# Digital Divide A study on Access to Online Education among Children of Coastal Fishing Community During COVID-19 Pandemic

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# SNEHA (Social Need Education and Human Awareness)

#### ACKNOWLEDGEMENT

During the outbreak of pandemic, the children have missed their schools and friends. This became the greatest challenge to the parents to engage children at home and worried of their education. This Online Education survey was carried out after the school closure and many measures were taken by Government through Education Department to ensure the learning in various medium.

SNEHA appreciates Dr.Sudhan, I.A.S. for his valuable guidance, encouragement and constructive recommendations.

Special thanks to Dr. Vidyasagar, for his tremendous support in improvising the report.

Grateful thanks to Ms. Stegana Jency (CCRD) for her technical help in developing the survey questionnaire and drafting the report.

This survey is to understand the impact of online education among children and parent. SNEHA appreciates all the respondents (Parents and Children) for their participation in bringing the issues faced during school closures, measures were taken by Governments in states and union territories (UTs) to implement programmes to support distance/home-based learning for children by varying degree of teacher interaction and follow-up and by parents. Different means, including television, and online platforms, have been used to provide distance/home based learning. These strategies are to ensure continued learning for all children, there is a lack of evidence of the extent to which children, particularly from the most marginalized groups, are able to access learning from home that are the most effective in reaching them.

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FOREWORD	Date :
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Coronavirus outbreak mediated pandemic impacted all the sectors across the world and like any critical sector, education has been hit hard. Millions of students and teachers had regular classes in their institutions, and due to the pandemic, got stuck at the home. As a result, education changed dramatically, both teaching and learning happen through electronic devices which are relatively new to the entire teaching-learning community. Education is a Fundamental Right for all Children in emergencies and must be a priority from the very beginning of any and all emergency responses.

Children have hope and dreams and all children deserve fair chance to make their dreams real. School is the institution where children's hope and dream been explored. School and school premises help the children to learn and unlearn things, it nourishes the child and it is the institution where the child's overall well-being is taken care. The pandemic has disrupted the whole world and the school closure was terrible and the costs stand to be tremendous in terms of learning losses, health, well-being and drop out. Children had a terrible missing of their dream school, favourite teacher, meeting friends and play ground. School reopening was the only wish each and every one wish for. School closures and a paradigm shift in the way educators deliver education—through various online platforms have created a big learning gap and disinterest in education among children. Children want physical presence in school. This report has brought out the impact of online education, challenges due to school closure and parents threat on their child's future. The path foreword in accommodating learning in home is like accepting unnecessary limits.

During school closures, measures were taken by Governments in states and union territories to implement programmes to support distance / home-based learning for children by varying degree of teacher interaction and follow-up and by parents. Different means, including television, and online platforms, have been used to provide distance/home based learning. Inspite of all existing efforts, it also requires urgent attention and collective action by all Government Departments, Institutions, Civil Society Organizations and communities to modify or create educational policies, laws, and schemes to obtain equal access to resources for all children.

This study reflects the merits and demerits of the new-normal online education from home in the compiled voice of parents and students. The study addresses the children's compliments and grievances of online education compared to regular classes. This further enlightens how to improve the technologies to make them use more efficiently.

I am happy to record my appreciation to SNEHA Organization with its long experience of over 35 years of working for the rights of women and children. I take this opportunity to recognize everyone involved in the task of organizing, interviewing, drafting and preparing this report including all staff of SNEHA, Mr. R. Vidyasagar, Former Child Protection Consultant, UNICEF who contributed to bring this report in a simple and effective manner.

R. Sudhan IAS \
state Project Director (SS)

# Digital Divide

A study on Access to Online Education among children of Coastal Fishing Community during COVID- 19 Pandemic

#### CHAPTER 1

# INTRODUCTION:

The COVID 19 pandemic has been a worldwide crisis that has wreaked havoc on the lives of the vulnerable sections of the population, especially school children since the education system has been system online. Since the schools have been closed for so long and there have been so many variations of Corona, there is a lot of uncertainty about resuming to normal lives. Tamil Nadu has seen schools reopened for a short period, and closed again and reopened from 1st February, 2022. Yet, uncertainty looms large due to school closures and a paradigm shift in how educators deliver education through online approaches. Online platforms have led to a big learning gap and disinterest in education among children.



UNESCO<sup>1</sup> indicates that 186 countries have implemented nationwide closures, affecting about 73.8% of the total enrolled students. Physical distancing is the most effective preventive measure in community spread, so transmission and hence practical-physical education has been closed. All students have been affected. In spite of the challenges posed both to educators and learners, online learning and distance education have been thought of as a panaceas for this unprecedented global pandemic. There is no substitute for the involved experience of school education in person. Schools where cell phones were not permitted at the time transacted entirely online. It is believed that an individual's overall psycho-social development takes place in the classroom. Students are experiencing demotivation and insecurity as well as oblivious to what they are losing out on as a result of this program. Activities such as social and challenging environments, engagement, communication, group work, value education, and play and relaxation time with peers are all integral to the overall development of a student.

# Digital Divide in India and difficulties in accessing online education

The COVID 19 pandemic and related restrictions on the mobility of people, brought a shift to virtual interactions and forced society to adopt technical and digital resources for daily activities. However, the access to the digital world is not uniform across different segments of the population and a significant gender digital divide has also been discussed by many studies across India<sup>2</sup>. This digital divide is exposed more during the pandemic when the schools were closed and teaching mode shifted to online. UNICEF has estimated that "approximately 120 million children in South Asia are on the verge of poverty due to this pandemic and around 240 million children reside in multidimensional poverty, which contains factors like deficiency of education, poor health, lack of sanitization, and poor working conditions". Poorer the population lesser the access to the digital world and because of this "the pandemic has created a new crisis in the education system due to a huge digital divide, which leads to a loss of learning in the short run, while

UNESCO (2020), COVID-19 Educational Disruption and Response, https://en.unesco.org/covid19/educationresponse/. https://1e8q3q16vyc81g8l3h3md6q5f5e-wpengine.netdna-ssl.com/wp-content/up-loads/2017/01/A4AI-presentation.pdf

https://www.livemint.com/opinion/quick-edit/opinion-the-gender-digital-divide-11571221197431.html



simultaneously increasing the chances of dropping out from education. In the long run, there will be a huge loss in human capital accumulation and economic development." According to a joint report on India by UNESCO and UNICEF3, In India, only 54% of urban and 32% of the rural population of 12+ years have internet and mobile connectivity. 99 percent of both urban and rural internet users aged 12+ years used mobile phones to access the internet only 11 percent of Indian households have computers such as desktops, laptops, and tablets (excluding smartphones). A report by the Action Aid (2021)<sup>4</sup> found that 57.98% of the respondents preferred a smartphone, 36% laptop and 5% tablet for attending online classes. Mobile data pack was the source of the Internet for 82% of the respondents. Majority of the respondents (62%) said that WhatsApp was the best way to communicate class updates. This indicates that those who have access to technology and gadgets performed better than those who could not arrange for the same which exacerbate the digital divide. In rural areas, students have limited or no Internet access and numerous students may not be able to afford a computer, laptops, or smart mobile phones in their homes. Online schooling has

UNESCO & UNICEF, 2021, India Case Study Situation Analysis on the Effects of and Responses to COVID-19 on the Education Sector in Asia, October 2021, https:// www.unicef.org/rosa/media/16511/file/India%20Case%20Study.pdf

Anviksha Kaul, Action Aid Association India, 2021, "Impact of COVID-19 on School Education in India" July 2021, https://www.actionaidindia.org/blog/impact-of-covid-19-n-school-education-in-india/

created a digital split among students. According to Action Aid, "the lock-down has led to extreme distress for students in India that come from an economically deprived background. The Majority are unable to explore online learning according to various reports. An immediate solution for making educational supply easier for them is required".

A study done by Mohammed Arshad Khan<sup>5</sup> et.al. (2021) on the perception and challenges towards online classes during COVID -19 pandemic, of school students who were studying in secondary schools of Delhi, revealed that the impact of rapid transformation towards online classes is guestionable. Quoting NSSO (National Sample Survey Organization, India) 2017–2018 data, the study has shown that only 9 percent of the households had access to the Internet and computer in India. Around 90 percent of the currently enrolled students have no access to the required materials, which severely affects participation in online classes, exposing the stark socio-economic disparities in Internet accessibility. Regarding the perceptions of Delhi students on online education, the study has revealed that, on the positive side it increased the technological literacy of students, saving traveling time and it is more flexible in time and space. However, the students felt that it is not comfortable when compared with the offline classes. The reasons specified are lack of interaction with teachers in online classes and low motivation for study due to a lot of distractions at home. Some students felt socially isolated because of restrictions on outdoor activities and group projects to prevent the spread of the virus. Mobile phones are considered not suitable for online classes and there is no difference in the perceptions between boys and girls. After the pandemic most of the students preferred normal classes in school, instead of online classes. The study has also illustrated the experiences of students towards online classes during the COVID-19 outbreak. Around 46.8% of the students were not satisfied with online learning due to connectivity issues, eye strain or belonging to low socio-economic family, whereas some students were satisfied with online classes as it helped to reduce the learning gap, which had widened due to the prolonged school closures during this COVID-19 pandemic. Several students felt that the teachers did not deliver better in online classes. As a policy recommendation, the study has said that "the study encourages the policymakers and educational

Mohammed Arshad Khan, Tuba Kamal, Asheref Illiyan and Mohd Asif, "School Students' Perception and Challenges towards Online Classes during COVID-19 Pandemic in India: An Econometric Analysis" Sustainability 2021, 13(9), 4786; https:// www.mdpi.com/2071-1050/13/9/4786/htm

institutes to handle this online-based learning in a better way by adopting the latest techniques of online classes and by training teachers and students in this new technology continuously so that the teaching and learning process becomes more enjoyable and effective during this ongoing COVID-19 pandemic. The government must take certain remedial measures to overcome the barriers/challenges in online classes and reduce the digital divide so that no students will be left out. The government must ensure that all necessary infrastructure is set up for this purpose".

A rapid survey conducted by Campaign Against Child Labour (CACL) (Tamil Nadu and Pondicherry) (2020)<sup>6</sup> among the vulnerable communities across 24 districts in Tamil Nadu and Pondicherry, on the impact of COVID 19 on child labour revealed the following issues on online education.

- Only 43% of the school-going children have attempted to attend online classes in all the districts. Of these children, most of them are not attending regularly because of various reasons. Though they know about the online classes, 24% of them are not attending at all, while another 24% attend only 25% of the classes. 21.6 % of the children attend 50%. Only 9.1% of the school-going children have said that they are 100% attending the online classes.
- Reasons for poor attendance cited are lack of smartphone, lack of good internet connectivity, needed work outside, a bad atmosphere at home and, so on.
- More than one-third of the children have said that online classes are not useful at all. On the other extreme, only 3.8% of the children have said that the classes are highly useful. Almost 90% of the children have graded the online classes below the expected level of satisfaction.
- Many children have said that the classes are monotonous and boring.
   There is no way of asking doubts and getting clarified though there are many other challenges.
- Only 92 school-going children (16.3%) had their mobile phones. Only a very few (6.7% of school children) attend TV classes regularly. Others

(Post-COVID-19 Education for a Sustainable Future: Challenges, Emerging Technologies and Trends)

<sup>&</sup>lt;sup>6</sup> CACL (Tamil Nadu and Pondicherry), 2020, COVID 19 Reversing the situation of Child Labour, A rapid survey in Tamil Nadu, Published by CACL.

attend not so regularly. Poor attendance of TV classes is because these classes are boring. There is no way of clearing the doubts, lack of TV or cable connection at home, bad family atmosphere, TV that is under repair and so on.

- Most of the children said they miss learning, their teachers, friends and mid-day meals.
- There is a big jump in the proportion of working children from 28.2% to 79.6% because of the impact of COVID-19 and school closure.

A study done by Children Believe (2021)<sup>7</sup> with 481 children in five districts of Tamil Nadu and Andhra Pradesh, on learning and living during the pandemic highlighted the following opinions about the education of children during the pandemic.

- Among the children surveyed, 74 percent of them either read rarely or not at all when schools were closed. This may pose problems for longterm problems.
- The low access to online learning may be due to the lack of needed electronic equipment. The majority of Scheduled Caste and Most Backward Caste students sampled (70 and 60 percent, respectively) did not have the equipment needed to participate in online learning (e.g. mobile phone, laptop, internet, television or even electricity). This shows that the pandemic has exacerbated the marginalization of impoverished, vulnerable children.
- Lack of a conducive environment for learning at home may be another reason hindering education. This was reported to be an issue for 82 percent of Scheduled Caste students. Both Scheduled Tribe (46 percent) and Backward Caste (48 percent) students also reported challenges with their home environment.
- Apart from a lack of necessary access to equipment, distractions at home may draw children's attention away from focusing on their studies.

Children Believe, 2021, LEARNING AND LIVING DURING A PANDEMIC - INDIA RESEARCH SUMMARY REPORT AND POLICY BRIEFS Impact of COVID-19 school closures on learning among children from marginalized communities in two southern states of India

- Two main issues related to online learning during school closures were reported. First, no online classes were conducted by the concerned schools, and second, even where online learning was made available, most of the children had no access to an android mobile phone, tablet, laptop or a television needed to participate.
- Many students were unable to follow or participate in online classes, feeling boredom or an inability to focus on studying remotely and, a lack of support from parents or other family members in following online classes. There were also issues with technology, such as technical glitches, connection issues and, a lack of equipment

#### The Present Study

The existing knowledge on the impact of COVID 19 pandemic on children's education is presented above. While it talks about the impact in general on vulnerable communities and children, this study focuses on children of the coastal fishing communities y to understand the impact of COVID 19 on access to online education. This study is based in three districts (Nagapattinam and Mayiladuthurai districts in Tamil Nadu and Karaikal district of Pondicherry).



# Background of the fishing community and the districts covered under the study:

Indian Fisheries and aquaculture is an important sector providing employment, food, and nutritional security, particularly to the rural poor and better access to protein rich food for all. Along the Indian coast, there are 3,477 marine fishing villages distributed in 9 coastal states, the union territories of Puducherry, Daman & Diu, Lakshadweep and Andaman & Nicobar. Highest number of marine fishing villages are in Odisha, Tamil Nadu and Andhra Pradesh with 739 (21.3%), 575 (16.5%) and 533 (15.3%) villages respectively. There are 1, 55,062 (17.4%) marine fishermen families residing in the maritime state of Tamil Nadu<sup>8</sup> . Government of Tamil Nadu has stated that it has a 1,076 km long coastline and 41,412 sg.km of continental shelf area, contributing to 5.21 Lakh tons of marine fish production. This supports the livelihood of 10.48 Lakh marine fishers. There are 5,806 mechanized and 41,652 traditional fishing crafts which are actively engaged in fishing and it is mentioned that about one third of the fishing families are below the poverty line (BPL)9. The Tamil Nadu fisheries sector is frequently affected by disasters, including cyclones and floods, and the occasional tsunami. The Covid-19 crisis is a new type of unfolding disaster<sup>10</sup>. According to Ajit et.al (MIDS, 2020) fishing community is affected in various ways due to COVID 19 pandemic. Fishing community suffered from Job loss, lack of transportation, shutting down of post-harvest operations like fish sorting, selling, transportation, processing, export, safety concerns of local consumers and so on. Though the government provided some relief, these were inadequate and did not compensate for the average earnings of fishers and fish workers. Moreover, the usual support given by the Tamil Nadu Fishermen Welfare Board, excluded the most vulnerable groups, such as women fish vendors. M.S.Swaminathan Foundation has also come out with similar findings from

<sup>&</sup>lt;sup>8</sup> Government of India, Department of Marine Fisheries and CMFRI Centre for Marine Fisheries Research Institute, Marine Fisheries Census 2016, https://www.indiaspend.com/uploads/2021/10/14/Marine\_Fisheries\_Census\_INDIA\_2016.pdf

Government of Tamil Nadu, ANIMAL HUSBANDRY, DAIRYING AND FISHERIES DEPARTMENT - Policy note for Fisheries, (2020-21) http://cms.tn.gov.in/sites/de-fault/files/documents/fisheries\_e\_pn\_2020\_21.pdf

Ajit Menon and Maarten Bavinck, 2020, "Covid-19 and Tamil Nadu's Marine Fisheries Sector" MIDS Occasional Policy Paper 18 Covid-19 Series August 2020, Madras Institute of Development Studies. https://pure.uva.nl/ws/files/52453453/50427401.pdf

their study including Pondicherry and Tamil Nadu<sup>11</sup>. This report also mentions that the supply chain disrupted, thousands of ice-plant workers, fishers involved in diesel transportation to the boats and youth are losing their daily wages. Such negative impact on the fishing families has also affected their children and their education.

## Profiles of the districts of the present Study

Nagapattinam district is predominantly a coastal district and Mayiladuthurai is a new district carved out of Nagapattinam district. Nagapattinam is predominantly, a Coastal District having a large coastline of 187.9 kilometers. 29 coastal panchayats are in 52 coastal settlements. Coastal areas also have two municipalities and two town panchayats.

Fishing along with Para marine activities like Dry fish, Prawn farming constitutes the second Major economy for the district. Some parts of the Mayiladuthurai district also falls under the coastal belt. The Human development report of Nagapattinam (2017)<sup>12</sup> shows that, in Coastal blocks the dropout rate of boys is higher at the secondary level of education.

Karaikal District is geographically contiguous with Tamil Nadu state and belongs to the UT of Pondicherry. The prominent source of income of this district is agriculture and fishing. Karaikal is a coastal town with a total coast-line of 26 kilometres. There are 12 big fishing hamlets and more than 25000 fishermen (6000 families) are living in these coastal villages<sup>13</sup>. Karaikal town is located about 20 kilometres north of Nagappattinam.

# Objectives of the present study:

The overall objective of the study is to understand the impact of COVID 19 on children's education in the coastal fishing community and suggest policies for improving the situation. The specific objectives of the study are as follows.

M.S.Swaminathan Research Foundation, 2020, "COVID impact on livelihoods of marine fishing communities along India's east coast, https://www.mssrf. org/content/covid-impact-livelihoods-marine-fishing-communities-along-india%E2%80%99s-east-coast

Tamil Nadu State Planning Commission, Planning Commission of India and UNDP, India, 2017, "Human Development Report, Nagapattinam District",

<sup>13</sup> http://en.wikipedia.org/wiki/Karaikal

- Understand the awareness level among parents and children about the online education/learning system conducted by schools.
- Digital access and the technical issues in attending the online education/learning classes.
- Effectiveness of the implementation and reception of online education/learning classes.
- High and Higher secondary school children's preparations on facing public examinations.
- Suggesting needed policy changes to improve the lacuna in the education system.

## Methodology:

The study is conducted among randomly selected 305 parents and children from the coastal fishing community. The survey has been conducted through a set of structured questionaries' (questionnaire annexed) in 8 blocks of Nagapattinam, Karaikal and Mayiladuthurai Districts. The survey was conducted by the staff of SNEHA<sup>14</sup> Organization after thorough orientation to them on the survey formats. In addition to this, focus group interviews with the community members and focus group interviews with the children were conducted in two districts.

The following section discusses the findings of the study.

Social Need Education and Human Awareness (SNEHA) incepted in 1984 and its work covers villages in coastal districts of Nagapattinam and Karaikal in Tamil Nadu and Pondicherry. Sneha is a right based organization based at Nagapattinam working with fishing and other coastal communities for the past 30 years.

# Chapter 2

# Response of Parents and Children on digital education

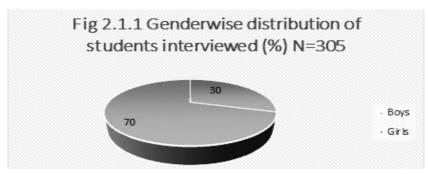
"Education is not just about subject knowledge but also about developing social skills and sportsmanship among the students, which is built over years. Relying solely on online education may hinder the holistic development of children, and many may underperform later in their professional and personal lives"

During school closures, measures were taken by Governments in states and union territories (UTs) to implement programmes to support distance/ home-based learning for children by varying degrees of teacher interaction and follow-up. Different means, including television, and online platforms, have been used to provide distance/home based learning. These strategies are to ensure continued learning for all children. There is a lack of evidence of the extent to which children, particularly from the most marginalized groups, can access learning from home that is the most effective in reaching them. Globally, data show that, in general, the poorest and most marginalized children are missing out on schooling compared to their counterparts<sup>15</sup>. In this context this study is conducted to understand the perception of the parents and experience of children on digital education from the field interviews, in order to gain an understanding of which interventions may be most effective in supporting distance / home-based learning of children, particularly from the most marginalized groups, during school closures. This report would be useful to states to better prepare the education system to ensure continued learning of children moving forward and in case of future crises as the pandemic crisis is still lingering on the community in some way or the other and the situation being very uncertain.

#### 2.1. Profile of the children interviewed:

Out of the total 305 children, 91 were males (about 30%) and 214 were females (about 70%) (Fig.2.1.1). Out of all the School going children, a majority of them are girls, especially among coastal fishing community as most boys start venturing into the sea along with adults after they become 15 years, as mentioned in many other studies and experiences of CSOs working among the fishing communities.

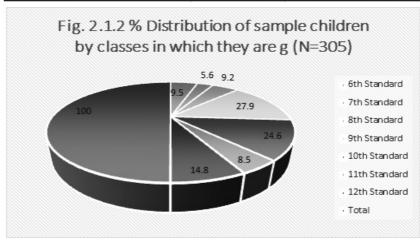
<sup>15</sup> UNICEF India Country Office"RAPID ASSESSMENT OF LEARNING DURING SCHOOL CLOSURES IN THE CONTEXT OF COVID", 2020.



As for as the status of schooling of these children, about 24% of them were studying in 6th to 8th standards, 52% were in secondary levels and about 24% were in higher secondary schooling. (See table 2.1 and fig. 2.1).

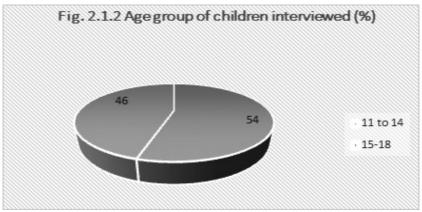
Table 2.1.1 Schooling status of children interviewed

Standard in which the children	Number of	% to total children	
were studying	Children	interviewed	
6th Standard	29	9.5	
7th Standard	17	5.6	
8th Standard	28	9.2	
9th Standard	85	27.9	
10th Standard	75	24.6	
11th Standard	26	8.5	
12th Standard	45	14.8	
Total	305	100	



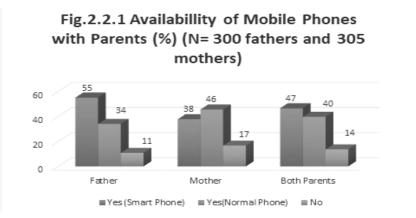
#### Age group of children:

Of the total children interviewed 54% of them were in 11-14 age group and 46% were in the age group of 15-18 as shown in Fig. 2.1.2.



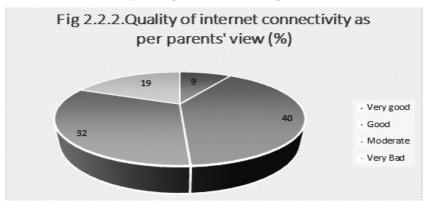
#### 2.2. Parents' situation and their perception on digital education:

This survey was carried out with 305 children and their parents. Both the parents were present during the survey. However, most of the mothers participated actively. In the case of fathers only 34% of them have smartphones and 46% of the mothers have smart phones. About 11% of the fathers and 17% of the mothers did not have any cell phones and the remaining have only ordinary phone that cannot be used for online classes. Overall only 40% of the parents had smart phones and this impacted the digital education of the majority of the children among the fishing community. Thus a majority of the children are deprived of access to digital education. (See Fig.2.2.1)



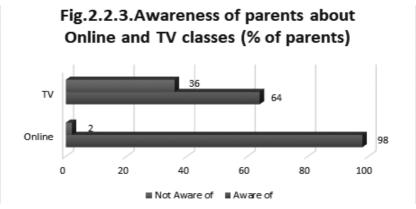
#### Quality of internet connection in smart phones

Only 9% of the parents have reported that the internet connectivity is very good, depending on their location. While another 40% of the parents reported that the connectivity is good and in most of the times, the remaining parents have said that the connectivity is either moderate or bad. Thus about 51% of the parents said that the connectivity is not to the desirable level to have uninterrupted digital access. (See Fig. 2.2.2.



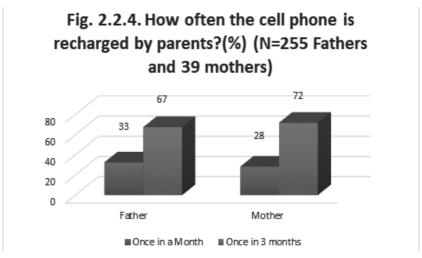
## Awareness of parents about online and TV classes:

It is necessary for parents to have knowledge on the modalities of online classes, in order to support their children. Two important mode of distance education is through online classes and TV classes. 98 % of the parents were aware about the online classes and only 64% of the parents are aware about the TV classes. However, all the parents do not have access to the TV or the digital platforms. (See Fig. 2.2.3.)



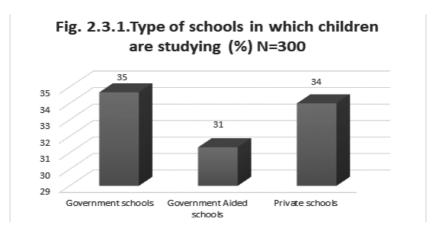
# Capacity to recharge the Cell Phones

The usage of cell phones depends on recharging the cell phones as and when necessary to use it effectively. In our field survey, it is reviewed that more than 60% of parents are able to do so only once in three months. This shows that the majority of the parents are using the cell phones sparingly to avoid expenditure on recharging. (See Fig.2.2.4)



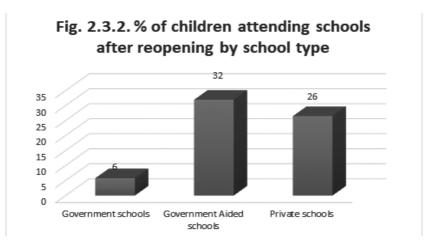
## 2.3. Children's access and perception about digital education

Children interviewed for the survey were enrolled in three different types of schools namely, government schools, government aided (government providing funds for teachers and the schools run by private philanthropists) and private schools (run completely by private sector). Private sector schools are expensive to enroll in as they charge high tuition fees and other fees. Thus only about one-third of the children are enrolled in private schools whose parents can afford to send them to private schools (There are both high-end private schools and low-end private schools and low-end private schools charges moderately where as those who are from the lower and lower middle-class economic category can afford). In the sample interviews, 300 students have responded to this question and only less than one third of the students (31%) have said that they are in private schools. Other 69% of the children are enrolled in both government and government aided schools almost equally. (See Fig. 2.3.1.)



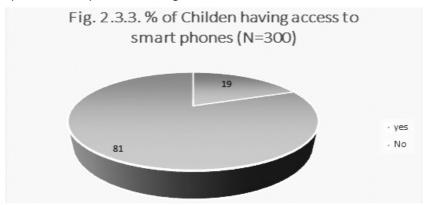
#### Children attending schools after a long closure of schools:

After the second bout of Corona pandemic, schools were briefly reopened only to be closed again. The children were interviewed during this brief reopening of schools. Our survey revealed that only 6% of those enrolled in government schools were back in school while 32% of those enrolled in aided schools and 26% of those enrolled in government aided schools were back to school. Due to the prolonged closure of schools, children were afraid of going to school (school attendance was announced as voluntary) and so are their parents, as the pandemic has not ended. It is also because some children were afraid of coping with the loss of learning during the school closure as their access to online classes or TV classes were not to the fullest extent. (See fig. 2.3.2.)



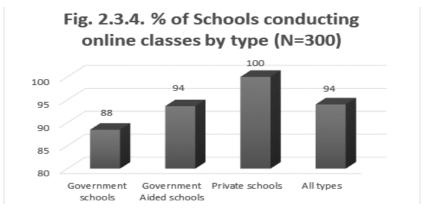
#### Children's access to smart phones:

Responses of children about their access to smart phones revealed the high digital divide for the deprived and marginalized communities. The results of the survey revealed that, of 300 children responded, only 19% have access to smart phones, and the rest do not have, as revealed by the responses of the parents. (See Fig. 2.3.3.)



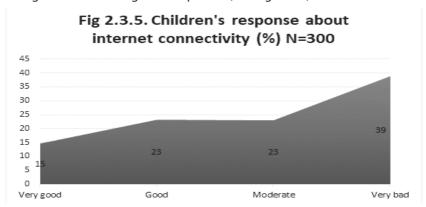
# Schools that have conducted online classes during the school closure:

The survey revealed that while 100% of the private schools were conducting online classes, only 88% of the government schools and 94% of the aided schools were conducting online classes. There are currently a lot of children suffering from a lack of access to digital classes, and not all schools offer online classes, so children are deprived of continuous education. (See fig. 2.3.4.).



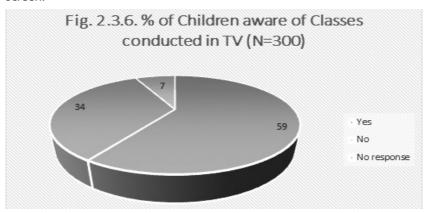
#### Children's response about internet connectivity:

We have seen that majority of the children do not have access to digital classes and on top of that 300 children who responded to the question on the quality of internet connectivity revealed that a majority of them (62%) do not have a good quality internet connectivity. Thus the situation for them is as good as not having a smart-phone. (See Fig. 2.3.5.)



# Awareness about classes conducted through Television:

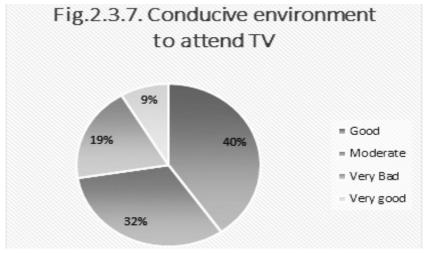
Available alternative to digital classes is the TV channel in on which classes are conducted. When asked about the awareness with regard to this, a majority of the children (59%) are aware of this. Slightly over one-third of the respondents have said that they are not aware and 7% did not respond to this. (See Fig.2.3.6.) TV classes depend on the availability of functioning TV, regular recharging for the cable connection, and the quality of the TV screen.



Though over 75% of the children have TVs in their homes nearly half of them said that they don't have access to the educational channel in their TV sets as the cable connection is not recharged regularly. Those children who were attending online classes are not able to attend TV classes. Among the rest of them, they are not able to attend TV classes due to various reasons. They find it difficult to follow the lessons as it is one-way lectures and there is no scope for interaction. It is difficult to follow the classes if they miss classes in between.

# Atmosphere at home to attend TV classes:

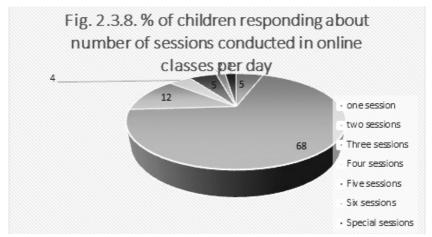
Only 49% of the children who have responded to the situation at home is condusive to attend the TV classes and for a majority, the situation is not conducive at home for attending TV classes (see Fig. 2.3.7).



More than half of the children who attend TV classes have said that it is very difficult to understand what they teach in the TV classes.

Both in online classes and TV classes the children have said that and pictures used to teach them are not very fascinating. The sessions abruptly starts without any warming up as in physical classes and that makes the classes so boring.

In most of the private schools, the number of online sessions is more than 2 per day even up-to six sessions per day and in some cases special sessions. That is quite boring and children lose interest in attending such sessions (see Fig. 2.3.8). In the majority of the cases, the teachers are giving assignments to complete before the next session. Children find it difficult to complete such assignments. Though in the majority of the schools, the class schedules are supplied in advance, many children are not able to attend due lack of digital devices and access to TV classes.



As a result of issues that are mentioned so far, many children say that they are not able to perform well in learning due to various reasons, the most important reason being not able to understand what is taught to them. (See table 2.3.1).

Table 2.3.1. Reasons for not performing well in learning

Reasons	No. of Children	% of children
Books are not available	9	5
Online class timings are not sufficient	5	3
Couldn't Not able to understand	48	29
Reduced Syllabus/Portion Leads to confusion	18	11
Unable to clarify doubts as the classes are short	58	35
Network problem	15	9
Not having mobile phones	9	5
No extra Classes/ Revision	6	4
Total	168	100

## Other issues highlighted by children

- Nearly one-third of the children said that they are afraid of facing the exams just by attending online or TV classes. However, majority of the children have not responded about their opinion on facing the exams.
- Only about 15% of the children have said that they need to clarify their doubts in person from their class teachers, though more than half of them said it is difficult to get clarified on their doubts while about one third were not even willing to respond to this question.
- While the majority of the children (more than two-thirds of the children)
  are happy about "All-Pass" even without writing the exams, one-third
  of the children are not happy with this. They feel that the government
  should have asked all children to write the exams and then declare "AllPass". A most important reason for not agreeing to All-Pass as it deprives
  the children who work hard and could have scored high marks. The way
  the marks are calculated for All-Pass students is not clear to them.
- After Schools closed in March 2020, children lost their mid-day meals, social skills and, the progress in their academic career.
- Children lost their traditional classrooms, interactive learning opportunities, lack of peer group interactions and positive outlook.
- There is a large gap in completing the assignments and follow-up of assignments by the Teachers. Children studying 1st – 8th standard in Government schools are neglected the opportunity for them to clarify their doubts.
- The duration of the classes is short which prevents them to interact with their teachers and lack of space to express that they are not able to understand the subjects.
- Many children have said that the classes are monotonous and boring.
- The majority of the children said that the television/online classes does not helps them to write their examination.
- Children do not have fear of reopening schools but they strongly expressed that the school could ensure safety measures against COVID19.

 Children are not prepared to face the challenge of learning and facilitation by teachers in this new environment as well as embrace the new opportunities that it has to offer.

To sum up, despite government and private actors coming together to roll out a wide range of remote learning resources, students are falling behind during the physical closure of schools since March 2020, due to the COVID-19 pandemic. However, the learning outcomes are not to the desirable levels. The most important reason is the digital divide. There is no "Equity" in the accessibility of digital devices.

Thus the lack of access will exclude students from learning and retention in schools. This is a significant issue in rural and low socio-economic background families. If students cannot afford the smartphone, how schools can ensure education for all children during the pandemic. As far as Internet accessibility is concerned, it is not universal, and in many families, Internet access poses a significant cost to the user. Some families pay a fixed monthly rate for their Internet connection, while others are charged for the time they spend online. If it is limited by the amount of Internet access they can afford, then instruction and participation in the online program will not be equitable for all students in the education.

During online education, children miss out on social and cultural skills, fitness, etc. that are slowed down considerably. Only minorities of students in the coastal community have used any remote learning resources; and even among those, nearly 80 percent report that they are learning less or significantly less than in school. Fewer girls, younger students, rural students and government school students use high-tech tools. Usage of such devices is less among government school students compared to the students from private schools.

The availability of key offline resources, textbooks and teachers remains far from universal. Despite Tamil Nadu state distributing textbooks for the new academic year, children are not able to use them on their own. The majority of the students are not in touch with their teachers. Generally, remote learning resources are perceived to be less effective than in-school teaching. Students with poor mental health struggle to succeed. Many children feel that their mental and socio-emotional health has been poor or very poor low since May 2020.

Many parents and adolescents see value in technology tools. Parents and teachers have also identified significant support needs to improve the remote learning experience and ensure safe school returns. While health concerns are by far the largest deterrent to returning to school, a sizeable number of respondents cited financial constraints and the need to have children in order to earn an income. These findings provide knowledge and inspire opportunities for further exploration of how we might enhance remote learning during the current school closures, better prepare for re-opening, and strengthen the education system over the long term.

# Chapter 3

# Recommendations from the study

- If a child need to successfully participate in an online program during disaster situation (COVID), the child must be well organized, self-motivated, and possess a high degree of time management skills in order to keep up with the pace of the course. For these reasons, online education is not appropriate for young children (i.e. elementary or secondary school age) and other students who are dependent learners and have difficulty assuming the responsibilities involved in online education.
- The effectiveness of online learning varies amongst age groups. Children are more likely to be distracted due to lack of structured environment, lack of space for discussion, clarification of their doubts, peer learning and these factors ultimately hindered their goals. It is clear that this pandemic has utterly disrupted an education system. But schools continue to focus on traditional academic skills and routine learning, rather than on skills such as critical thinking and adaptability, which will be more important for success in the future.
- It is important to bridge the digital divide as a first critical step towards
  ensuring the children especially adolescents from the marginalized
  communities have access to online learning. This can be continued once
  the pandemic ends. Focus on building an inclusive digital infrastructure
  will enable and increase access to online education.
- The children, their parents, the community, governments, and the civil society organizations need to come together to work collectively for creating a robust education systems. Feedback from parents regarding education and learning methods, community-based approaches to education, and meaningful conversation with adolescent groups will be crucial to make positive changes in their lives. We cannot let the gains of the past two decades in promoting education for adolescents; especially girls epically go in vain. In the post-pandemic world, our focus should strongly remain on building back better for the present and future generations a new world where no one will be left behind and everyone will be able to achieve their full potential through education.