



COVID-19 and rural educational systems of Goa, India: A descriptive short report of a government school in Sattari, Goa

Dattaram Fale¹, Nezlyn Cressida D'souza^{2*}

¹Department of Education, Goa Vidyaprasarak Mandal's Dr Dada Vaidya College of Education Farmagudi, Ponda, Goa, India.

²Department of Food Technology, Carmel College of Arts, Science and Commerce, Nuvem, Goa, India.

Received: 26-May-2022, Manuscript No. AERR-22-65069; **Editor assigned:** 30-May-2022, PreQC No. AERR-22-65069 (PQ); **Reviewed:** 13-Jun-2022, QC No. AERR-22-65069; **Revised:** 20-Jun-2022, Manuscript No. AERR-22-65069 (R); **Published:** 30-Jun-2022, DOI: 10.51268/2736-1853.22.10.062.

ABSTRACT

The devastating SARS-CoV-2 outbreak of 2020 has affected all functioning systems of the world, as well as highlighted the loopholes in existing systems. As with other services, the educational systems across the globe have been drastically affected. Being a country of people of diverse socioeconomic backgrounds, India, a country with the world's second-largest school system, has seen a disproportionate effect of the pandemic and the restrictions imposed on the teaching-learning systems of rural and urban environments. As the country suffered through multiple devastating waves of the COVID-19 pandemic, it imposed the longest-running closures of schools. Like other states of India, the education systems of Goa, a lush green state on the West coast of India, have also been affected by the pandemic and related modification of regulations. The rural schools of Goa have been disproportionately affected by the pandemic compared with schools in urban environments. This paper discusses the case of a government school in Sattari-North Goa, and enlightens the challenges faced and initiatives that were taken to tackle the situation.

Keywords: Education, Pandemic, Rural schools, Online learning, Sattari, Goa, COVID-19.

INTRODUCTION

Education provides a foundation for the blossoming of student's social, psychological, and learning needs. The pandemic-imposed closure of schools and other academic institutions has possibly widened the gap between school-dependent students and access to education. Mandatory school closures and the emergent switch to online education were

the results of public safety measures. With a rapidly spreading virus in the country, lockdowns and digitization of most services were imperative; however, the teaching-learning systems were highly affected by the decision. It is common knowledge that high-income students have access to smartphones, laptops and internet connectivity and thus were

able to cope with the introduction of online classes partially. However, the same cannot be said for students of rural sectors. The average financial structure of privileged urban families allows investing in tech-savvy devices and internet facilities, thus enabling a smooth transition to the synchronous and asynchronous forms of online scholastics. On the other hand, pandemic-enforced economic instability dramatically worsened the scenario for students of rural habitats.

Although the Government of India, in collaboration with UNESCO: INCCU (Indian National Commission for Cooperation with UNESCO), developed various online learning resources such as DIKSHA, SWAYAM, e-PATHSHALA, and SWAYAM PRABHA, which could be accessed by remote, internet-deficient students via radio and television, not all the students could benefit from these platforms advantageously (UNESCO, 2021; Jena, 2020). As stated by the Annual Status of Education Report (ASER) 2021, the schooling of rural children was affected: They had no learning activity or learning materials, and had no access to online education, despite being provided with a smartphone (ASER Center, 2020).

Furthermore, with post-pandemic relaxation, a large proportion of teachers reported children being unable to catch up, or demonstrate basic comprehension and mathematical skills. The effect of the lockdowns on student learning and educational progression is thus of interest to researchers worldwide.

The objectives of this study were to investigate the challenges faced by the students and staff vis-a-vis the transition from classroom learning to online learning, to recognize the challenges faced by the students and staff, and to document the measures taken to stay on par with other, primarily semi-urban, educational institutions. With new variants of concern of the COVID-19 virus arising and spreading across the world, such information can promote the development of change-resistant educational opportunities.

CASE PRESENTATION

Sattari is a green, forest-dense Taluka of North Goa, composed of more than 70 villages, with the river Mhadei serving as its lifeline. This agriculturally bountiful sub-district of Goa allows its residents to be reliant on the natural resources provided, with most of the locals

involved in agriculture-related activities such as cashew plantation and the development of value-added products (Figure 1). Due to the prominence of Sattari in Goan history and politics, the rural taluka has many pre-primary, primary, middle and high schools, which are either government or private run.

However, due to the better quality of education offered by urban schools, many villagers have shifted out of the taluka, leading to a sharp decrease in the strength of students in these schools. Although characterized as a rural taluka the villages in this taluka are far from rural when compared to rural villages in other states of India. The people of Sattari are literate, politically active and value education. Most of the villagers belonging to this sub-district are of diverse castes and socio-economic backgrounds (Figure 1).

The residents belong to different occupational backgrounds ranging from farmers, daily wage workers, cobblers etc. to high-ranking government servants. While it cannot be generalized, substantial proportions of the families are financially unstable and are unable to afford the most basic of requirements.

The government schools located here thus serves as a solution to provide basic needs such as food (through the mid-day meal scheme) and guidance, in addition to free/affordably priced education. Unlike urban schools, rural schools, in general, face challenges concerning infrastructure, student enrolment and drop-out, under qualified staff, primitive pedagogy, technological blockades, etc.

The closure of schools has amplified the existence of these challenges and made it more difficult for underprivileged children to receive an education. Concerning the sex ratio of students enrolled in Indian government schools, it is not uncommon for girls to drop out before they reach senior grades.

This observation can be attributed to either son preference, domestic chores or in some instances, early marriages (CARE, 2020). While many other rural communities across India report a disproportionate sex ratio of students in high school, with most female students dropping out of school before they reach higher grades, schools of Sattari have a fairly stable sex ratio and few-to-none gender-related withdrawals of female students.

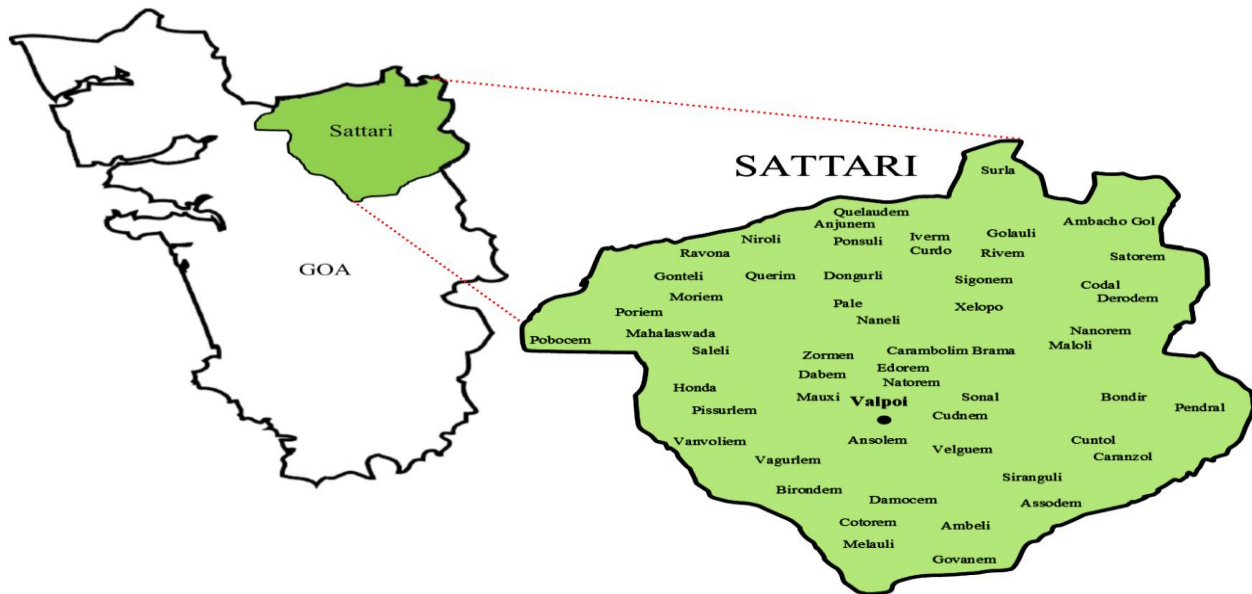


Figure 1. A Map of Goa highlights the area under the Sub-district (Taluka) Sattari and some of the prominent villages in Sattari.

The school (that wishes to remain anonymous), in particular, is a well-established government high school with an appropriate structure and laboratory facilities. Their staffs undergoes various training sessions at the Department of Higher Education (DHE-Goa), and are up-to-date with the most basic of educational advances. The school admits 80-100 students per year but has seen a drop in enrolment due to an increase in parents opting to send their children to private schools. As discussed above, due to the unstable financial backgrounds of most students, they face various issues to even reach the campus. Most of the inner villages of this sub-district have no access to buses, and thus students belonging to this area walk 4 Km-7 Km (on average) to reach school. Being a part of the Western Ghats, a large area of land comprising a variety of flora and fauna is protected, and fewer cellular towers are installed. Thus network issues and internet unavailability are fairly common.

All the above-discussed issues are experienced differently in urban settings. In this study, we evaluated the impact of the COVID-19 pandemic and related safety restrictions on an ideally-located government school that harbours students from more than 30 villages of the sub-district.

Case core: School initiatives

A nationwide lockdown was imposed on 24 March 2020, during which most schools were in the process of concluding the academic year 2019-2020. The subsequent exponential increase in cases made it impossible to complete the academic year or begin in-person

schooling for the following year. As a repercussion of the pandemic, the education of students in most villages suffered drastically. While the rest of the urban zones in the state managed to shift to e-learning methods, the students of rural zones experienced no learning activity for a while. Many of these students did not have laptops or smartphones necessary for online classes. Even if a family could afford a smartphone, various factors affect their educational application: Poor connectivity, parental needs, having multiple children with simultaneous classes, etc. Although certain non-governmental organizations provided some of the students with smartphones, the lack of stable internet made it impossible to conduct live classes. Social media applications primarily WhatsApp, relieved educators, students, parents and administrators.

Teachers would scan notes and WhatsApp them to student groups. The students who managed to possess a smartphone were able to receive learning material online, whereas the students who could not manage to get one had to collect this material from the school in person. A majority of the students had to travel/walk long distances to arrive in an area with a strong network signal to download the lecture material. Due to these discrepancies and lack of stable internet services, the teachers could not conduct live classes and the students had to self-study from the material received.

Being the backbone of the educational sector, the teachers have played a very critical role in making learning material available to these students. Apart from rapidly adjusting to the implementation of online teaching tools, many

government school teachers were tasked to work as frontline workers at quarantine centers, vaccination centers and as data collectors and processors. As per the order by the Ministry of Home Affairs dated 30 September 2020, under strict guidelines the states were allowed to reopen schools (with parental consent) in a staggered manner, with online being the preferred mode of teaching and learning.

Considering the electronic inadequacy to conduct online classes, the school administration decided to conduct offline, off-campus classes for the students, at a location convenient to the students. The teachers were divided into pairs who travelled to the villages on a predetermined date and time and interacted with the students at spacious places such as temples, panchayat ghars, and community halls, all the while practicing the necessary SOPs of mask mandates, social distancing and repeated sanitizing. The teachers would spend 2-4 hours with the students.

If a village had a higher ratio of these students, the teachers would spend longer time in that setting. These initiatives to an extent prevented further learning loss and combated the digital divide in the technological education sector. The state's decision to cancel board examinations for class X students and reduce the syllabus for class XII students was welcomed by many, especially by the underprivileged. They either couldn't afford to attend online classes or understand what was being taught.

Self-studying is a salient behavioral trait that influences the impact of online learning. Although provided with the learning material, many higher secondary students were unable to study by themselves and preferred meeting and learning in pairs or groups. Familial support and motivation influence learning patterns. With the lockdowns in effect, people whose jobs were affected turned to farms to alleviate their financial burden. In some instances wherein the students assisted their parents by participating in housework and fieldwork, a positive home support system motivated them to allot time for educational activities. Literate parents and guardians assisted younger students in practicing their reading and writing skills.

However, students with no moral support systems at home were more likely to ignore homework and indulge in non-academic recreational activities, which affected their learning outcomes. Intending to mitigate the situation, some of the teachers began tutoring nearby children, regardless of their school affiliation, for free.

Although most of the students belong to financially weaker sections, the school has not observed students dropping out of school for the academic years 2020-21 and 2021-22. This observation can be attributed to the free/affordable fees of a government school, and initiatives are taken by the school to promote the continuation of education. For example, some teachers of the school offered to financially assist the students to prevent them from dropping out. In particular, in this case, it can be concluded that having access to devices is insufficient for successful online education, it is thus the out-of-the-box initiatives by the school administration and management that proved beneficial.

The majority of the student population in the country relies on typical blackboard teaching. The implementation of a sudden lockdown drastically affected these academic circles. The Government circulated guidelines to practice online teaching, but while necessary, was not conditioned to cope with it easily. One of the main pros of online learning is the ability to learn at any time from any place. However, school administrators cannot fully explore this advantage as students need to be taught live as per a fixed schedule. Therefore, students and teachers need to have the required facilities (stable internet connection) to successfully engage in a live online class (Valentino et al., 2021). In case of unstable internet connectivity experienced by a student, older students may be able to manage missed syllabi by self-studying or discussing with peers. Still, one cannot expect the same from younger students.

DISCUSSION

The lockdowns and consequential changes in the educational system have impacted student scholastic progress. The transition from offline to online modes of teaching and learning has been smooth for families with stable income and infrastructure; however the same cannot be said for families from financially disadvantaged rural backgrounds. Thus, students of both settings belonging to the exact grade, and being taught the same syllabus have different learning consequences, with the former struggling to read and write. Factors such as the financial impact of the pandemic, access to the internet and internet-accessible devices, unmonitored online learning and other parameters need to be evaluated, to determine their effect on learning outcomes.

The pre-pandemic education scenario was not without flaws and disparities. Teachers and Institutional administrators of various countries have described the spread of 'Learning Poverty', a phenomenon wherein a child cannot

read and understand a simple text by the age of 10 (World Bank, 2020). As of 2019, more than half of 10-year-old children in low- and middle-income countries either had failed to learn to read with comprehension or were out of school entirely, whereas the value was 80 per cent in developing countries (World Bank, 2020). Learning poverty is an essential indicator of the 'Learning Crisis', a circumstance that threatens the country's achievement of Sustainable Development Goals. Failure to establish foundational learning during early age can impact how the students thrive in school or at the workplace, thus lacking the skills and knowledge to power their careers and contribute to economic balance in their community and country.

Reducing the rate of Learning Poverty is possible with a significant increase in the rate of improvement in learning; however, the onset of COVID-19 has made it a dramatically tricky possibility. Prolonged school closure can seriously affect the lifetime educational achievements of rural Indian children (Azevedo et al., 2020; Tiwari, 2021). Sattari, an extraordinarily valuable Goan taluka, historically belonging to the New Conquest, harbours over 120 schools. With multiple waves faced by the state and the country, it is necessary to investigate the learning modes employed by teachers in these rural and urban zones, quantify the learning loss incurred and establish methods to reduce the level of Learning Poverty experienced by the students of the taluka.

Family support is another critical facet to consider regarding successful adaptation to online learning. Better educated parents and family members are more likely to support their children's educational needs either by providing a comfortable study environment or through assistance with classwork and homework activities. Rural India has a lower number of educated individuals, with most families enlisting their children to assist them with some form of household or farm errands and thus may not be able to provide a positive learning environment (ASER Center, 2020). Moving forward, teachers will have to develop methodologies to evaluate learning loss among these students and find alternatives to update their knowledge.

Considering a scenario where the technological needs of rural educational systems are met, successfully integrated education will depend on teacher qualification and their capability to develop and adapt to novel pedagogical techniques. Thus it is important to ensure that the teachers have had sufficient training and can guide and motivate students in trying times, ensuring continued student enrolment.

CONCLUSION

According to Article 45 of the Indian Constitution, education is an elementary and primary mandate for children up to fourteen years of age; however, there has always been a divide between the rural and urban segments of the education sector. Rural schoolchildren have historically been disadvantaged in terms of educational quality and opportunities compared to their urban counterparts. Large-scale survey reports have stressed this – the Household Social Consumption on Education in India (2017–2018) survey and the Annual State of Education Report 2020 (ASER) (Tiwari, 2021).

Under the guidance and approval of the Central government, the State governments employed a mix of methods to make distance learning feasible for rural schoolgoers. Unfortunately, the ASER 2020 survey highlights that the efforts were unsuccessful. The COVID-19 pandemic has shed light on inequality in education and has provided opportunities to solve existing and possible issues. It has also taught us that education is not merely four walls and a blackboard. It encompasses a social space wherein teachers and students interact and find novel ways to exchange knowledge.

The government, administrators, teachers, students and parents, together, act as educational shareholders and can thus develop a safe learning space for the student. The case discussed above serves as an example of the lengths that these shareholders can go to ensure minimal learning loss and improve learning outcomes.

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