

COVID-19 Impact on Education

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ABOUT THIS ISSUE

It has been almost 2 years since the COVID-19 lockdowns were implemented in India to curb the spread of the pandemic. While several sectors of the economy have resumed business as usual, the schools in India have been closed indefinitely to protect their students. Digital platforms and online classes have helped to fill in the void left by the absence of classroom teaching, yet the limited access of internet in India has proved to be a challenge. As schools reopen after the third wave of COVID-19 in February 2022, it is high time to take stock of the detrimental impact of the pandemic on India's Education Ecosystem.

This issue of *Southasiadisasters.net* is titled, 'COVID-19 Impact on Education' and highlights the adverse impacts of the pandemic on the education sector in India and beyond. It is estimated that, the Covid-19 pandemic has battered education systems around the world, affecting close to 90 per cent of the world's student population. Similarly, over 1.5 million schools closed down due to the pandemic in India, affecting 286 million children from pre-primary to secondary levels. This adds to the 6 million girls and boys who were already out of school prior to Covid-19. This disruption in education has severe economic implications too. A World Bank report, 'Beaten or Broken: Informality and Covid-19 in South Asia', has quantified the impact of school closures in monetary terms- India is estimated to lose \$440 billion (Rs. 32.3 lakh crore) in possible future earnings.

This issue of *Southasiadisasters.net* highlights implications of the disruption caused by the school closures along with several opportunities offered by this situation. ■

- Kshitij Gupta, AIDMI

NEW OPPORTUNITES FOR LEARNING

Remote Learning: An Area of Inquiry

By Mihir R. Bhatt, All India Disaster Mitigation Institute



Students can learn at home while schools are closed because of the COVID-19 pandemic. Photo credit: ADB. Source: <https://development.asia/print/explainer/how-deliver-effective-remote-learning-scale>

A new area of inquiry has emerged in the Humanitarian System in the past few months, post set-in of COVID-19 pandemic. And that area is Remote Learning.

Remote Learning is a part of learning that takes place between the two: the one who is learning and the one who is sharing learning (person to person). So far it was possible to do so face-to-face; in a field visit; though a focus-group-discussion; and in "write-shops". But now pandemic has made it difficult to do so.

As a result, the Humanitarian System is of and will be affected in terms of its plans, performance, and results, on all three at all levels and in all sectors.

We will have quick fix to finish the delayed projects and we will have new tools and pedagogy to keep the research and learning goings.

A recent discussion with a wide range of civil society leaders indicate several priority areas such as how to protect multiculturalism in remote learning? Are there case studies available of those who have

in fact done remote learning and reflected upon? And how will such remote learning be useful to those in the rural areas, such as cotton farmers to grow and protect organic cotton in arid areas?

Will such remote learning be useful in say schools of Jammu and Kashmir in north India? And what is South Asia wide experience that is emerging around remote learning? Especially in Bhutan and Afghanistan? Is there any special application of remote learning that is useful to work of organisations such as International Rescue Committee? Or to those engaged in multilateral engagement for bilateral humanitarian aid? How will such remote learning enhance the research and evidence efforts of international development departments of governments in the global North and South?

But what is needed is a more reflective look at how we learn, and how we learn from a distance. In addition, what comes easy for remote learning - technology, reviews, monitoring, included - and what comes with more effort? ■

Higher Education and COVID-19: Impact and Opportunities

By *Dr. Indrajit Pal, Assistant Professor and Chair, Disaster Preparedness, Mitigation and Management, Asian Institute of Technology, Thailand*

Every disaster comes with the light and shadow in the systems. There is no doubt that the COVID-19 pandemic impacted every facet of our lives starting from livelihood, wellbeing, health and education. Education is one of the major pillars of our social system to function as developmental tools for the children and youths. As described, in the policy brief document of ProSPER.net by Indrajit Pal and others, “Education is central to reorient efforts towards a new path for development with sustainability. Higher Education Institutions (HEIs) can potentially play an important role in imparting sustainability”. The higher education institutions in Asian region faced several short-term disruptions by various hydrological and climatological hazards in the past. Most of the hazards have impacted the institutions’ infrastructure and services. The impacts of the COVID-19 pandemic was in other dimensions, not on the infrastructure but at the systems level. The COVID19 pandemic forced the authorities to shut down the educational institutions without adequate time to plan for the alternative options for educational continuity.

Lockdowns at various levels, social distancing norms, increasing cases of infections, overwhelmed health infrastructures and basic support services, not only impacted the social systems but also exacerbated the challenges of livelihoods for vulnerable communities, widened the gaps of access inequality to the services and severe disruptions in education continuity. It is imperative to have a cascading impact in higher education at various levels, e.g., accessibility to the institute and availability of the functional administrative staffs and teachers etc.

Digital platforms or e-learning platforms look like saviours or tools for crisis management to address educational discontinuity. The institutes have immediately tried out the various low cost or no cost options to make the education system functional. However, majority of the higher education institutions neither well equipped nor well-trained to handle the sudden changes in higher education delivery. The traditional curricula design, digital divide, lab-based activities, field data collection for research and social disconnect made

it more difficult to transform the system immediately.

Transitioning the traditional higher education system to hybrid or blended teaching needs to consider the challenges and gaps at various levels to make it functional. UNESCO Bangkok developed a new online self-assessment tool for Higher Education Institutions (HEIs) to enhance their understanding of blended learning and promote the quality of higher education in the Asia-Pacific region. It is imperative to understand the responsibility of HEIs to assess the current dynamics of the labor market and continued effort to upgrade their educational curriculum to reduce the mismatch between what they deliver, and the technical and intellectual ability required in the market.

The COVID-19 crisis has provided the opportunities to develop a more flexible, resilient and blended platform for teaching and learning. Flexible curricula and blended learning options might provide the students access to a diverse set of curriculums or modules that opens endless opportunities for them to acquire additional knowledge in their unique areas of interest. However, the universities need to evaluate their institution’s approach to blended learning, identify gaps and improve blended learning strategies. Developing key infrastructure to support blended learning is essential for transitioning the traditional higher education system to more flexible and versatile blended or hybrid learning, which will help for the education continuity during the COVID-19 crisis, as well as other natural and anthropogenic hazards. ■



New normal of Education and learning.

APRU and Pandemic: Agenda for Education as COVID-19 Unfolds

By Christopher Tremewan, Secretary General, [APRU](#), Hong Kong

When the World Health Organization declared the pandemic to be a global health emergency on January 30, universities had to move fast, emptying their campuses and moving to virtual teaching.

The 56 leading research universities that form the Association of Pacific Rim Universities are located around the vast Pacific Ocean and the geophysical realities of the Ring of Fire: East Asia, Southeast Asia, Oceania, North and South America.

Therefore, this sudden shock came on top of many existing challenges from economic stresses, increasing inequality and unemployment, geopolitical tensions, and extreme events from climate change – floods, earthquakes, fires, storms.

While facing increasing challenges, APRU universities are also global centers of research excellence in exactly these areas. Working together, they have been able to contribute effective solutions to their societies and to the Asia-Pacific region. In dealing with the pandemic, they had valuable experience in an effective public health response from mobilizing to meet the SARS outbreak in 2003. Not only had several Asian societies



acquired the necessary social reflexes for containing the COVID-19 coronavirus, they also had the biomedical research capabilities necessary for developing treatments and a vaccine.

APRU responded to the current pandemic by helping member universities to share information and strategies for confronting the pandemic. The [APRUplus.org](#) website was launched featuring high-level webinars on critical issues for university administrators, webinars led by subject experts from member universities, research

projects, a student competition, and virtual courses.

“Universities need to take a multi-hazard approach in their planning to prepare for natural disasters and other hazards like the pandemic,” President Hideo Ohno of Tohoku University told *University World News*. His words ring throughout the APRU network, where we have convened discussions featuring disaster experts from academia, UN agencies, governments, and the private sector, all to advance learning through the numerous phases of recovery.

“We re-examined all the things around education – a whole lot of academic policies – because we had to deal with all sorts of exceptions,” Margaret Gardner, vice-chancellor of Monash University, Australia, explained.

“We have to be thinking about the day after and that this [pandemic] will end, so I’ve been very deliberately creating conversations about our goals beyond managing through COVID and the budget crisis.” said Carol Christ, chancellor of the University of California,

APRU - 56 universities acting together can make a significant difference.



Berkeley. "COVID-19 has given us an opportunity. We have resources now and this is perhaps a good time to make big changes to put us in a better position for the future." said Tan Eng Chye, president of the National University of Singapore (NUS).

However, not all higher education institutions were in the same position. "Two-thirds of universities were surveyed in Asia, and almost 50% of them said they are not ready" for such emergencies, "especially for a pandemic," said Professor Takako Izumi, Director of APRU Multi-Hazards Program. Through APRU's activities, we have offered universities ways of responding to multiple risks, strengthening their

disaster management strategies through multistakeholder partnerships and developing innovative tools and approaches for disaster preparedness and response.

"For everything there's a plan B, C and D. Every plan comes with an asterisk," said Ana Mari Cauce, president of the University of Washington, Seattle in the United States.

"We have to walk and chew gum at the same time; we've got to be able to respond to the immediate and also think about longer term planning to assist with some of those other threats that we know are on the horizon," said Dawn Freshwater,

vice-chancellor of the University of Auckland, New Zealand.

The pandemic has demonstrated the need for all universities to continue improving their crisis management. Under the leadership of the public health schools of four universities (UCLA, University of Sydney, National University of Singapore, and Peking University), we have initiated new thinking on crisis management, focusing on varying experiences and contexts of the COVID-19 pandemic. Through case studies and discussions, APRU universities are drawing lessons for future public-health crisis preparedness and management in the higher education sector. ■

IMPACT AT SUB-NATIONAL LEVEL

Jammu and Kashmir School Safety Programme 2020

By *Kshitij Gupta*, All India Disaster Mitigation Institute

It has been well documented that children bear the disproportionate burden of any disasters or emergencies due to their unique physical, mental and social characteristics. The Indian territory of Jammu and Kashmir has not been exposed to a variety of natural hazards such as earthquakes, flooding, avalanches, etc., it has also witnessed a disproportionate amount of internal conflict due to a festering insurgency. The civil unrest in the area has also had great implications for the welfare of children in the area. Considering the enhanced vulnerability of the children in Jammu and Kashmir to multiple hazards and human induced risks, Samagra Siksha (Department of School Education), Jammu and Kashmir has launched **Jammu and Kashmir School Safety Programme 2020**.

Drafted with technical inputs from UNICEF and other sectoral experts, the J & K School Safety Programme 2020 follows the National School Safety Guidelines drafted by NDMA (2016). This school safety programme is predicated on the 'Comprehensive School Safety and Security Framework' that merges school safety and child protection outcomes. The idea is to provide safe learning facilities to children where they are protected from all kinds of rights abuse. A set of Standard operating procedures (SOP) has been developed for the two components to help teachers implement the guidelines.

The indefinite closure of schools due to the COVID-19 has also adversely affected the learning outcomes for the children in the state. Therefore, the J & K School Safety Programme

2020 has COVID-19 specific guidance on reopening schools. This will help the relevant authorities in taking an informed decision on whether or not to open schools according to their assessment of the threat. Additionally, a school safety audit checklist has also been developed as part of this programme to rank schools on the basis of indicators covering Child Protection, DRR, Health and WASH aspects.

All in all, the Jammu and Kashmir School Safety Programme 2020 is a comprehensive effort to address all the risks and leverage all the opportunities to for ensuring safe, continuous and quality learning outcomes for the children of Jammu and Kashmir. ■

Impact of COVID-19 on Education of Marginalized Children in India: Key Loss and Damages

By Seema Rajput, Senior Technical Specialist - Education, CARE India

COVID-19 has had cataclysmic changes across all sectors. The pandemic has significantly disrupted the education sector which is a critical determinant of a country's economic future. The pandemic has affected 1.6 billion learners in more than 190 countries. In India, education of more than 260 million of school and preschool age children got affected since the lockdown. To mitigate the challenges on education of children posed by the pandemic, the Government at national and state level has taken several initiatives to ensure children receive appropriate support to continue their education and their mental and physical health needs are also met. In order to understand the impact of COVID-19 on education and well-being of children especially adolescent girls residing in the remote villages, CARE India conducted a survey in 5 states namely Bihar, Haryana, Jharkhand, Uttar Pradesh and Tamil Nadu in June, 2020. The survey covered 1090 children, 1100 parents and 313 teachers in these states to study the 1) level of awareness on COVID-19 amongst respondents, 2) understand the impact of COVID-19 (and the lockdown) on children education and wellbeing especially issues related to safety, 3) identify the potential approach to ensure the continuation of children's education (an online mechanism) and preparedness required, and 4) understand the approach or strategies that a school should adopt after re-opening. The data collection was undertaken telephonically by the CARE India project staff in their respective locations.

The survey findings revealed that both the children and parents expressed that learning/education has been affected due to the lockdown across the states. A whopping proportion of children (86.8%) mentioned that their learning/education has been

affected while more than 2/3 (70.2%) of parents felt children's education as a challenge during the lockdown. Additionally, (82.8%) of parents stated that they were worried about the loss of learning this year for their children due to school closure. In response to the educational support, which was being provided by the state government to children, 24.6% parents stated that they received materials (video and homework) shared through WhatsApp as a key approach used by schools. While 18.6% parents reported that they received educational materials / messages shared through Text messages. Only 6.5% parents said that their children are receiving education through TV and radio program hardly reached to them. To understand the extent of access to mobile phones by children, only 31.1 % of children said that they could access phones for their education. Therefore, digital mode to education needs to be supported through learning circle time, a fact to face interaction with children and other measures to complement educational support as for millions of children going digital is not the option for India. It also gives evidences that digital infrastructure divide exists at significant level for most marginalized communities and children that needs to be bridged through special efforts.

It is alarming to note that close to one third children (31.1%) indicated that they were disturbed due to change in parents' behavior (scolded more often) during the lockdown. A higher proportion of male children reported a change in parents' and their behavior as compared to female children. Further, more than half of the children (54.7%) reported a change in their own behavior (feel anxious / uncertain / threatened nowadays). Children in general have noticed more violence and disturbance in their family life. It must be taken seriously and in a

comprehensive manner by the system as children are anxious in general particularly about the future, their education, and many girls are also experiencing gender-based violence which was more often than compared to normal times. These incidents are neither reported or addressed upon, indicating that a significant percent of millions of children will be carrying the burden of COVID-19 in the form of trauma and emotional disturbance for a very long period of time. Almost 83% of children were worried about the effect of COVID on their future education and academic session. Despite the challenges posed by the pandemic, it was heartening to note that 88% parents expressed willingness to send their children to schools, if schools follow safety and healthy standards and protocols. In this scenario, role of teachers become most crucial during and post pandemic in order to ensure children feel secure and able to make up for the lost time academically. Once the schools reopen, focus must be on providing socio- emotional support to children and building their resilience to cope better in challenging times. In this connect, nearly 50 percent teachers demanded the need of orientation on checking children's wellbeing and augmenting their digital skills to participate in training and capacity building programs (45.2%) to support children's education.

Recently released New Education Policy aims to develop resilience in learners as one of the most important qualities, the system would need to prepare itself for addressing the diverse learning needs of children including their mental well-being. The education officials at all levels would need a strong orientation to plan and implement education in emergency situations by ensuring that no one is left behind. ■

Impact of the Pandemic on L.N. Mithila University: A View

By *Dr. Manu Raj Sharma, Assistant Professor, University Department of Geography, L.N.M.U., Bihar, India*

COVID-19 outbreak has caused a huge impact on higher education institutions (HEIs) in India leading to sudden closure of universities and colleges as a measure against community spread of virus. This has resulted in transformative changes in methods of teaching where regular class room teaching was replaced by virtual e-learning through online web platforms. Unlike major central universities across India that already have well developed online systems, small state universities like L.N. Mithila University too made sincere efforts for integrated forms of online education into their coursework. With the least number of reported cases the administrators have been successful in ensuring the continuity of teaching-learning, research and technical knowledge dissemination through conduct of webinars. Although the institution struggled initially to get acquainted with virtual meets and scheduling online lectures but soon university excelled and was adjudged best by Raj Bhawan, Patna in preparation of online course material for students which was shared with other state universities of the Bihar.

Various opportunities for students were facilitated for knowledge dissemination and practical exposure through conferences and seminars on e-platform. Sharing of knowledge between different institutions was promoted through virtual guest lecture which enriched students. Innovative forms of collaboration with Indian Institute of Remote Sensing (IIRS), a unit of



Indian Space Research Organization (ISRO) for faculty-student development program and skill enhancement through courses on Mangalyaan and Chandrayaan-2 were realized to drive learning, promote planetary research and teaching. The faculty actively engaged themselves in various academic activities like delivering lectures, participating in debates and symposiums and sharing their research on various platforms. The university excelled in research with greater number of research publications and developing e-content on platforms like Vidwaan, Swayam and YouTube. Even during the lockdown university upheld its best practices of concern towards environment and celebrated Earth Day (April 22) and World Environment Day (June 5).

Although great efforts were made for the creation of a conducive environment for teaching-learning but students faced major hurdles in

getting high speed internet, getting acquainted with new apps and unavailability of smart devices. It was expected that this remote learning will provide advantage to individuals (especially those commuting from villages and neighboring towns) who find it difficult to attend full day classes at university but this flexibility failed to provide wider access due to high data charges for mobile internet. Students pursuing Science and other practical subjects like Geography and Psychology suffered losses as they couldn't get hands on training and work with apparatus in laboratory. The effect of the pandemic intensified during monsoon season as all districts falling under the university suffered from disastrous floods followed by heavy rains. Many students were stranded in their villages and were left unsupported without any economic and administrative help. A large number of such students couldn't find access to online classes

or even study offline during this period of floods for more than six weeks. Also, as per guidelines issued by UGC the last date of admission for the fresh session has been extended due to which students has suffered a delay of session.

To conclude, the pandemic has critically affected quality of teaching at university with a delayed academic session. University administration is expected to increase its infrastructure during post-pandemic period for better provision of laboratories and

classrooms to avoid crowding. The educators and policy makers of university are expected to plan the post-pandemic education and research strategies to ensure student learning outcomes and standards of educational quality. ■

IMPACT ON FAMILIES

Impact of The Pandemic on The Students

By Bhagat Singh Negi, Lecturer, G.B.Pant Inter College, Bhowali, Nainital, Uttarakhand, India

It's been long time since the world war II, when any power(s) made mass destruction globally. The world has poised itself in such a status quo that no country can be imperialist today but the cold under current can be felt in the various pockets of the world. The COVID-19 is the greatest threat since 1945, when the civilisation restarted to assemble the broken arrows. Today the world has faced the most unknown, unexpected danger to which actions are in sixes and sevens. The current scenario is destructing the ages due to lack of immunity and threat to the children due to poor physical defence mechanism. Thus, for the safety issues the school, colleges, parks, gyms, pools, and all public places are closed and circumscribed the home limits only destiny for the children for an unknown period. Initially, it was fun but more unsung consequences were to come up. Now the business to stay at home has become revolutionary and the children want to burst out like volcanoes.

The burning issue in last 9 months is the problem of physical standards of children has derailed. Due to lack of physical exercises or limited

workouts rising levels of obesity among children has become a major problem, especially in the cities. The important issue is the change in the behaviour of the children due to online classes. There has been no freedom to move during the class and most of the time they spend in the school given works. Now strain on the eyes and mind has increased, triggering to the irritating behaviour like quarrel among brothers and sisters on tiny issues, mood swings, eating disorders, etc. has risen. To upheaval the personality the creative activities are hampered resulting in belligerent actions. The lack of peer group among the children hitting puberty can become maladjusted resulting into sexual disorders. Developing countries where the sexual talks are concealed, the new age are suffering from the emotional weakness resulted in provoke and solitude. Online studies are well for the students in cities however we should consider that the world is having 10 percent people below the living standards where over 301 million of the world's children dwell in the extreme conditions of poverty¹. Hence the education for thus is quite challenge where there are no internet connections and for

last 9 months' students are hovering at home limits encountering poverty extremes. Initially, unknowingly the kids and children became the victim of Covid-19 due to ignorance, poor measures and unawareness but today children have become more aware of frequent hand washes and importance of being sanitize.

The world has now clearly defined and acknowledged the importance of the communication revolution where even the world has been at a standstill yet creeps to its destination thus a lesson for the young ones to understand the importance of communication and its means becomes vital. The developed world has already provided their children the knowledge of the latest knowhow but the need of the hour is for the Asian and African countries to teach their children about the need of the cyber and its skills. Another important fact is that there is a less infection and low death rate of children due to COVID so the fear is abolishing gradually, further more boosted by the recovery rate of the patients. Thus the school going students are free frequent to public place these days of course with safety measures. ■

¹ Source: World data lab projections, 2019.

CASE STUDY

Role of INVERTIS University in the Pandemic: A Case Study

By *Awdhesh Kumar, Asst. Professor, Department of Civil Engineering, Invertis University, Bareilly (U.P.), India*

Emanation of 0.12 micron novel coronavirus not only put 7.8 billion lives & entire socio-economic systems in the world on acid test but stay-at-home orders, quarantine, & isolation to control infection triggered unprecedented global education crisis too. As per one UN estimate COVID19 has affected nearly 1.6 billion learners in more than 190 countries & overall impacted 94 percent of the world's student population. As a paramount learning Centre of north Indian state Uttar Pradesh Invertis University also never faced such a prodigious situation since its establishment in 1998, Rohilkhand region where the University is functional mainly comprises of 8 districts namely Bareilly, Budaun, Shahjahanpur, Pilibhit, Bijnore, Moradabad, Rampur & J.P. Nagar, majority of student community in the university belongs from this region, which is inhabited by 75.24% rural population, connecting the students who belongs from villages & towns by & large with weak digital infrastructure to novel web-based remote learning was an obvious challenge moreover that holding terminal/end semester examination emerged as another worrying issue, students from abroad also return to their native countries due to home confinement directives.

Invertis is one of the first academia stakeholder in the region which realized change is inevitable & accordingly left no stone unturned to shift on novel learning approaches with digitized techniques, it's

already entrenched paperless culture right from 2009 proved to be a plus point in this regard. To enable the student's interactive remote-access to Laboratories University joined MHRD Initiative under the National Mission on Education through ICT i.e. Virtual lab facility by the assistance of IIT Roorkee, Students lacking infrastructure were counseled & assisted on smartphones, for uninterrupted Session University go for online exam for final year students while promoted the rest as per the UGC Guidelines.

University efficiently managed the remote learning however as per frequent feedbacks of students during counseling sessions & psychosocial survey conducted by the faculty members on student's routine revealed pandemic driven lockdown imposing stress-induced behavioral change, therefore University decided to adopt a mental wellbeing inclusive learning strategy via interactive programs, on this line, an e- campaign on handmade mask distribution along with substantial notion of awareness dissemination among masses about "Corona Warriors" launched; Later, encouraged by the grand response, another online contest Rangmanch with a broader canvass was launched that attracted around 7000 participants of more than 400 Schools, Universities, & Institutes from 15 Countries showcased their skill set under various creative categories, To encourage their moral

winners & participants also rewarded in each contest.

Amid lockdown, University ensured the incessant brainstorming on contemporary issues where Invertis also received generous support from NIDM via series of webinars & Training Workshop on COVID19 related issues, basic disaster management, disaster risk reduction approaches & pollution & environmental factors etc., here leading disaster management experts shared their experiences on disaster resilience & pandemic new normal. Such programmes were attended by learned masses from across the globe; Meanwhile University also welcome idea of self-reliant India & explored dimensions of Indo-centric research & indigenous financial resilience.

Establishment of COVID19 monitoring committee, contribution in PM cares, employee welfare, pandemic scholarship were some more key steps by University, many faculties & students also benevolently volunteered in distributing the ration to the needful & also helped in grappling with the exodus of migrants crisis under the supervision of local administration, As of now when country is on the path of recovery, with its experiences & lessons learned Invertis University is also all set to serve with its vision of inclusive education & creating future citizens with right perspective of mind and heart towards humanity. ■



Role of Social Work Students and Faculty in Managing the Pandemic in Kerala

By Dr. Jilly John, Assistant Professor, Department of Social Work, Central University of Kerala, India

The COVID-19 pandemic has adversely impacted everyone in the world. The unexpected hit of CoVID-19 pandemic created a total chaos in the society with massive impact on all sectors of the economy. The sudden lockdown created major problems with the downtrodden populations in the country heavily. Specific populations like workers in unorganized sectors, daily wage workers, marginalized communities were highly disturbed with the pandemic. The first Corona Virus Disease case in India was reported in Kerala in January 2020, when a student who had returned home from China, tested positive. Even though the first reported cases were controlled successfully by the Health Ministry of Kerala, more number of patients started reporting later and the unexpected lock down first started in Kerala from second week of March 2020.

The COVID-19 pandemic management works in Kerala are leading and controlled by the Kerala state government with the help of all service sectors, mainly health workers along with others from all public and private sectors. The major works other than the health sector was mainly focusing on social security measures with Community Kitchen, Public Distribution System, Break the Chain Campaign, Social Distancing, Monitoring on Mask wearing etc. In Kerala there are more than 50 Social Work Educational Institutions offering courses at graduation and post-graduation level. Followed by the lockdown all educational institutions went to shut down and the students and faculties were locked down at their home. Their major work as part of field work shift its focus from other fields

to mitigate the sufferings of the pandemic.

Social work students started working as part of the volunteering works in their nearby accessible geographical communities. They were engaged as full time volunteers with the material distributions to the marginalized or economically backward communities, elderly population and people with comorbidities, home visit, tele-counselling, mask making and distribution, utilizing virtual platforms for creating awareness and providing support, conducting case studies, webinars, leaflet preparation etc.

As part of online internships, the students started working with different organizations across the country which gave them the opportunity to extend services for the needy population. In the present COVID-19 context most of the non-governmental organizations are focusing their work on fighting against the COVID-19 pandemic. The Social Work students also got opportunity to extend their services on the same issues as interns in reputed organizations in and out of Kerala. Students work through the organizations mainly in the areas of documentation, qualitative and quantitative research studies, organizing webinars, addressing the health concerns of rural population, resource mobilization for the needy populations, practicing Social Work methods such as Case work, Group work, Social Work Research through the online platforms, tele-counselling, assisting in Social welfare administrative activities of the organizations etc. were also carried out.

The faculties of Social Work in Kerala were mainly focused upon Social Work Education and Research. For imparting better training to the Social Work students, they led the COVID-19 mitigation efforts of their students, explored and arranged online internship opportunities for the students, made them learn to organize and coordinate national and international webinars, guided and supervised their students at each and every online and offline activities and also helped the students to find out ways to manage their socio economic needs, provide opportunities for online group interactions, addressed the parents worries on their children's academic and professional prosperity, arranged training programmes for stress management of the students and family members due to lock down and economic suffering followed by that etc. They conducted several studies on COVID-19 effect on different populations and disseminated the knowledge in the form publications, as resource persons for national and international webinars, part of training programmes of educational institutions, Local self-government, NGOs, State and Central Government, assisted in district and state level administration for the disaster management due to COVID-19.

The immense contribution of each and every individual is required to alleviate the sufferings of COVID-19 and in this venture Social work fraternity has extended its wholehearted support till now and till the end of last reported case of COVID-19 in our country. ■

Impact of COVID-19 on Child's Education in India

By *Aekta Chanda, Education Specialist, ChildFund India*

As the COVID-19 pandemic struck, governments all over the world swung into action and declared varying degrees of lockdowns in their respective countries. Invariably, the closure of schools became an inevitability to curb the spread of this pandemic. India too was no exception to this, where one of the strictest lockdowns had been enacted and schools were shut with classes being taken online. Currently, with the unlocking process, modalities of reopening the schools are being discussed. With the future of [320,713,810²](#) learners at stake, this is an important discourse with multiple viewpoints.

While, the percentage of out of school children in the age group 6-13 is still [2.97%³](#) in the country, India also faces a huge challenge of intensified dropout rates post

COVID-19. At present, the majority of children have no means of continuing their education and their families too are faced with livelihood crisis. All these factors may disrupt the continuity of education for many children and push them towards child labour and child marriage.

Also, there are concerns around the psychosocial wellbeing of children in general which has a very direct relationship with the continuity of learning for them. As per a study done by ARNEC in Asia Pacific region for understanding the situation of children, it was found that around 73% families assessed in the India have been under significant stress. The factors contributing to this stress were primarily livelihood related concerns, but closures of schools also had a significant contribution towards the same.

Though, the online learning solutions have been provided, there were certain challenges to this - the huge digital divide with only 8 % of families with children in school going age group having access to both smart phone /computer and internet facilities as per NSSO data, with livelihood losses making recharging phones and internet services difficult. Moreover, the field interactions⁴ with the children and their parents suggest that children found online content very difficult to reach and stress inducing as learning has become increasingly difficult with online solutions, due to challenges in access to devices like smart phone or laptop as well as internet connectivity, further, understanding the lessons as well as the standard language used in the online sessions was found to be very hard and more importantly the



Village Khampa - PACE.

² As per the UNESCO institute for statistics data as on 3rd Sept'2020.

³ As per NITI Aayog SDG index and dashboard data for 2019.

⁴ ChildFund India has been on the ground supporting the continuity of education for around 50,000 children and families in around 15 states through it's "Inter-

Generational Coping and Learning" intervention.

children felt that they learnt best in the activity based learning modes which they miss now.

In this context, blended approaches seem like a viable solution to some extent. These included range of offline - online solutions as well as ensuring a component of contact either through phone calls, wherever possible home visits even if it was just once a week visit, and including the local youth in supporting these initiatives along with the teacher. Some of the state governments have also been using this and many development agencies have also been adopting the same. ChildFund

has also used this in our own intervention area we termed this as 'Inter-Generational Coping and Learning intervention'. Supporting the parents in helping the children continue their learning through ensuring a daily routine, wherever possible having very small groups of children sit with physical distance and work on workbooks etc. has also helped during the unlock process.

The re-opening of schools has to be the way forward even if it means having children come in very small groups just once a week. Furthermore, there is also a need to track the children and have major

enrolment drives to prevent drop outs and to ensure inclusion of the huge number of children who have returned back to villages as a result of reverse migration, special bridge sessions for the children with sessions on Socio - emotional learning skills along with the academic competencies are also needed. Further, with a lot of low budget private schools being shut combined with the phenomenon of reverse migration, there are high chances of the government schools in rural areas will witness a swelling up in their enrollment ratio, for which adequate provisions need to be made. ■

PANDEMIC IMPACT ON EDUCATION

Impact of Pandemic on School Education and Children

By Dr. Saswati Paik, Faculty, Azim Premji University, Bengaluru, Karnataka, India

A pandemic has changed our life in many ways, this natural disaster has huge impact across the globe. Among several impacts, an untimely long-term closure of schools is one. The schools in India are shut down since March. By mid of April, almost 1.58 billion children and youth, from pre-primary to higher education, in 200 countries across the globe were affected by the pandemic in various ways (UN, 2020). School closure is a wise decision. The cities which closed their schools earlier and for a longer period blunted the effects of Spanish Flu pandemic in 1918 (Maher, 2020). However, long term school closure has its own set of challenges.

Children during Untimely School Closure

Natural disasters harm children disproportionately by causing damage to children's physical health and/or mental health, and by interrupting children's education in many ways, sometimes children are pushed into labour force to help their families, micro-level effects on

educational attainment are common (Kousky, 2016; Onigbinde, 2018). The UN has highlighted that the closure of the educational institutions especially the schools will "hamper the provision of essential services to children and communities, including access to nutritious food, affect the ability of many parents to work, and increase risks of violence against women and girls" (UN, 2020). Child marriage, child trafficking, child abuse, children's addiction to substances could be some of the side effects. The likelihood to dropout significantly increases during transitions from primary to secondary school. Therefore, even after the schools reopen, drastic dropout from schools is expected. In a nutshell, numerous children are extremely vulnerable now.

Long-term Impact on Children and Society

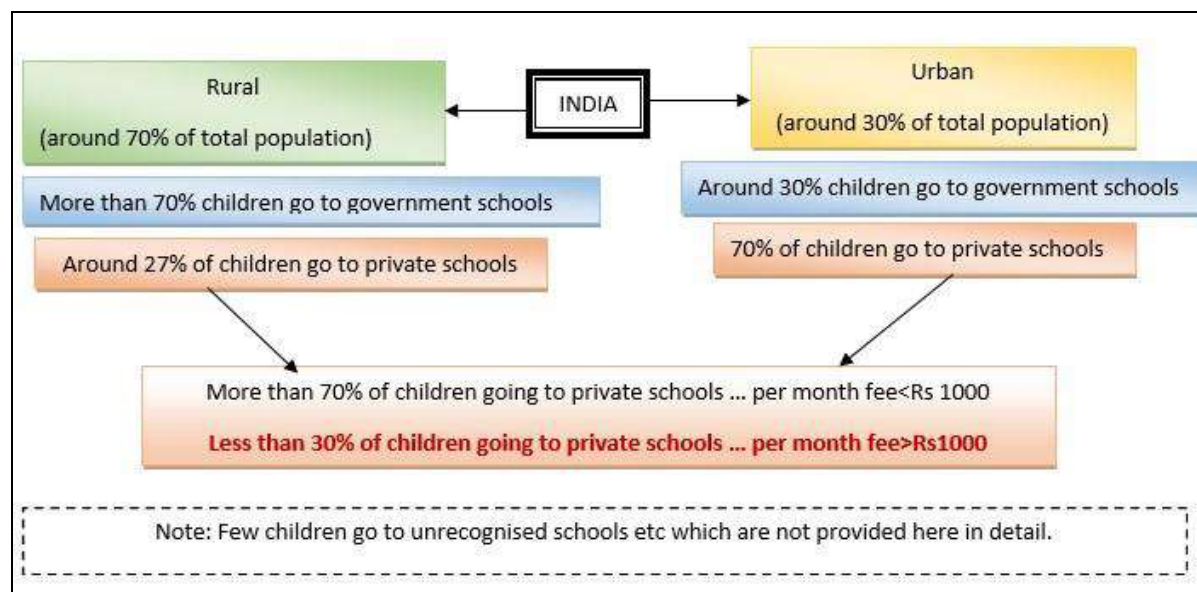
Existing poor status of learning in many countries will be aggravated by this pandemic. Before the outbreak of the worldwide pandemic, a learning crisis among

children was identified; around 53 percent of children in low- and middle-income countries were found to be living in "Learning Poverty" as stated by the World Bank, these children were found to be unable to read and understand a simple text by age 10. While most of the schools across India are closed without any academic activity in its true sense, there are a very limited schools, mainly confined in urban settings, providing online classes and learning materials, and a few lucky ones can attend such classes. Can we imagine how these children would be treated by the other set of children getting extremely left out at present? Thus, an already existing inequity is taking a worse and extremely ugly shape.

India about to Face "Generational Catastrophe"

A statement by the UN looks like an alarm for India, it says, "Preventing a learning crisis from becoming a generational catastrophe requires urgent action from all" (UN, 2020). Majority of Indian population is

Figure 1: School children going to different schools in rural and urban India



Source of data: State of the Sector Report: Private Schools in India, DISE Data, Census of India 2011.

rural and around 85% schools are in rural areas. A recent report shows that 47.5% of students attend private schools, out of which only around 35% are in private unaided schools located both in urban and rural areas; rest are in private aided schools where schools are privately managed but receive financial support from the government. 27% of rural students and 70% of urban students attend private schools, but majority of these schools are low-fee private schools, where monthly fee per child is less than Rs. 1000, or even less than Rs. 500. What do these figures indicate? Maximum children studying in government schools currently have either no or extremely limited academic engagement in schools. It is unlikely that children studying in low-fee private schools will get effective virtual learning on regular basis. The figure below indicates the scenario of schooling based on latest data; one can see who all are possibly getting regular virtual learning opportunity during this pandemic.

Lessons to be Learnt

Reduction of “digital divide” is felt like a necessity now, but it can’t be a long-term solution. Building up resilience to address contextual issues is the need of the hour. What could make the situation different? Educated parents, active school management committee, committed teacher leaders and collegial school system, school culture with teacher autonomy.

The battle against Covid-19 is the battle of the entire human society; it is not the time to increase the social discrimination. Are the schools and teachers meant only for talking about curriculum and examinations? Why can’t we think of the crucial role of teachers and parents to join hands to informally talk about the current issues such as pandemic as a challenge, socio-economic issues and the interlinkages in our surroundings, government decisions and their relevance in present context, social wellbeing, our duties in the society with children to make them more responsible and aware

citizens? This is the time when all parents should make a strong demand for “zero academic year” for all school children to save the society from further damage caused by upcoming economic crisis after pandemic. We must not behave like ostrich now. This pandemic is a wake-up call for us to plan for a better citizenship of next generation with sensitivity and responsibility. ■

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IIT Roorkee Committed to Augmenting Global Efforts to Tackle COVID-19

By Professor Ajit K Chaturvedi, Director, Indian Institute of Technology Roorkee, Uttarakhand, India

The COVID-19 pandemic has been considered the most unprecedented crisis since World War-II. Being in the league of ‘Institutes of National Importance’ in India, there is a great sense of responsibility on IIT Roorkee to play a pivotal role in shaping India’s development and tackling exigencies through cutting-edge research and technical expertise.

During COVID-19, IIT Roorkee spearheaded several initiatives to tackle the pandemic exemplifying the spirit of collaboration and innovation, both of which have gained new currency during this time. The COVID-19 pandemic underscored the significance of the broader application of online instruction. IIT Roorkee adopted digital education after a careful wait-

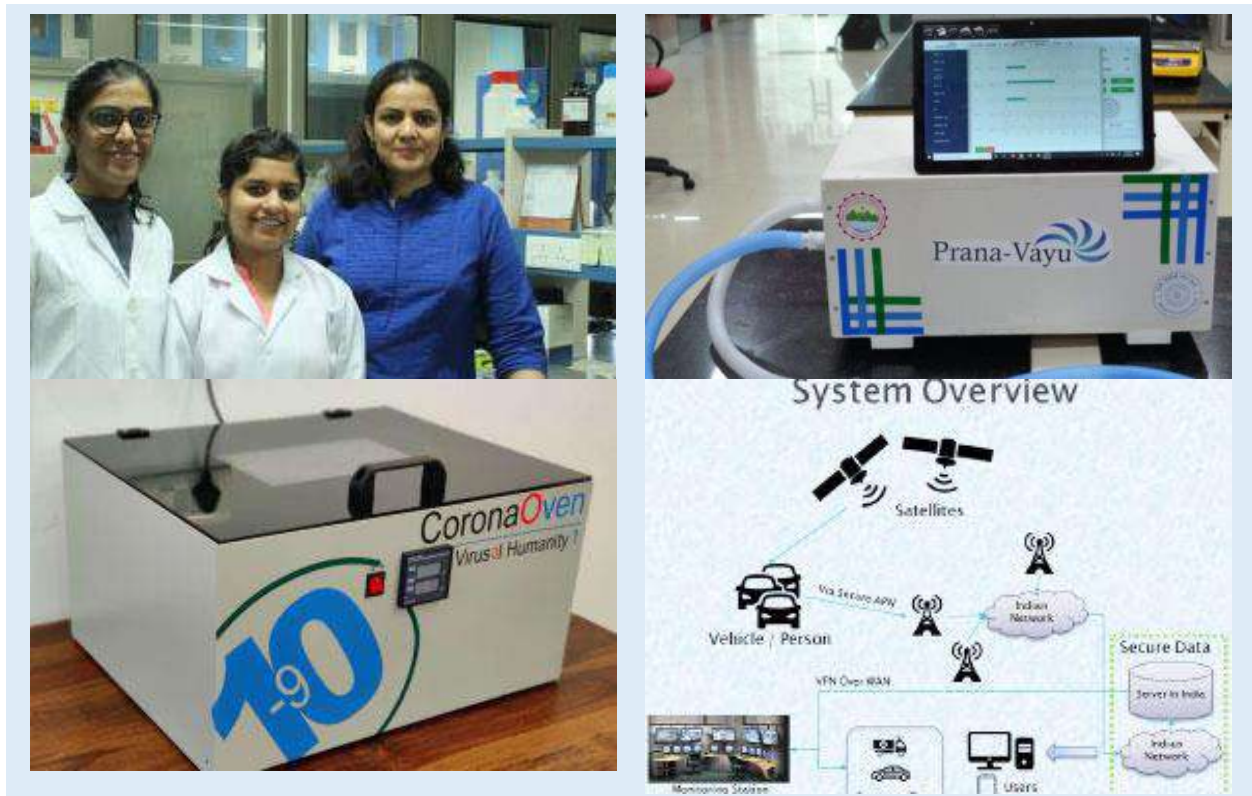
and-see period. The immediate short-term measures consisted of facilitating online teaching platforms, ensuring good network connectivity, allowing flexibility in assessment, leveraging from existing massive online and open course (MOOC), providing essential e-kits to the faculty, and so on.

During COVID-19, IIT Roorkee led several initiatives encompassing translational research related to diagnostic tools, therapeutic interventions, surveillance strategies and technologies, online education as well as community work to augment efforts in tackling the pandemic.

Among the most notable innovation is a low cost, portable closed-loop ventilator called ‘Prana Vayu’. Face

shields with a 3-D printed frame, a nano-coating system for facemasks and PPE, a portable COVID-19 screening (in collaboration with the Roorkee Nagar Nigam), a continuously operated sterilization system, the ‘Unisaviour Box’ for sterilization and low-cost rapid testing software, software to detect Covid-19 in 3-5 seconds, a community kitchen in association with the municipality are among other notable offerings.

The identification of antivirals for the treatment of SARS-CoV2, the development of a new algorithm to improvise treatment of brain tumours, and architecture and algorithm to enhance the driving experience during the fog are among notable research projects





commissioned during the lockdown.

The start-ups incubated at TIDES Business Incubator, IIT Roorkee are also taking the fight against COVID-19 to the next level. Their disruptive products such as a 'Corona Oven' to sanitize healthcare and household products, a unique surveillance system to facilitate quarantine management, a herbal sanitizer, a Powered Air Purifying Respirator (PAPR) and Real-Time PCR and Virus Detection Kit is a testimony to their entrepreneurial spirit.

IIT Roorkee also engaged with stakeholders through various initiatives such as advisory for farmers, a community kitchen in association with the municipality, etc. civil administration, military establishments and medical institutions to develop and provide technological solutions for the protection of frontline workers and for facilitating in-patient care. This covers several developments like the installation of a dispensing unit for alcohol-based sanitizer for the public, face shields for frontline

workers and a sanitized chamber at the Civil Hospital Roorkee for sample collection by health workers. The development of a low-cost ventilator is in an advanced stage of testing for mass production.

In the area of digital education, the institution adopted several measures to sustain academic momentum. The faculty members are using methods such as voice-over/narration over PPT files, recording video files among others to impart lessons seamlessly. All the placement processes are completely online. The institute has also hosted the online SPARK summer internship program through work-from-home mode. It has collaborated with e-learning platforms to launch professional certifications such as an Advanced Certification Course on Deep Learning at Cloudxlab.com and AI in Banking program on WileyNXT, Advanced Certification in Artificial Intelligence (AI) and Machine Learning (ML) and Certification in Data Science on Coursera, *advanced Certification Program in Cybersecurity and Professional Certification in Supply*

Chain Management & Analytics with Eckovation.

IIT Roorkee's Anushruti Academy for the Deaf offered the provision of the Internet and smartphone to impart lessons to speech and hearing-impaired students hailing from the marginalized sections of the society.

A unique initiative was the online Sanskrit camp which was commended by Hon'ble Prime Minister Shri Narendra Modi. It concluded with a grand valedictory session with Hon'ble Minister of Education Dr. Ramesh Pokhriyal 'Nishank' as Chief Guest. The initiative imparted spoken Sanskrit lessons free of cost online to over 3000 learners globally.

By harnessing the next-generation skills of the youth, these initiatives will go a long way in making IIT Roorkee count among the league of global academic institutions that are imbued with the spirit of making a difference. ■

WAY AHEAD

COVID-19 Impact on Education is Hardest?

By AIDMI Team

From ongoing survey of students, teachers, parents and key stakeholders involved in re-opening schools AIDMI finds that COVID-19 hits education sector the hardest.

The work with UNICEF and city officials indicates that reopening calls for both, promising future and eminent caution. And these two need to crystalize in reopening efforts.

Girl's educations are hardest hit, almost in all or any schools, due to their limited online access. The distant education demands rethinking pedagogy and methodologies, as well as ways of learnings. This is especially true for girl students who now face "double distance" of gender and technology.

Digitalisation of learning is a reality and is here to stay. For all schools



Photo: AIDMI.

and all students, the blending of distant and face-to-face learning needs more piloting, innovations, and demonstration.

Care must be taken so that the above items do not curse millions to children, mostly girls among them, to drop out, for a year, or forever. ■

The views expressed in this publication are those of the author.

For Personal and Educational Purpose only.

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