



**Biotica
Research
Today**
Vol 3:5 ³⁶⁷/₃₇₀
2021

Covid-19 Pandemic: Changing the Perspective of Education with Special Reference to Agriculture

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 Open Access

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Keywords

Agricultural universities, Covid-19 pandemic, Digitization,
Innovations

Article History

Received in 19th May 2021

Received in revised form 25th May 2021

Accepted in final form 26th May 2021

E-mail: bioticapublications@gmail.com

How to cite this article?

Jan *et al.*, 2021. Covid-19 Pandemic: Changing the
Perspective of Education with Special Reference to
Agriculture. *Biotica Research Today* 3(5): 367-370.

Abstract

Almost every sector has been affected by the global effects of pandemic Covid-19. The education sector is one the region that has unquestionably changed as a result of Covid-19. In India, over 32 crores students were unable to move to schools or universities, and all educational activities were halted. Instead of being an option, online learning has become a requirement. The online experience was crucial to ensuring that students continue their learning and interaction with the subjects they have chosen, and side by side ensured that schools could complete syllabus and teaching in some methodical way. It was noticed across India's Agricultural Universities, that the loss of academic learning time ranged from 210 to 270 hours per student. The Covid-19 pandemic has shown that change is unavoidable. To wash away the possibility of a pandemic, the education sector has been striving to survive crises with a new method and digitization of learning.

Introduction

The advent of Corona Virus Disease (Covid-19) has triggered a global public health emergency. In India, emergency procedures were enforced to monitor the spread of virus, resulting in restrictions on all non-essential public movements. India is one of the countries most hit by the Coronavirus pandemic. To fight the spread of the novel disease, the authorities enforced a nationwide lockdown in late March. The government tried to prevent the virus from spreading by restricting movement, but the epidemic caused devastation on the country. Many people died as a result of the virus, including some who were fighting it to save other's lives.

Some of the Major Impacted Sector as Under

Healthcare

In India, the most significant obstacle in the fight against the emerging pandemic is a lack of medical investment and healthcare infrastructure. In the midst of the rising number of cases and lack of healthcare facilities (such as a lack of beds and protective equipment), only 4% of patients in need of an ICU bed were able to find one through the normal method, according to a poll performed by Local Circles, which includes responses from over 17,000 people in 211 districts across the country. The remaining 78 percent were forced to rely on connections and clout to acquire an ICU bed.

Tourism

The Coronavirus pandemic has a significant impact on the Indian travel and tourism industry. Tour operators lost \$4.77 billion, which includes both online, and offline, as well as inbound and outward travel. The entire travel and tourism value chain is expected to lose over 5 lakh crores (US

\$65.57 billion), with the organized industry alone expected to lose US \$25 billion.

Gross Domestic Product

India's GDP fell by 23.9% in the first quarter of fiscal year 2021 as a result of the Coronavirus pandemic that has forced businesses, industries, and services to shut down in unprecedented numbers. The economy has been down across the board, from manufacturing to real estate, hotels to mining, as the economy has experienced its biggest decrease in 41 years.

Street Vendors

The unprecedented shutdown has harmed the livelihoods of street vendors who rely on being in public locations. The city's vendors lost their source of income due to the lack of people during the lockdown. Many people were unable to feed their family, resulting in hunger and misery.

Employment

The majority of recruitment has been postponed as a result of Covid-19. The unemployment rate is likely to rise as a result of the pandemic. Because of the current circumstances, there is no recruitment in the government sector in India, and recent graduates fear losing their job offers in the private sector.

Increased Parental Responsibility for their Children's Education

While some educated parents are capable of guiding, others may lack the necessary education to teach children in the home.

Educational Activity

Because people are compelled to stay at home due to the current situation, education has been hampered. Since the nationwide lockdown was enacted, schools and institutions have remained shuttered.

It was found from the various analytical sources that,

- The pandemic forced the closure of almost 1.5 million schools across India.
- According to a 2019 government survey, only 24% of households have internet connectivity.
- In rural India, the figures are far lower, with only 4% of families having access to electricity. The education ministry's funding for digital e-learning was cut from Rs. 604 crores the previous year to Rs. 469 crores in 2020-21, the year Covid struck.

Statistical Status of Education in Covid-19

The Covid-19 pandemic, according to UNICEF, has wreaked havoc on school systems around the world, affecting about 90% of the world's student population. The pandemic forced the closure of approximately 1.5 million

schools in India, affecting 286 million children from pre-primary through secondary education. This is on top of the 6 million girls and boys who had already dropped out before Covid-19. This disturbance in education has far-reaching economic consequences.

To combat the disruption and damage, educational institutions around the country have embraced digital education as a way to fill the hole left by classroom learning. With this, India's formerly marginalized digital education took centre stage and is now progressively being absorbed into the mainstream.

While the Covid-19 pandemic has made online schooling a new normal, a recent report from the global education network Quacquarelli Symonds claims that India's internet infrastructure is still not up to the mark. According to a 2019 government survey, only 24% of households have internet connectivity. In rural India, the percentage of homes with access is even lower, with only 4% of families having access.

According to a 2018 NITI Aayog report, 55,000 villages in India are without mobile network connectivity. Many youngsters from impoverished backgrounds are becoming alienated as a result of the emphasis on technology-driven education, which is preventing them from continuing their studies. Other stakeholders are also having difficulties.

Aside from the digital infrastructure, teachers must be trained on how to use the system to provide students with authentic and seamless education. Because learning in colleges differs from that in schools, the successful delivery of education is also under concern. At every level, digital education cannot be used in the same way.

The Centre and state governments must increase education expenditures to at least 6% of GDP if the Indian education system is to transition to online learning without creating a digital divide.

Broadcast Media can Foster Equitable Learning amid the Covid-19 Pandemic

Media has various advantages in delivering educational information amid the Covid-19 and can be a key component of a data-driven, multi-pronged approach to alternate delivery of educational content. According to statistics, television and radio broadcasts can reach the majority of the world's children, particularly the most vulnerable. According to UNICEF, television is used in 77 Percent of nation's national responses to Covid-19 school closures, while radio is used in more than half of the countries.

Boosting Access to the Internet and Other Digital Solutions

Digital learning has been identified as a viable alternative to traditional classroom Learning. These changes give us a glimpse at how education will change in the long

run for the better and the worse.

Certainly, these developments have created a degree of inconvenience, but they have also inspired new examples of creativity in education. While it is too early to determine how reactions to Covid-19 would affect education systems around the world, there are indications that it may have a lasting impact on the direction of innovation and digitization of learning. However, in many low- and middle-income nations, access to these technologies is limited.

- Only 60% of countries adopted digital and/or broadcast remote learning policies for pre-primary education, despite the fact that more than 90% of countries had done so.
- Government policies ensuring learning continuity through broadcast or digital media might potentially reach 69 percent of kids (at most) in pre-primary to secondary education around the world.
- Because of a lack of sufficient technology assets at home or because they were not targeted by the chosen policies, 31% of kids (463 million) worldwide cannot be reached by broadcast- and Internet-based remote learning policies.
- Television had the greatest potential to reach the most students (62%).
- Only 16% of pupils in the world might benefit from radio-based learning.
- Globally, three out of every four students who are not reached by distant learning initiatives are from rural areas and/or originate from the poorest families.

Transformation of Indian Agricultural Education System due to Covid-19

The Indian Council of Agricultural Research has been working hard to coordinate for developing digital material in collaboration with all members of the National Agricultural Research and Education System (NARES) and developing skill sets among the faculty members using digital technology for teaching.

Based on the survey, the general consequences of Covid-19 on agricultural education as seen by University Officers/ Faculty Members and students are given briefly as under:

- *Loss of Academic learning time as a result of the lockdown enforced after Covid-19:* Across India's Agricultural Universities, the loss of academic learning time ranged from 210 to 270 hours per student.
- *Academic activities were disrupted:* All higher Agricultural Educational Institutions were physically shuttered, and while a few universities began their online programmes and engagements, the lockdown inevitably disrupted the academic calendar and activities.

- *Loss of Experimental learning:* Agricultural and allied science courses, unlike standard degree programmes, have built-in practical components of about 30% and experiential learning modules through field experiments and community visits. These learning experiences disappeared as a result of the shutdown and heavily impacted the skill components.

- *Inadequate access to faculty mentoring:* All Agricultural Universities have a unique framework for enabling individualized mentorship for students by establishing Course Coordinators/Student Advisors and a few Councilors for each batch of students across the graduating levels. The benefits to students through interaction with their Coordinators, Mentors, Advisors, who otherwise stay constantly engaged were significantly impacted by student displacement.

- *Psychological well-being:* According to the findings, Covid-19/ lockdown has a considerable impact on the students' psychological well-being. It is seen that the lockdown harmed their self-confidence (29 percent) and general attitude (23 percent); created boredom (46 percent), irritation (36 percent), worry (32 percent), sadness (29 percent), and uncertainty (30 percent), that led to loss of overall behavior.

Agricultural Universities across India discovered their own innovative strategies to continue fostering the teaching learning experiences despite COVID-19, the global epidemic, posing an unprecedented challenge that caught all academic institutions unaware and unprepared. The Indian Council of Agricultural Research has been promoting and supporting digital education in SAUs by providing financial support for infrastructure development and faculty capacity building. The World Bank-funded National Agricultural Higher Education Project (NAHEP), which is being implemented by ICAR, has aided in the development of digital infrastructure and courseware in a variety of agricultural fields. Thus, the pandemic has created an opportunity to rethink and reimagine the Agricultural Education in India.

Looking at a Few Avenues that would Help Construct a Strong Base for Learning in the Current Covid-19 Pandemic

- The way learning is delivered should be restructured; pedagogies should change according to the requirements of online classes, and additional training should be provided to tutors/ teachers to help them better enforce the new processes and teach more effectively.
- Advanced tools should be further built to help construct a simulation of a physical classroom and maintain peer-to-peer learning. To design these virtual classrooms and create a better visualization of concepts, Augmented Reality, Virtual Reality and Mixed Reality (AR/ VR/ MR) should be leveraged.

- With a popular platform or forum for children from a specific geographic area, learning framework and education can be made much more flexible to help them compete and evolve with their peers, regardless of their educational institution.
- Working around the holistic development of students with an emphasis on essential skills and extracurricular activities is now more important than ever. While a balance of this is highly endorsed by the NEP policy, it is very important to enforce it strongly as a student's overall personality and character development is of utmost importance.
- Each student is different, some learning best in classes, some alone, some during the day, some in the evening, some reading, some watching videos, some reciting aloud, and some even acting out. By developing adaptive and personalized learning systems that help nurture individual talent, now is the time to work on these individual strengths.

It is critical that governments should not rely just on one remote learning channel to reach all children. To minimize learning risks, boosting access to the Internet and other digital solutions for all children would be a long-term objective.

Opportunities for Teaching and Learning

The Covid-19 pandemic has provided several opportunities for those who are inexperienced or have long-term ambitions to introduce an e-learning framework.

- *Improved the use of electronic media for sharing information:* For the first time ever, online platforms such as Google Classroom, Zoom, interactive learning environments, social media, and various community channels such as Telegram, Messenger, and WhatsApp are explored and tried for teaching and learning. Many educational organizations are making their resources and software solutions available for free in order to assist and facilitate teaching and learning in a more immersive and engaging manner.
- *Demand for Distance Learning (DL):* During the pandemic, most students chose DL since it supports self-learning and allows them to learn from a variety of resources while also

tailoring their learning to their specific requirements.

- *Increase the use of soft copies of learning materials:* Because students were unable to acquire hard copies of study materials during a lockdown, the majority of students relied on soft copies for reference.
- *Global exposure:* Educators and students will have the opportunity to interact with colleagues from all around the world.

Conclusion

It is clear that this pandemic has totally destroyed a system of education that majority are of the opinion that it has already lost its importance. Adoption of the appropriate resources would allow for improved teaching and, as a result, increased student achievement. Teachers will never be replaced by software, but they can be supported by it. Thus digital capabilities and infrastructure must reach the most remote and underprivileged places in order to allow students to continue their education during pandemics.

There is a pressing need to maximize the use of online platforms so that students can not only finish their degrees this academic year, but also prepare for the future digitally oriented environment. Thus all educational institutions must digitize them and get a foothold in the tech space as soon as possible so that they can provide their students with the kind of education that improves their cognitive and vocational abilities. Institutions should view technology collaborations as an essential investment in their student's futures, and they should not compromise on quality or expansion in this field, as it has become a necessity in today's era.

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