoing a sea change. The trend of modernization of industries / institutions / organizations across all spheres has set in, the market horizons have stretched across the globe and the bases of competition have also changed. Heavily dominated by technological advancements, scientific innovations and information and communication (ICT) tools, the modern day organizations all over the world have experienced complete transformation. The new face of the organizations has come up with profound changes in the nature and working of all cadres of professionals. The academic sector can't be an exception to this. The roles and responsibilities of any employee working in academic setup has also undergone a paradigm shift; be it the teacher, researcher, extension educationist, administrative staff, other non-teaching staff or even LIS professionals. Further, if we closely look at the working of libraries in contemporary era, one must acknowledge the fact that the library environment has changed drastically over the past few decades. With the increasing adoption of ICT tools, the library environment has undergone a paradigm shift and moved from traditional to computerized to the digital library in the present era. With such rapid changes, the LIS professionals are also experiencing a sharp shift in their work profiles [4]. Today, the LIS professionals are facing more challenges due to rapid adoption of ICT in HAEIs [5].

University libraries or libraries of HEIs are usually among the most advanced in terms of developing electronic based services. Many have large collections of electronic journals, as well as sophisticated searching tools catering to the needs of various stakeholders. Special Library Association in 2008 identified the roles of librarians to include development and maintenance of a portfolio of cost effective, client valued information services that are aligned with the strategic directions of the organization and client groups. Building a dynamic collection of information resources based on a deep understanding of clients' information needs. Gathering evidence to support decisions about the development of information services and products and maintaining current awareness of emerging technologies. Other responsibilities include assessing and communicating the value of the information organization including information services, products and policies to senior management, etc. In nutshell, gone are those days when the LIS professionals were found seating idle in their chairs and cabins. The modern day LIS professionals are not merely serving as the general administrators looking after the 'Depository and Supply Centres'; but they have been playing multitude of roles, especially as a Knowledge Manager and more importantly as a Strategic Partner for fulfilling the mission and vision of any Higher Education Institute (HEI) in general, and of an institute of higher education and learning like a University. These LIS professionals are serving as the "Knowledge Managers" by successfully managing the knowledge centres - the library of any academic institution and satisfying the hunger of the true knowledge seekers on one hand and as the "Strategic Partner" by coordinating the development plan on the other. Off late what has made the libraries and the LIS professionals even more central components in a University; is the growing concern of transforming Indian Universities into World Class Universities with institutional ranking at the national and state level in India.

As far as HEIs or Universities in Gujarat is concerned, three such ranking frameworks are worth mentioning. The first is the pioneering initiative of the National Institutional Ranking Framework (NIRF) launched by the Ministry of Human Resource Development in India on 29th September, 2015. This framework outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations broad understanding arrived at by a Core Committee set up by MHRD, to identify the broad parameters for ranking various universities and institutions. The parameters broadly cover "Teaching, Learning and Resources," "Research and Professional Practices," "Graduation Outcomes," "Outreach and Inclusivity," and "Perception" [6]. Second is the Gujarat State Institutional Rating Framework (GSIRF), which can be considered as a pioneering attempt towards creating world class institutions in Gujarat by using a highly credible & transparent framework based on objective data [7].

For the four State Agricultural Universities (SAUs) of Gujarat viz., Anand Agricultural University at Anand, Sardarkrushinagar Dantiwada Agricultural University at Dantiwada, Junagadh Agricultural University at Junagadh and Navsari Agricultural University at Navsari and the recently developed Kamdhenu University at Gandhinagar; the third ranking framework - Ranking of Agricultural Universities instituted by the Indian Council of Agricultural Research (ICAR), New Delhi matters more. Every year, this is issued by the Agricultural Education Division (EQR Section) of ICAR, New Delhi.

Significance of Primary Work Attitudes of LIS Professionals

Given the multitude of roles being played by these LIS professionals and considering the ever increasing importance of multifaceted evaluation of quantitative and qualitative aspects of library in institutional ranking at the national and international level, the institutions of higher education like Universities will have to create congenial work culture and induce the LIS professionals to ignite inner urge to contribute their level best.

This will ultimately pave way for transforming the institute/university into a world class institute/university. In this context, taking care of the stress level of the LIS professionals has emerged as the central concern. The toll of stress among the LIS professionals has become the top most concern, as these cadre of professionals need to maintain cool and calm composure all the time with courtesy, alertness, promptness, professionalism and above all empathetic outlook to continue to excel in their noble profession. Ironically, the LIS professionals - ideally one of the strongest pillars of any premier academic setup, but the much ignored cadre of professionals, are facing a lot of organizational role stressors; which in turn adversely affects their motivation, job satisfaction, job involvement, organizational commitment and performance.

LIS professionals' job satisfaction, job involvement and organizational commitment - the three primary work attitudes are extremely important. These three primary work attitudes, with their impact on most of the work related outcomes like absenteeism, employee turnover, productivity, wastages, rejection rate, complaints, grievances, indiscipline or divergent behaviour with stakeholders, workplace negativity, etc.; need to be taken care of for creating not only successful libraries, but also pleasing, satisfying, live and vibrant knowledge centre sort of libraries. And, for achieving higher levels of these three work attitudes, the HEIs/Universities needs to make the LIS professionals feel that they really care for them. They should be provided with all the things that they expect to have; and not the things that the authorities feel they ought to have or what they can afford. In a sense, the academic institutions must emphasize on the qualitative aspects of the work life of the LIS professionals for ensuring their happiness.

Further, one must understand the fact that in the globalized era, given the amount of time and energy people expend at their workplaces, it is important to ensure that they feel satisfied about their work life. Since job/work occupies an important place in the total life space of any employee; affecting him/her in variety of ways, such conditions generating feeling of satisfaction and happiness are likely to affect not only their physical but also their psychological, social and spiritual being [8]. Considering this only, perhaps, the study of human behaviour at work has remained the focal point of considerable research over the years in Industrial Psychology [9].

Thus, if organizations are concerned about building and sustaining high performing work culture through their people, it seems inevitable that they take care of their employees; that too in right spirit, and not only in words or on paper. So, if an organization focuses too much on hard quantifiable, visible aspects like enhancing productivity, reducing absenteeism, employee turnover, etc., ignoring/sidelining the soft aspect of quality of employees' working life, it is unlikely to succeed in achieving the desired end of building high performance organizational system. Levering (1988) also argued the same that the profit of successful organization is not to be achieved at the expense of its employees. Realizing this, since times immemorial, organizations have been focusing on how people feel, perceive and what they think about their working life; and it has always remained a major concern area. Hence, more and more organizations are showing concern about ensuring better Quality of Work Life of these real assets who are ultimately taking care of the bottom line. This may be because of expected linkage between employees perceiving better QWL and feeling happy and satisfied and displaying greater work motivation. Consequently, their job involvement and organizational commitment would also be higher. In this regard, taking care of the stress level of the LIS professionals is increasing emerging as the central concern and the need of the hour, ultimately leading to better QWL for them. Hence, the researchers have also tried to summarize the findings of earlier studies conducted on stress faced by LIS professionals in the digital era, owing to multitude of roles played by them.

The Chartered Institute of Library and Information Professionals (CILIP) does not offer a specific library related definition of stress based on identification of specific causes arising from library and information work on its official site [10]. Bunge (1987, 1989) [11,12] also reported contradicting findings as one hand he found library work very stressful and the patrons being a cause of stress, while on the other, they are also categorized as a "bringers of joy and fulfillment".

Gill (2017) [13] reported that the LIS professionals in Digital Library Environment are left with two choices, either to manage or control the situation that impact their work and produce stress, or to allow stress to manage, as their modern day profiles is quite stressful.

Vij (2017) in his study of Management of Pressures and Stress on Library Professionals in 21st Century highlighted that many factors are responsible to create stress for library professionals like staff problem, inadequate budget allocation and management support, too much responsibility with secondary duties & heavy workload, working with changing technology, changing users' demands, etc. He even noted that the digital library environment has changed the physical structure of the job environment for LIS professionals. Due to this, sitting in front of computers for long hours, working in air-conditioned environment, etc. have also resulted in the physical pressures and stress related illness among the LIS professionals.

Shah (2015) reported number of stressors that bother LIS professionals in India including lack of job satisfaction, health issues, technological changes, personality and behavioural changes, changing library environment, changes in documentation types and procedures, changes in physical facilities, user demands and reduced staff strength. He also suggested implementing the Swami Vivekananda's philosophy for overcoming adverse effects of these stressors. Similar findings were reported by Raja (2011) [14] in his study of stress management for library and information professionals.

Popoola, Olalude and Francis (2013) observed the sources of burnout among the library professionals. The study examined that adoption of ICT by the university has made negative effect on the professionals and created the problem of techno stress. The study confirmed that there is a positive relationship between techno stress and burnout while the contribution of work values and achievement motivation are negligible.

Somvir and Kaushik (2013) [15] in their study "Occupational Stress among Library Professionals in Haryana" investigated various aspects of occupational stress among library professionals who are working in private Engineering and Management colleges in Haryana. They found that stress negatively affected the performance of employees and the work environment. It was also suggested that employees should be motivated with rewards, achievements & incentives to improve productivity which will reduce the stress among these professionals.

Ajala (2011) [16] studied work related stress among Librarians and Information Professionals in a Nigerian University and found that there were inadequate working tools and resources, librarians don't have enough and adequate working tools in their own unit, which leads to work overload for them, the ergonomic problem affects their physical health; poor job incentives or rewards; interaction with other staff, so on and so forth. Home problems were also found to be a cause of stress. Males were found to have more job dissatisfaction than the female staff; while the older staff experienced more job satisfaction than the younger staff.

McClellan (2011) [17] noted that the library profession is subjected to rapid changes and one of the prominent technological stressor among the librarians include cataloguing electronic resources.

Routray and Satpathy (2007) [18] in their pioneering study of stress management of library & information science professionals in digital environment found that there are three types stress being faced by the LIS professionals namely Technological Stress, Job Security Stress and Physical Stress. Technological Stress was described as the stress due to the development and application of information technologies. Due to rapid change in computer hardware and software, obsolescence of existing hardware and software is a common phenomenon in almost all libraries. Thus, there is the necessity to keep pace with the changing technologies which seems to be difficult due to financial, time or technological constraints.

Pantry (2007) [19] reported that library workers deal with constantly changing technology, shrinking budgets, outsourcing, excessive workload, and burnout, all of which can precipitate internal stress and conflict. Libraries are also vulnerable to stress from external sources as a result of their accessibility to the general public, welcoming atmosphere and service ethic.

Study of Elisa (2007) [20] aimed at helping people understand the impact that stress on library employees and the library as an organization. He found that the library workers are under stress and the library as an organization needs to provide training in how to deal with this issue.

Pors and Johannsen (2003) [21] noted that library directors are under cross pressure between new public management and value-based management; and highlighted various stressors for LIS professionals. Poole and Denny (2001) [22] noted that in this digital era, with use of digital media, storage space facilities have increased manifold. This has created techno stress among librarians owing to the introduction of new technologies in the library field.

Conclusion

The modern-day Library and Information Science (LIS) Professionals are playing multiple roles that can have a far reaching impact on the overall education ecosystem of the nation. Considering the changing face of libraries and changing role dynamics of LIS professionals in the digital era, they should be given due respect, regards and weightage in the overall plan of a higher education institute. Further, as a value strategic contributor, they can help the HEI or University to improve their public image and branding by securing higher rank in State, National and Global ranking.

Application of research: This research will help to understand the changing structure and nature of work profile of LIS professionals and initiate measures to make their services more fruitful to all the stakeholders.

Research Category: Library & Information Science

Abbreviations: AICRP- All India Coordinated Research Project

ATIC- Agricultural Technology Information Centre

CAAST- Centre for Advanced Agricultural Science and Technology

FLD- Front Line Demonstration, HAEI- Higher Agricultural Education Institute

ICAR- Indian Council for Agricultural Research, ITI- Industrial Training Institute

LIS Professional- Library and Information Science Professional

NAHEP- National Agricultural Higher Education Project

NAU- Navsari Agricultural University

QWL- Quality of Work Life, SAU- State Agricultural University

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Cultivar / Variety / Breed name: Nil

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Ethical Committee Approval Number: Nil

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