International Journal of Social Sciences
Citation: IJSS: **11**(02): 103-115, June 2022
DOI: 10.46852/2249-6637.02.2022.7

An Empirical Study on Technology Adoption and E-Learning Management System of Agricultural Educational Institutes of Rajasthan

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Received: 14-03-2022 **Revised:** 29-05-2022 **Accepted:** 05-06-2022

ABSTRACT

The paper entitled *"An Empirical Study on Technology Adoption and E-Learning Management System of Agricultural Educational Institutes of Rajasthan"* was carried out both primary as well as secondary data. Higher education is no longer defined by the practice of just sitting and soaking up information in traditional lecture halls. Instead, the development of new technology has made it possible to engage in the active building of knowledge in more virtual environments. These changes in the nature of the learning environment have an impact on the education of tomorrow's business leaders. In spite of this, research on technology-supported management learning and its implications for management educators is splintered and uneven across study fields. The findings obtained in the disciplines of educational psychology, educational technology, higher education, and management education are organized and incorporated into this article via the use of a methodical technique that was developed specifically for this purpose. Because of this, we are able to get thorough overview technology-supported management learning.

HIGHLIGHTS

- Higher education is no longer defined by the practice of just sitting and soaking up information in traditional lecture halls.
- In rural areas there is lack access to the educational opportunities made accessible by contemporary technologies.
- This research is based technology-supported management learning and its implications for management educators is splintered and uneven across study fields.
- Technology has taken over the educational system, interactive physical classes are still considerably more effective at helping students learn subjects.

Keywords: Education institutions, Technology etc.

The advancement of technology throughout today's world has resulted in the development of innovative strategies for the lesson. It has been shown that introduction of ICT to learning environments makes education more student-centered, promotes teamwork, and stimulates improved teacher-student contact. In addition for the kids' education to go toward growth, innovation is the primary assistance that they may rely on. The use of information and communication

How to cite this article: Sharma, S., Singh, G. and Isher, A.K. (2022). An Empirical Study on Technology Adoption and E-Learning Management System of Agricultural Educational Institutes of Rajasthan. *Int. J. Soc. Sci.*, **11**(02): 103-115.

Source of Support: None; **Conflict of Interest:** None

technology with the potential to bring about favorable improvements in educational settings (ICT). "ICT" is an acronym that stands meaning "digitalization," and it is described as "a broad range of technical tools and training used to connect as well as to generate, transmit, store, and handle data." The field of agro education makes use of a wide variety of ICT methods, some of which include videoconferencing, video-conferences, email, social networks, television, radio shows, interactive radio therapy, voice based systems, and many more. In this age of information, communications (ICT) has predicted new type of communication behaviors and the transformation of data. There is little doubt that the use of Technology has had an effect on the amount and efficiency of research as well as teaching for agricultural education. The collaborative, creative, and interesting material that is made possible by ICT has the potential to make student learning more successful. Additionally, ICT may provide real chances for more efficient education. Data and Knowledge Technique offers great ability to expedite, enhance, but also develop capabilities; stimulate attempting to teach situations; help learners relate their learning opportunities to work tends to perform; endorse the forming of financially sustainable laborers for the future; result in improved of agricultural practices and rural communities. offers chances for connection here between educational institution and the rest of the world, improves drastic transformation in teaching links, and increases student learning in agro educational institutes.

THE FORMATION OF THE AGRICULTURAL HIGHER EDUCATION

Agriculture played a very significant role in that though lives of people of humanity; however, agribusiness as a science discipline did not come into existence only until 19th century, despite the fact that several components of agriculture now also existed in all other research fields, such as within the context of genetics. Agriculture played a very vital role in this same life of humanity. Even before the science nature of agribusiness was acknowledged and also the agricultural production higher education institutions began to operate protest farms, they had already been around since the late 1700s. Farmland fairs have become very important discussion boards for the handover of expertise in the field of agriculture. During the nineteenth century, Hungary saw a shift in public sentiment about agriculture as a whole, and this coincided with the beginning of agricultural education there. Before that time, the common belief among the people was that agricultural was a sort of occupation that boys could learn via their dads and that there was little need for such a formal training in this field. However, throughout the nineteenth century, scientists came to the conclusion that in attempt to reach the ever-evolving requirements of society world in general, a higher degree of knowledge is required. Even after a number of shifts in focus, the importance of tacit and explicit knowledge within education remains of critical significance.

However, despite centuries of hands-on and completely informal education in agricultural, the contemporary perspective opted to remove the education first from local scale. Despite this decision, farms, and especially family farms, have not lost their significance in the educational process. A more organized and methodical framework for agricultural education was produced as a part of the recent educational approach. From the other extreme, the translation of the actual skills was still organized on estates, and in most instances it isn't on the farmland that were owned by the students' family. During the strategy process for higher education, each nation is required to make a decision about the fields of study that it intends to fund. As component of this organising, the country or the govt is required to ascertain most critical data pertaining to postsecondary learning. For instance, they are required to publish its criteria again for child ratios, the quantity and percentage of the faculty members who grab a scientific extent, and prescribed medications for the good implementation of universities. But at the contrary hand, when seen from a perspective that is not institutional, it is the state subject to choose that should have authority over the syllabuses of education. Supervisors have the ability to delegate that authority to the academia or, alternatively, to the customers. Politicians now have the responsibility of deciding the appropriate subject matter for school in process of adapting it to the altering socioeconomic requirements articulated by the players involved.

To better understand the primary function that each university and university college play in society, it is necessary to segment the educational responsibilities among the many institutions that get funding from the government. In this manner, students and professionals partners alike will be able to chose where to research, where and when to educate personnel, and what to discover other partners with whom to collaborate. The value of word knowledge within education has decreased, while the value of scientific inquiry and using a multifaceted team has increased. As a result of the rapid advancements in technology, there has been an increase in the frequency with which agriculture have been subjected to the process of reformation. As a consequence of this, it has become increasingly crucial for children and universities to possess the resilience that helps develop as quickly as is humanly possible.

Scope of Educational Technology

A parallel may be drawn between this idea and the area of online education. If audible aids are the only kind of instructional technology that are taken into consideration, then its application area is restricted to only those.

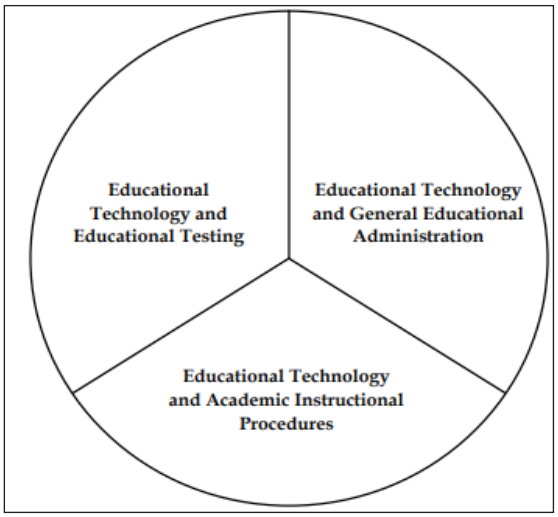


Fig. 1: Educational Technology

If education product is growing to be a kind of programmed teaching, therefore the only types of learning objects that fall under this category are those that are computer-based. If we think of it as a methodical technique, then we can see that it covers a very large area. They days, sound aids and computer-based teaching are not what we mean when we talk about online education; rather, that those are the components of online education. As both a result of the fact that online learning is now regarded a full science, the area has become very large and vast.

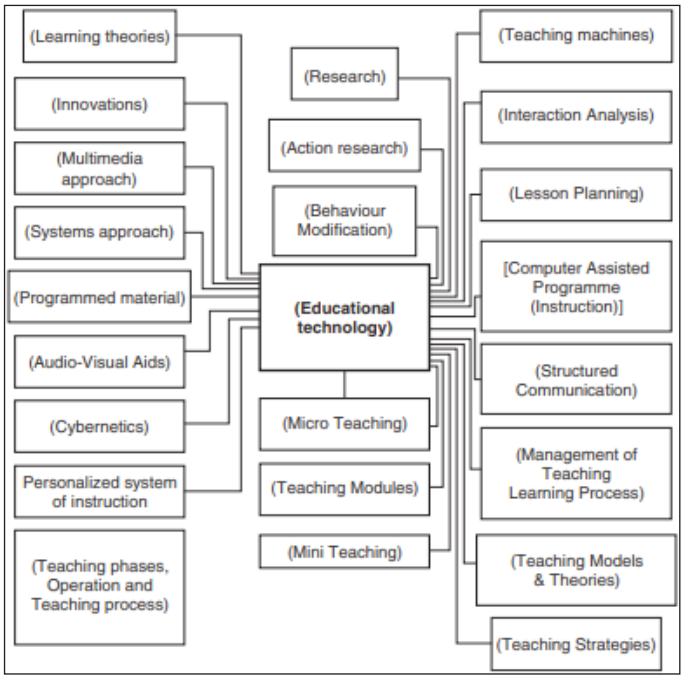


Fig. 2: Area of Education Technology

Educational Technology in the Classroom

As technology becomes more pervasive in our everyday lives, there is a corresponding change in educational practices. Technology has evolved to the point that it is now an expected component of the educational experience and even a prerequisite for certain students and instructors. "The majority of traditional educational technologies are distinguished by their distinctiveness, stability, and clarity of function; but, as time passes, these technologies attain a clarity or vision, become routine, and in many instances were not regarded as techniques." Teachers are obligated to make use of pedagogical technology in schools in an effort to acclimate their pupils to media and technology in such an effort to better prepare them for live in an online realm. As a result of this discovery, practically all

school districts are now providing students their own electronic devices and asking instructors to include the usage of these devices into their lesson plans. Because of this, there are still many unanswered concerns about the usefulness of technology in classrooms, the capacity of instructors to utilize it, and also the ability of students towards learning with something in U.S. public schools, just than there were in the classrooms of the past.

A Brief History of Technology in the Classroom

The use of technology in teaching has also advanced along with its development as a field. Alongside each new generation and kind of technology, questions about its function, utility, and suitability for educational settings made their way into the conversation. During first decades of the 1900s, film strips began working their way inside schools; nevertheless, the usage of these strips offered a number of challenges for both students and instructors. Access was restricted in very many school settings because there was a shortage of dependable equipment; instructors were unable to adequately use the devices; film was pricey; teachers struggled to find motion picture that was compatible with the curriculum they were teaching; it was hard to find motion picture that fit through into capacity and maintenance requirements of the motion picture. Because of the difficulties associated with this type of detail, it was eventually phased out of class use at the same time as radio was introduced there in the early 1900s.

Broadcasting had its problems from the beginning, despite the fact that it was originally more helpful and simpler to install. But by 1930s, both regional and national radio stations had developed educational programming that was utilized to enhance the teaching that was provided by teachers. Despite the fact that radio was simpler and more efficient and hence better liked than film, instructors still 've compiled of concerns, which included the following: a large starting cost of machinery, a denial of available to the machinery, frequent maintenance on the recipients, and insufficient content coated through radio that was in line the with education system. As a result of these factors, the radio was phased out of widespread usage in online education from the year 1950 and became obsolete with in field of education. This created an opening in the field of e - learning for the subsequent kind of technology known as television. Video entered the classroom about the middle of the late 1940s, and it quickly became evident that it was both more successful and more widely accepted than either film or audio. Nevertheless, it was as if the instructors were the last ones involved of application, when they had slight say over how the new technologies should be integrated into the curriculum. This resulted in problems that were very similar to those caused by the earlier advances in technology in the school environment. Although the worries expressed by teachers were warranted, the radio has maintained its place as an element of instructional today's technological classrooms as a result of the final creation of educational content. Another piece of technology that has lasted the test of time and attention in the classrooms is the computers, which first made its appearance there in the nineties. A computer raised similar worries among educators as did cinema, radio, and video; but, because just like the widespread computers in fields other than education, they will continue to be present in classes. In 1983, there was one computer for every 125 students. However 2008, the ratio has increased to one computer for every three students, and that is continuing to rise when more districts implement one computer per student.

Current Educational Technology in the Classroom

(a) Hardware

The teaching method that is available today serves a variety of objectives and may either be in the type of computer systems. The actual component or element of a piece of tech, including the apparatus or the equipment, is referred to as the "electronics." Tablets, like Apple's ipads, are always the device or tool of selection for usage in online education because of its adaptability, touch screen characteristics, and subscriber features. Chrome, Google's take on a traditional laptop at home, have been gaining ground in educational institutions over the last several years owing to a number of factors, including its cheap price, straightforward and versatile management

system, and adaptability both within and without the classroom.

(b) Software

After the devices have been introduced into the lecture, the appropriate software must be located and installed in order to make those devices beneficial to the teachers and students. The software consists of the windows os and any other applications that are necessary for it to run. A number of applications and internet platforms that were developed for educational and recreational reasons have seen widespread adoption in educational institutions. As a result, the majority of classrooms in schools nowadays make use of a variety of digital tools. However, based on the public education system, the incorporation of instructional material is often accomplished in stages owing to the technological and financial challenges involved. The use of cloud services, 3D printing, mixed reality, and VR technology were all popular types of applications in the school in 2017. The development of software capable of video streaming has led to an increase in the number of students enrolling in online classes at the school schools.

(c) Internet

The acquisition of gear and also the software updates are both done, but nobody can function effectively without the advent of internet. Connectivity may be provided through conventional or wireless connections, while wireless connections are more common for student devices. When many schools went through the process of converting to a one-to-one model, they purchased equipment for their students. However, they soon discovered there isn't enough bandwidth, which is the power of devices that a connectivity can endorse for the transferring of information, to provide mobile broadband to those systems at the same time. In addition, problems caused by the lack limited internet connectivity are not unique to the university since some of the freshman class does not have internet connection in their homes. During 2019, 77.4 cent of both the total population mentioned receiving internet connection in their residences, while 63.5 cent reported experiencing a mobile phone service contract or data package that included internet service. Which leaves between 22 and 36 percent of people without the tools to finish online coursework or tasks that need internet connection from outside the classroom. When organizing exercises for pupils to complete utilizing various electronic devices, an educator has to keep the following considerations in mind.

The 1:1 Computing Initiative

One to only one computing, often known as 1:1 computing, is indeed an educational program in which the school gives each student their own electronic device, such as a laptop computer, tablet computer, or cellphone, in an effort to just provide the child a more individualized learning experience. Bring your personal device (BYOD), wherein the students are responsible for supplying their own electronic equipment, has grown considerably in recent years and is unquestionably a more cost-effective strategy for the local school system. Since the inception of the 1:1 model, extensive research has been carried out and posted. Many of these studies have found that student must be able for using technology with in classroom demonstrate increased involvement in the material being taught, improved collaborative learning, increased compelling reason individually, and enhanced technology and mobile skills. Irrespective of the type, these observations have been consistent. The writers of these research also concluded that favorable student results are the consequence of instructors employing online learning together in self-assured and competent manner, showing to their pupils how to properly utilize the technologies to enhance study.

Since the mid-1990s, the concept of one computer for every student is also of attention in the field of education; nevertheless, it has only become a possibility in the most recent years owing to the accessibility and widespread use of small handheld computing. Whenever an education department makes the choice to install one computer for every student, there are often several different arguments that support the decision. This then highlights key goals, which are often kept by school authorities, for starting 1:1 in an education department: lessons customized for self-paced education, literacy and pre - vocational skills, incorporating technological tools

to encourage finalization of intricate and inventive tasks, and constructing and strengthening correspondence between parents, educators, and teachers. On paper, the implications appear compelling; nevertheless, if students and instructors do not have access to the appropriate foundational knowledge, 1:1 deployment and other forms of ICT in the classroom will also not be advantageous to the users of these tools.

There is far more to program than just providing students with a gadget, since that is the responsibility of the instructor to demonstrate to the child how to make educational use of the device. Additionally, the instructor is responsible for developing and implementing a curriculum that makes use of technologies in a manner compatible with the students' devices. The skill of both the university to implement new a plan for such technology integration here on implementation of the curriculum is crucial to the growth of the one-to-one computing initiative. This plan should include, but that is not constrained to, professionalism for the teaching staff that focuses on the innovation. It is important to keep in mind the role of the educator despite the rapidly advancing and evolving technology. Educators often report that they are left with the impression that they do not belong in the updated environment since there is a shortage of training opportunities that are specifically geared toward technology.

Integration of Educational Technology in Classroom Instruction in Higher Agricultural Education

Over the course of the last several decades, developments in technology, most notably in ICT infrastructure, have brought about changes in teaching techniques by making school education more focused on the individual student. The role of the student has evolved from one of a passive observer to one of a participant as well as an occasionally expert. The learning of facts has given way to a greater emphasis on inquiry, innovation, and exploration as the primary objectives. It is essential for teachers, along with understudies, to stay abreast of emerging advancements. This is because the strategic application of experience in the area of classroom teaching has the potential to be a powerful step in closing the understanding gap that exists between classmates and their instructors. The use of technology in the classroom alters traditional methods of instruction by providing educators with more efficient tools to communicate with students of varying learning styles and to evaluate students' comprehension in a variety of ways. Well over course of many years, both the idea and the use of ICT in the classroom (ET) have progressed. When the phrase was initially formed, it referred meant "ICT in classrooms," which implied the need for a range of acoustic aids for cause of education. However, as time has passed, the understanding of the word has evolved. The breadth of educational technology (ET) broadened as a result of ongoing technological developments, and indeed the phrase "future technologies of education" became more popular during this time period. A new facet was introduced to E.T. with the introduction of digitally convergence media, which fostered interaction and connectedness and promoted both. The challenge of when to shift the views and behavior of teachers in Indian teaching methods within the jurisdiction of agrarian university system towards full implementation erg is becoming a more significant one as if this sector continues to quickly expand. The use of instructional technology yields benefits not just for students but also for their instructors. It does this by attracting more of the students' notice and making the learning process more participatory. It provides support for innovative educational techniques, including group work, shared intelligence, critical reasoning, and higher level abilities, among others. But at the flip side, technology also boosted instructors' productivity by delivering more truthful data in a shorter amount of time and enabling them to rapidly develop materials with a better appearance that were more "suitable for the students."

In the end, it improves not only the performance of students but also that of instructors and produces a more engaging and participatory learning environment. However, incorporating technology into the instructional process in the class seems to be a complicated process. Mastering the technology, incorporating technology into the lesson, and employing integration of technology to improve student learning are all components of this approach. The teachers' attitudes is a deciding element in the employment of technologies in classroom

instruction. This attitude, in return, is impacted by a multitude of environmental aspects connected with an instruction in their personal and work environment. Because it needed a practical emphasis and intended to foster entrepreneurial aptitude, the merger of ET into the increased farm education system was given more significance.

It is possible for educators, regardless of age grouping or sexuality, to also have a favorable attitude toward the incorporation of instructional technology. However, the amount of work satisfaction, ego with technology, organizational citizenship behavior, and training may favorably reduce the durability of an outlook toward the usage of online education throughout the period that this is being used for classroom teaching. The administration major educational establishments should maintain a heightened level of vigilance over the degree to which teachers are committed to their organizations, self-sufficient in their use of tech, and happy in their jobs. As well as the actual, effective utilization of online education, sufficient steps must be taken to maintain and review job satisfaction levels, technology identity, and commitment. These steps should be chosen to take throughout conjunction with actual, effective utilization of online education. It is necessary to determine the other important elements that impact both the views of teachers toward its use of instructional technology in classrooms and the actual usage of such technology by students.

Challenges with the Integration of Educational Technology

High Cost of Educational Technology and a Lack of Funding

The rising cost of access brought on by technological advances is one of the obstacles standing in the way of many school systems' efforts to incorporate instructional technology. An investigation that took place in the Kansas SBAE schools in the year 1989 indicated that a shortage of money for both operating systems contributed to the absence of computers. Likewise, and more later, a research that was carried out in schools participating in the Alabama State Board of Educator Endorsement (NC SBAE) found that the cost of using technology had been the primary reason instructors did not do so. An impediment that prevents many public schools from completely integrating teaching methods is the expensive cost including both equipment and software, particularly addition to the absence of financing that is available towards online education from public schools. The most up-to-date and cutting-edge technology often comes with the greatest price tag, while lesser affordable technologies tend to become obsolete in a few short years at the earliest. Because of this, some school districts are unable to afford to make data driven decisions. As was said before, it's been a concern since the introduction of new forms of instructional technology in schools. Yet, if the aim is 1:1 but still the expense is too much of an obstacle, Mdm is an alternative that may help the school system adopt 1:1 even if the goal cannot be achieved. Include a college tuition to bear the expenses of the particular program in the event that a teacher wishes to make use of a particular application or piece of software that is not pre-installed on the computer or whereby the institution will still not pay. This is one of the options available to instructors.

After this, the expense of digital learning and an inadequate funding for that though wouldn't be the primary priority of this study; however, it should have been taken into account that influences the acceptance but also preservation of or inform to the equimolar initiative for using educational software district-wide.

Teacher Self-Efficacy with Educational Technology

Because instructors are sometimes left in some kind of a chaotic state as either a result of never-ending waves of changes, it is imperative that the requirements of instructors not be disregarded within the continuously shifting environment of technological advancement. Teachers have a poor sense of self-efficacy when it comes to its use of instructional ICT in classrooms because they are in a constant state of uncertainty and have little to no prior experience with online education. The majority of this investigation was started gathering at such a time when so many instructors had already completed their degrees during an era and there was less of an emphasis placed on the introductory capacity of academic

technology integration. Like a result, many teachers lacked the well before training that was associated with academic integrating technology.

Lack of Educational Technology Specific Professional Development

A child's lack of preparation here about how to utilize educational technology appropriately, or often enough, in certain situations, is another barrier to using educational ICT in the classroom. The implementation and use of the innovations to their utmost potential has proved to be challenging and also at times even impossible for instructors when they have not received the appropriate education. In case of increase cost of the technology, adequate training for instructors requires an additional expenditure for governments and just a time allocation from teachers, both of which are seen as further strikes against online education in very many people's views. There is a significant body of research that identifies inadequate access to training opportunities and retraining as one of the primary causes of insufficient use of ICT in teaching and learning settings.

The failure of teachers to participate in the design of the integrating technology has led to the failure of many technological improvements that were made at that time. Instead, authorities have advocated for the acquisition of technological equipment and the incorporation of this equipment into educational settings because they recognize its significance. The dearth of training and academic development opportunities for teachers that are centered on computer and whether it can be used in the classroom is, nonetheless, a growing concern in the field. The capacity of the professor to make use of such a technology being implemented in the school is the single most important aspect adding to the implementation of technological tools.

Agricultural Education - Present Setup

The historic move that launched the formation of agricultural colleges in the country was really the founding of the Masters Degree Department at the Indian Agricultural Research Institute (IARI) around 1958. Nowadays, we get a network consisting of one Main College of agriculture, 53 Agricultural Campuses (SAUs, including fourteen specialized Animal health and Mammal Sciences but also Horticulture and Reforestation Sciences Academic institutions), five Research institutions having Presumed (DUs) prestige (five or six of them seem to be CSIR Institutes: Company has presence, New Delhi; IVRI, Invest in the development; NDRI, Haryana and CIFE, Chennai and, the fourth Allah . The institutions follow a pattern for state grant institutions in the United States and integrate teaching, research, and extended education into their curriculums. As a result, they have been instrumental in the expansion of the farming production in the nation. Education is provided by the Perth in 11 primary fields of study at the university level and around 95 courses at the reply level. Most AUs have approximately 265 component colleges that have approximately 35,000 pupil intake capabilities. It is estimated that around 55 percent of students in increased farm education come from a poor backgrounds, and that approximately 36 percent of students are female. Roughly 100 privately run colleges, the large number of which are affiliated to broad sense universities while others, particularly inside the Cities of Mumbai and Chhattisgarh, are affiliated to Involving, teach increased farm education including over 10000 pupils each year. In addition, the Indian Institute of Technology in Kharagpur provides instruction in the case of agricultural mechatronics.

Role of ICAR

The Indian Council of Agricultural Research (ICAR) includes assistance for policy, QA through accreditation, popular learning regulations, revised and contemporary curriculum curricula and shipment systems, advancement of faculty professionalism, promoting excellence thru scholarships/fellowships, Boutique areas of success, practical training, National Professors, Federal Fellows, Emeritus Astrophysicists, admissions of pupils through All Kerala competitions, transformation of farms, information technology support but also up-gradation, etcetera. On the other hand, it is common knowledge that the primary assistance comes first from governments of the various states.

In 1960, that govt chose Dr. Ralph Walter Cummings to lead an Agriculture University Group. This was done with the intention of laying the legislative groundwork necessary for the construction and operation of agricultural institutions. In 1962, that Committee presented its findings to the government in terms of an Act. This idea was subsequently expanded and refined by the ICAR, which resulted in the publication of the first Proposed Law for Agricultural Schools in 1966. Our goal was to contribute to the establishment of consistency in the Statutes that regulate SAUs as well as their governance structures and organizational structures. The Sample Act went through three rounds of revisions in the years 1984, 1994, now 2009. The money from the Center and the City was sufficient for the building of outstanding infrastructure even during early period of the formation of SAUs. This included the creation of laboratory services, equipment, bookstores, and research ranches. Up until the Iiia Plan, actually nearly 33 percent of both the ICAR expenditure was dedicated to strengthening farmland eduction, but it thus is the chief factor that the majority of the academic institutions that were established throughout that time period have extensive network, which itself is contributed significantly to with the Csir. The percentage of the Csir budget allocated to agro education increased from 8.9 percent with in VIII Project to 14 percent there in X Project, and then to 21.5 percent in the Xii Plan. The total amount has grown from ₹ 224.69 crores with in IX Program, ₹ 1019.85 rupees with in X Program, whereas Crore. 2585.00 rupees was the amount allocated with in XI Scheme.

Yet, as time went on, the lot of colleges as well as the quantity of institutions and sections that were a part of those institutions expanded. However, the financial allocations did not rise at the same pace. In addition, the sectoral segmentation of Receive similar into several topic areas has been a contributing factor in the rise in their total number as well as the decline in their economic proportion. As a direct result of this, the overall economic health of Receive similar is really in a vulnerable state. It is important to increase financial assistance mostly at the Central and the Provincial level in order to acquire and maintain expanded capacity for technological development, excellence of science and research. This can only be done by increasing the amount of money available at both levels.

ICAR got the ball rolling on a number of different initiatives to ensure that agricultural education is of high quality. Among these are the establishment of such a Norms but also Accreditation Committee, which was then followed either by formation of a Quality Assurance agency in 1996, this same revision of class curriculum by means of a Headmasters Committee, and indeed the collaboration and reinforcing of Receive similar through provision of development, among other initiatives. The Central Bank, which acknowledged the importance of elevating the standard of education, provided the Indian Council of Agricultural Research (ICAR) with financial assistance in the amount of US $74.2 billion annually through the Farm HRD Programme in order to facilitate the implementation of important educational reforms. The most significant changes that were made as a result of this proposal included the formation of a Quality Assurance agency, norms and principles for the promotion of education, institutional capacity for training and development, uptick of faculty skill, and endeavors for reducing intermarriage. These efforts included holding another All India Leading Examination per year to complete 15 percent of UG but also 25 percent of Shooting guard seat backs in all Receive similar, awarding 300 United nations Talent Scholarships there at UG stage to pupils who opted to relocate out.

RESEARCH METHODOLOGY

In order to gather population responses, research has used standardized questionnaires. Sampling methods are used in quantitative studies, such as market surveys, where outcomes can be represented in numerical form and therefore are susceptible to statistical manipulation, allowing researchers to predict future events or quantities. Quantitative survey researchers express enthusiasm that it will be accurate, factual, & effective to make judgments from analyzing results. And that's what, at least, they conclude**.** Data collection is seen as a method of regularly collecting as well as measuring data for targeted variables which will allow the related

questions to be answered and results evaluated. Both primary and secondary data has been collected. We gather data from huge groups of students and teachers from Agricultural institution of Rajasthan through survey by using a structured questionnaire/schedule.

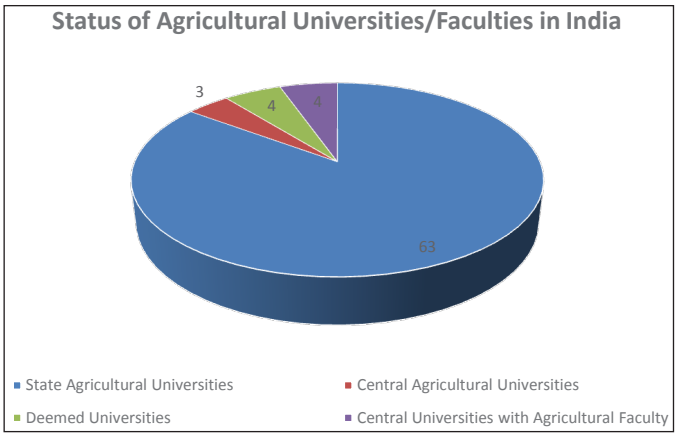
DATA ANALYSIS

Data is analyzed on the basis of data collected from faculty and students that is completely done according to the questionnaire. Data is analyzed using various statistical tools and with the help of SPSS.

RESULTS AND DISCUSSION

Table 1: Status of Agricultural Universities/Faculties in India

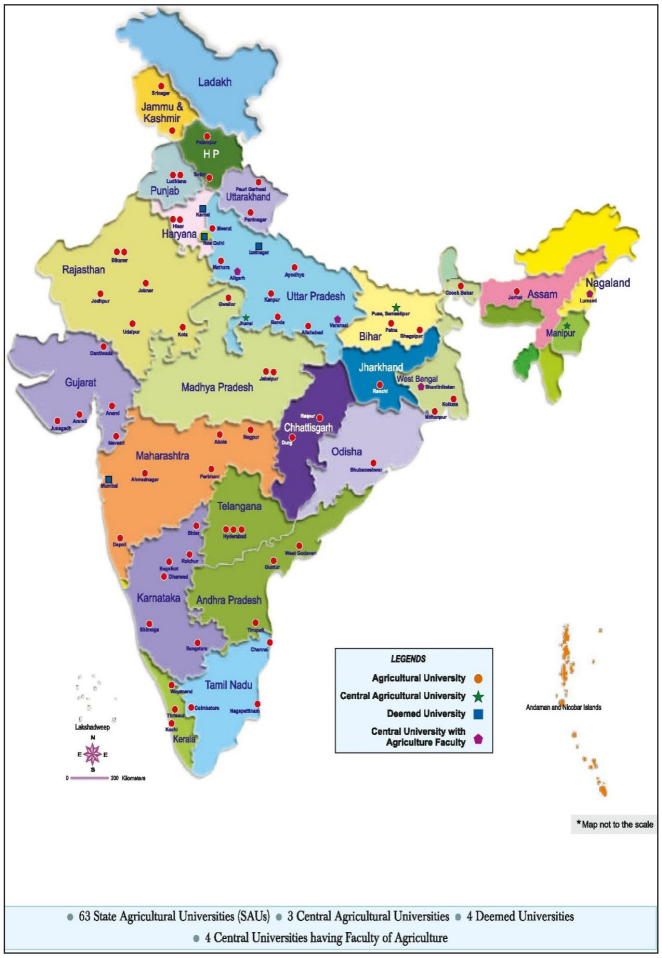
State Agricultural Universities	63
Central Agricultural Universities	3
Deemed Universities	4
Central Universities with Agricultural Faculty	4
Total	74



Source: *ICAR Annual Report 2021-22.*

Fig. 1: Status of Agricultural Universities/Faculties in India

According to the ICAR Annual Report 2021-22, there are total of 74 agricultural Institutions. Table 1 and Fig. 1 shows out of total, 63 are State Agricultural Universities, 3 are Central Agricultural Universities and 4 are deemed universities. Apart from this, there are also 4 Central universities with Agricultural Faculty.



Source: *ICAR Annual Report 2021-22*

Fig. 2: State wise Distribution of Agricultural Institution

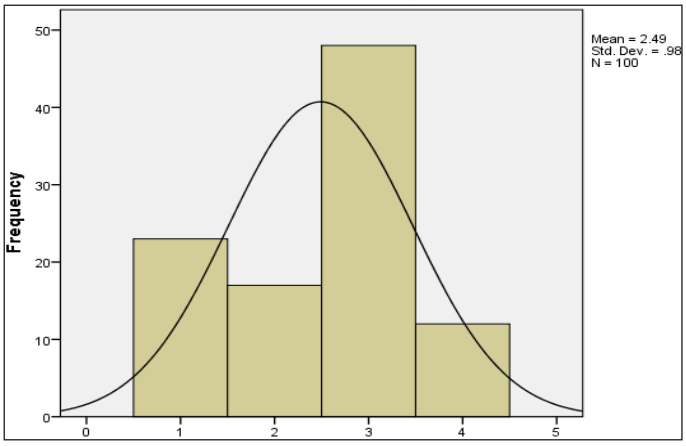


Fig. 3: Tools and Techniques used in the Classroom for Teaching

Table 2: Status of Scientist and Technical employees in ICAR and its Research Institutes and number of employees of Scheduled Castes, Scheduled Tribes, Other Backward Classes and PwD Employees

Sl. No.	Class of Post	Total Posts Sanctioned	Total Employees in Positions	SC Employees		ST Employees		OBC Employees		PwD Employees	
				No.	% to Total Employees	No.	% to Total Employees	No.	% to Total Employees	No.	% to Total Employees
1	**Scientist Posts**										
	Scientist	4451	3752	537	14.31	217	5.78	1053	28.07	28	0.75
	Senior Scientist	1295	883	59	6.68	16	1.81	112	12.68	0	0.00
	Principal Scientist	665	242	13	5.37	3	1.24	24	9.92	1	0.41
	RMP	175	97	1	1.03	0	0.00	5	5.15	0	0.00
	Total	6586	4974	610	12.26	236	4.74	1194	24.00	29	0.58
2	**Technical Posts**										
	Category I	3974	1997	357	17.88	215	10.77	418	20.93	27	1.35
	Category II	2708	1595	265	16.61	133	8.34	353	22.13	23	1.44
	Category III	755	268	28	10.45	42	15.67	65	24.25	1	0.37
	Total	7437	3860	650	16.84	390	10.1	836	21.66	51	1.32

Source: *ICAR Annual Report 2021-22.*

Table 3: Tools and Techniques used in the Classroom for Teaching

		Frequency	Percent	Valid Percent	Cumulative
Valid	Black Board	23	23.00	23.00	23.00
	OHP	17	17.00	17.00	40.00
	LCD	48	48.00	48.00	88.00
	Digital Boards	12	12.00	12.00	100.00
	Total	100	100.00	12.00	

Above table shows the data of responses of respondents on the use of tools and techniques which were used by them in the classroom for teaching. 23 percent respondents said they use blackboard, 17 percent respondents used OHP while 48 percent respondents used LCD and 12 percent respondents used digital boards in the class room for teaching.

Table 4: Tools and Techniques used in Classroom are helpful in understanding the concepts in a better way

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	65	65.0	65.0	65.0
	NO	35	35.0	35.0	100.0
	Total	100	100.0	100.0	

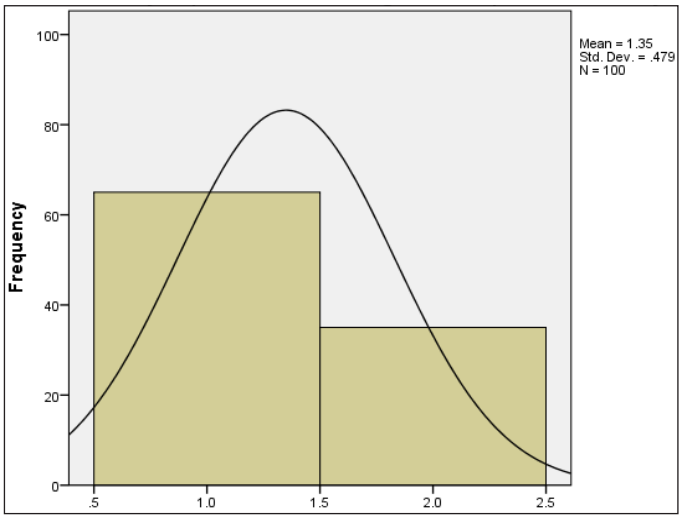


Fig. 4: Tools and Techniques used in Classroom are helpful in understanding the concepts in a better way

Table 4 includes the data of respondent's responses on whether the technology or techniques used are as much helpful to students to understand the concept of their subjects in a better way o not. In response of these questions, 65 per cent respondents said yes while 35 per cent respondents said no.

Table 5: Use of edit audio/video files according to the lesson

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	25	25.0	25.0	25.0
	NO	75	75.0	75.0	100.0
	Total	100	100.0	100.0	

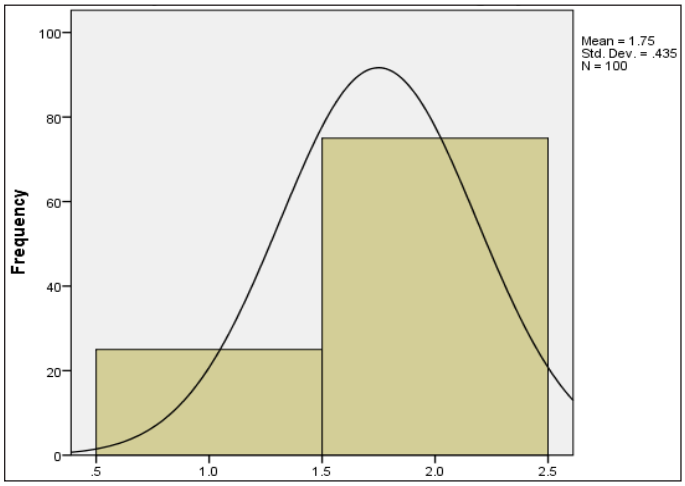


Fig. 5: Use of edit audio/video files according to the lesson

Above table includes the data of respondent's responses on the use of edit audio/video files according to the lesson. Above questions is related to the online or computerized work which were used by the teachers towards students. Above question is related to the videos or audios which were used by the teachers to understand the concepts in a better way for students. In response, 25 percent respondents said yes while 75 percent respondents said no.

Table 6: Use search engines such as Yahoo or Google

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	28	28.0	28.0	28.0
	NO	72	72.0	72.0	100.0
	Total	100	100.0	100.0	

Above table includes the data of respondent's responses on the use of search engines such as Yahoo or Google. Researcher asked about the use of search engines via teachers for students.

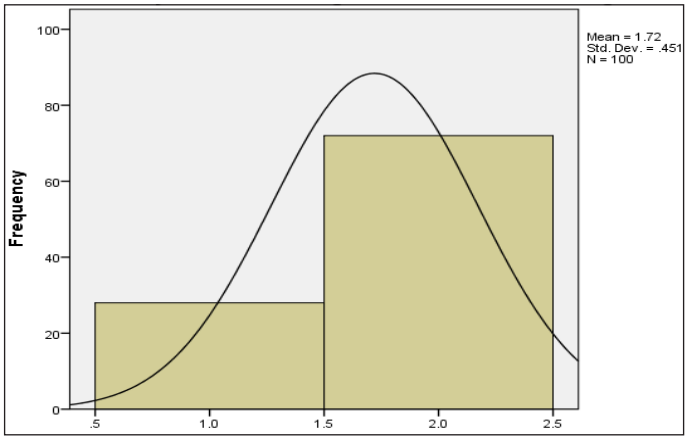


Fig. 6: Use search engines such as Yahoo or Google

In the present questionnaire the researcher include two search engine, Yahoo and Google. As per the respondents, 28 percent said yes while 72 percent said no.

Table 7: Teacher ask to submit assignments and projects by using a computer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	33	33.0	33.0	33.0
	NO	67	67.0	67.0	100.0
	Total	100	100.0	100.0	

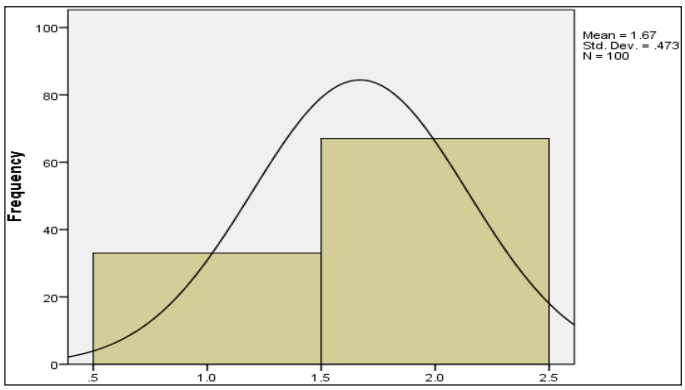


Fig. 7: Teacher ask to submit assignments and projects by using a computer

Table 7 includes the data of student's responses on whether the teachers ask them to submit assignments and projects by using a computer or not. Above table

includes the question related to the use of computer as in present time internet is one of the most useful thing for students. As per above question, the researcher wants to know about the use of computer to submit assignments. In response, 33 percent respondents said yes while 67 percent respondents said no.

CONCLUSION

Students may encounter sluggishness in the updating to their online course materials due to a lack of expertise on the part of all instructors. Particularly in this area, rural areas lack access to the educational opportunities made accessible by contemporary technologies. Several agricultural universities in this region maintain some of the online learning settings. Although technology has taken over the educational system, interactive physical classes are still considerably more effective at helping students learn subjects. In their classroom activities, such as submitting assignments and projects, faculty members have begun to employ the most recent tools and techniques. They also use the internet and technology to some extent.

REFERENCES

Keswani, B., Banerjee, C. and Patni, P. 2008. Role Of Technology In Education : A 21st Century Approach. ResearchGate, June, pp. 1–5.

Khalid, S., Islam, K. and Nyvang, T. 2020. Integrated Resources and Training Facilitation: A Strategic Priority when Promoting ICT in Developing Countries. *Contemporary Educational Technology*, **4**(4): 263–280.

Knobloch, N., Ball, A. and Allen, C. 2007. The Benefits Of Teaching And Learning About Agriculture In Elementary And Junior High Schools. *Journal of Agricultural Education*, **48**(3): 25–36.

Kőmíves, P.M., Pilishegyi, P., Novák, N., Nagy, A.S. and Körösparti, P. 2019. The role of the higher education in the development of the agriculture. *International Journal of Information and Education Technology*, **9**(9): 607–612.

Krohn, R. 2003. The role of technology in biodefense. *Journal of Healthcare Information Management (JHIM)*, **17**(3): 28–30.

Leadership for Higher Education in Agriculture Proceedings of a conference held in Amsterdam, The Netherlands, Edited by David G. Acker Iowa State University This conference was sponsored by : (1999).

Luis, F. and Moncayo, G. (2016). No Title.

Maguire, C. 2000. Agricultural Education in Africa: Managing Change. The World Bank, 1–16. http://siteresources.worldbank.org/INTARD/825826-1111044795683/20424536/Ag_ed_Africa.pdf

Maguire, C.J. 2000. From agriculture to rural development : Critical choices for agriculture education. December.

Maini, E., De Rosa, M. and Vecchio, Y. 2021. The role of education in the transition towards sustainable agriculture: A family farm learning perspective. Sustainability (Switzerland), **13**(14): 3–4.

Makwana, A.K. 2013. *Education Agricultural Education in India : Challenges and Prospects*, **2**(3): 90–94.

Meaning, I.O., Technology, E., Technology, E., Difference, E.T., Approach, H. and Approach, S. 2017. Unit- I Concept of Educational Technology.

Miles, Matthew B. and Huberman, A.M. 1984. *Nonparticipan Observation*, **3**: 33–35.

Mohammadi, D., Hosseini, S.M. and Fami, H.S. 2011. Investigating agricultural instructors' attitudes toward e-learning in Iran. *Turkish Online Journal of Distance Education*, **12**(1): 174–183.

Morris, J.G. 1975. Educational technology. *Journal of Educational Television*, **1**(2): 26–27.

Mulder, M. and Kupper, H. 2006. The Future of Agricultural Education: The Case of the Netherlands. *The Journal of Agricultural Education and Extension*, **12**(2): 127–139.

NCERT. 2006. Position Paper National Focus Group on Educational Technology. http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/educational_technology.pdf

Paper, P.K.P. Tripathi 2021. Quality Assurance in Higher Agricultural Education through Accreditation by National Agricultural Educational Accreditation Board. 1.

Pogorelskaia, I. and Várallyai, L. 2020. Agriculture 4.0 and the role of education. *Journal of Agricultural Informatics*, **11**(1).

https://icar.org.in/content/dare-icar-annual-report-2021-22 accessed on January 10, 2022 at 08:15 PM.