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Digital literacy and it's challenges: A study of scheduled tribes of Himachal Pradesh

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Abstract---India's education system has shifted from conventional to digital learning because of Covid-19 pandemic, which has put the whole planet on lockdown. The Scheduled Tribes of Himachal Pradesh could not escape it's effect. Due to online education which is the only way of education, their children are unable to get formal education because of difficult geographical situation, poor internet facility, irregularity of electricity service, poor infrastructure, lack of mobile phones, laptop and computer. This paper aims to explore the problem of getting the education of the Scheduled Tribe of the districts of Kinnaur and Lahaul-Spiti, as well as the two sub-divisions of District Chamba: Pangi and Bharmour (designated as Scheduled Areas) of Himachal Pradesh during Covid-19.

Keywords---adivasi, digital literacy, social inclusion, scheduled tribes.

Introduction

Digital literacy alludes to a person's capacity to discover, assess, and form clear data through composition and other media on different computerized stages. It is assessed by a person's language, piece, composing abilities, and capacity to deliver text, pictures, sound, and plans utilizing innovation. Social media and interpersonal organizations have become a pivotal piece of the data scene. Numerous understudies are utilizing online media to share their spaces of interests, which has been demonstrated to be useful in boosting their degree of commitment with instructors. New models of learning are being created in view of advanced education. Due to Covid-19, when all the education instruments were completely closed, at this time digital education is the only means of getting education without coming in contact with each other.

Scheduled Tribes: The word Scheduled Tribe (ST) was first used in the Indian Constitution. Scheduled tribes were described in Article 366 (25) as “such tribes or tribal communities, or sections or groups within such tribes or tribal communities, as are deemed to be Scheduled Tribes for the purposes of this constitution under Article 342”. The Scheduled Tribes people are generally called “*Adivasi*”. Special opportunities are provided to enhance access to jobs, education, skills and scholarships. Special funds have been set aside in the federal and state budgets for the advancement of these tribes. About 23,655 sq km geographical area is under Scheduled V in Himachal Pradesh. There are 1,73,661 people living in the Scheduled area, with 1,23,585 of them being tribes, accounting for nearly 71.16 percent of the total population. The districts of Kinnaur and Lahaul-Spiti, as well as the two sub-divisions of District Chamba: Pangi and Bharmour have been designated as Scheduled Areas because the population comprises communities declared as Scheduled Tribe under the Fifth Schedule of the Constitution. These tribal areas are very remote and inaccessible, with difficult mountainous terrain and harsh climatic conditions, resulting in high infrastructure construction costs and difficult living conditions. 23,655 sq. km. of the total 55,673 sq. km. of the geographical area in H.P. falls within the Scheduled Area, accounting for 42.49 percent of the total area. The state's Scheduled Tribe population is 3,92,126, with a concentration in the districts of Kinnaur and Lahaul-Spiti, Pangi and Bharmour in Chamba and dispersed across the rest of the state. Gaddis and Gujjers living in combined areas of the state have been designated as Scheduled Tribes by the Indian Ministry of Tribal Affairs. The Scheduled Areas of the State are home to more than 31.52 percent of the State's Tribal population (5.71%) belongs to Scheduled Tribes. The Bhot, Bodh, Gaddi , Gujjar, Jad, Lamba, Khampa, Kanaura, Kinnara, Lahaula, Pangwala, Swangla, Beta, Beda, Demba, Gara, Zoba communities have been listed in the State Scheduled Tribes list.

Constitutional Safeguards

Given the difficulties they face and their lack of access to development facilities in their geographic areas, India's Constitution has made provisions for Scheduled Tribes in the region where they reside. The main safeguards include the promotion of educational and economic interests and their protection from injustice and all forms of exploitation.

One of the important Acts which ensures Social Safeguards of the STs is "Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989. These provisions create safeguards for the protection of tribal communities while creating an environment for affirmative action to support the mainstreaming of tribal communities and for bringing them at par with the other social communities. As per provisions of Article 21A of the Indian Constitution “The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine”. Since COVID-19 pandemic the only way to provide education is through digital mode for which knowledge related to online modules is also necessary.

The Need for Digital Literacy

The term digital literacy to Paul Gilster (1997) is the ability to understand and use information in multiple formats from a broad range of sources when it is presented through computers,” as a logical extension of literacy”. It also refers to the ability to comprehend and use data in a variety of formats from a variety of sources when presented via computers, or to a person’s ability to efficiently execute tasks in a digital world. UNESCO (2013) Digital literacy is dependent on both digital technologies and the digital knowledge they provide. Digital devices and tools, such as computers and communication devices, as well as databases, enable access, management, and creation of digital information. A digitally literate person, according to the American Libraries Association's Digital Literacy Task Force (2011), is someone who: possesses the technological and cognitive skills necessary to locate, comprehend, analyze, construct, and communicate digital information in a variety of formats understands the relationship between technology, life-long learning, personal privacy, and stewardship of information.

Various requirements of Digital Education

Electricity: - Digital literacy is dependent on technology for which electricity is very important. According to the survey report, 24 hours of electricity in every season in all the tribal areas of Himachal Pradesh is difficult due to inaccessible geographical situation of these areas, which greatly affects Digital literacy.

Mobile Phone/ Laptop / Computer:- It is necessary to have a mobile, laptop or computer for digital education. The table-1 analyses the availability of Digital equipments among the tribes of Kinnaur, Pangi, and Lahaul Spiti.

Table-1
The availability of Digital equipments among the tribes of
Kinnaur, Pangi, and Lahaul Spiti

Name of District / Sub District (SD)	Total Number of Household	Radio / Transistor	Television	Computer/ laptop With Internet	Computer/ laptop Without Internet	Both Land line and Mobile Telephone	Mobile Telephone
District Lahaul & Spiti							
SD- Udaipur	1,964	710 (36.15%)	1,503 (76.53%)	14 (0.71%)	37 (1.88%)	331 (16.85%)	848 (43.18%)
SD- Lahul	2,256	983 (43.57%)	1,767 (78.32%)	24 (1.06%)	77 (3.41%)	832 (36.88%)	1,175 (52.08%)
SD - Spiti	2,475	796 (32.16%)	1,668 (67.39%)	23 (0.93%)	77 (3.11%)	280 (11.31%)	1,077 (43.52%)
Total in Lahul &	6,695	2,489 (37.18%)	4,938 (73.76%)	61 (0.91%)	191 (2.85%)	1,443 (21.55%)	3,100 (46.3%)

Spiti District)	%))	
District Chamba							
SD-Pangi	3,868	1,663 (42.99%))	2,206 (57.03%))	6 (0.16%)	38 (0.98%)	7,654 (40.57)	235 (6.08%)
SD - Brahmaur	5,130	1,477 (28.79%))	3,840 (74.85%))	42 (0.82%)	172 (3.35%)	303 (5.91%)	3,820 (74.46%))
District Kinnaur							
SD - Hangra ng	1,099	277 (25.2%)	776 (70.61%))	18 (1.64%)	27 (2.46%)	10 (0.91%)	93 (8.46%)
SD - Poo	1,986	698 (35.15%))	1,341 (67.52%))	37 (1.86%)	154 (7.75%)	535 (26.94%))	1,028 (51.76%))
SD - Morang	2,385	927 (38.87%))	1,507 (63.19%))	29 (1.22%)	184 (7.71%)	536 (22.47%))	1,234 (51.74%))
SD - Kalpa	4,535	1,825 (40.24%))	3,246 (71.58%))	109 (2.4%)	557 (12.28%)	705 (15.55%))	3,304 (72.86%))
SD - Nichar	6,617	1,726 (26.08%))	3,903 (58.98%))	107 (1.62%)	1,054 (15.93%)	309 (4.67%)	5,268 (79.61%))
SD - Sangla	2,913	-34.33%	2,152 (73.88%))	54 (1.85%)	233 (8%)	565 (19.4%)	1,958 (67.22%))
Total Kinnaur Dstrict	19,535	6,453 (33.03%))	12,925 (66.16%))	354 (1.81%)	2,209 (11.31%)	2,660 (13.62%))	12,885 (65.96%))

Source:- Census 2011, Himachal Pradesh.

Internet

We can call the Internet a soul for digital education and information technology. Without internet a mobile, laptop or computer is like a lifeless body. Gagandeep Singh Dhillon (August 22, 2020) wrote an article vide which he stated that there is no internet access in the area; a single BSNL satellite tower serves the entire Dodra-Kwar sub-division in south-eastern Himachal, which includes 20 villages and over 6,000 people. According to a BSNL official and locals, it only provides call connectivity during the day, but 2G internet access is available in the valley during “off-hours” at night if the weather is open. As a result, no virtual classes have been held here. A few teachers have started visiting students at their homes to offer them assignments. The sub-division has three 2G towers, but the low-speed internet service is erratic, leaving students in the valley without access to virtual learning.

Poor network connectivity is still a problem in other parts of the state, especially in the Lahaul and Spiti district. Only students in the Keylong and Gondla valleys have daily access to virtual learning. Officials from the Samagra Shiksha scheme recently conducted a statewide survey to assess the level of virtual learning among students, but due to network issues, they were unable to communicate with respondents in Pangji, Dodra-Kwar, and Spiti. According to the survey, about 95% of students in other parts of the state were linked to teachers through electronic means. Though, lectures are also broadcasted on Doordarshan and the website of the 'Har Ghar Pathshala' programme, Whatsapp is currently the most common method of virtual teaching in the state.

Low speed of internet and broadband with high speed is difficult and expensive for these people because their income is low and due to lack of adequate funds, people are deprived of these responsibilities. Smriti Parsheera (2019) has mentioned in her article that in Himachal Pradesh, the town of Lahaul-Spiti is known for its 'internet ka vanvaas'. The 30,000-plus inhabitants of the area, who live at an elevation of over 10,000 feet, are cut off from the rest of the world for six to eight months of the year due to the harsh winters. The region is mostly served by BSNL's patchy 2G network, with 3G networks available in a few villages. However, after optical fibre cables were destroyed during heavy snowfall, the entire BSNL network was down for the better part of the last six months. This is a fairly common occurrence in Lahaul during the winter when cell towers are often out of operation due to a lack of maintenance and power backup. Airtel is currently the district's only private provider, but its services are limited to Keylong and Udaipur, Lahaul's two largest villages.

Lack of Knowledge & Technology

Not having complete knowledge of technology is also a reason which is a hindrance for digital education. In these areas, both students and teachers do not have full knowledge of the technique, instead of focusing on the subject, they are engaging in the technique itself. The government has run many programs but not enough to cope up during this situation.

Poverty

Poverty is also one of the main reasons of digital divide because it is not in the hands of the people of these poor nations to buy the technical equipment which are used in digital education due to their high market sale price. The government has distributed some equipment to the people for free, but it is impossible to provide this equipment to every survivor unless a proper policy is framed for it.

Government Efforts

NME-ICT- The Government of India has approved a centrally funded scheme called "National Mission on Education through ICT (NME-ICT)" under the Ministry of Human Resource Development, which will be implemented in all of the state's government colleges to provide access to educational content and connectivity with the national pool. The aim of this programme is to provide high-quality customised and interactive information modules to all learners in Higher

Education Institutions through the internet/intranet at any time and from anywhere. Currently, the Central Government bears 75% of the cost of providing connectivity, with the remaining 25% supported by the colleges involved in the project.

Under the student Digital Yojna/ Srinivasa Ramanujan Digital Yojna, the department will distribute laptops/ Net books to 8800 meritorious students from Himachal Pradesh Board of School Education, Dharmshala (4400 -10th and 4400-12th class) and 900 first-year college students, along with 1 GB data cards, to strengthen teaching-learning activities.

Vocationalization of Secondary Education

The Department proposes to begin vocational education in 200 Govt. Senior Secondary Schools with seven subjects/trades vocations, including three new courses, namely Agriculture, Hospitality & Tourism, Electronics & Hardware, Automobiles, Retail Security, IT, and Healthcare, with the aim of promoting skills and improving employability of students in grades 9 to 12.

Technical Education

Five Industrial Training Institutes, namely Reckong Peo in District Kinnaur, Bharmour & Pangti at Killar in District Chamba, Udaipur (Lahaul), and Rong-Tong (Spiti) in District Lahaul & Spiti, are operational in the state to provide vocational training to students from tribal areas. In addition to the above, a women's Industrial Training Institute is operating in Reckong Peo, Kinnaur. At the moment, only two trades are offered under the Tribal Sub Plan and five trades are offered under the Public Private Partnership (PPP) mode at ITI Udaipur, three trades in ITI Rong-Tong (Spiti), three trades in Pangti at Killar, and four trades in Bharmour.

Completion of Project of Atal Tunnel

The Project of the Atal Tunnel was begun on 28 June 2010 and it was introduced by the Prime Minister, Narendra Modi on 3 October 2020. Slicing through the Pir Panjal range, the passage diminishes the distance between Manali and Leh by 46 km. The Rohtang Pass, to which the passage gives a substitute, is situated at a stature of 13,050 feet, and an excursion from Manali Valley to Lahaul and Spiti Valle. While the passage will be a shelter to the occupants of the Lahaul and Spiti Valley who stay cut off from the remainder of the country in winters for almost a half year because of weighty snowfall, the passage will give practically all-climate availability to the soldiers positioned in Ladakh.

Conclusion

This paper comes to the conclusion that internet is not the only reason for lack of digital education among the Tribal people of Himachal. This digital divide is primarily a demographic factor, for which poverty, lack of knowledge of technology, geographic status, irregular supply of electricity and lack of adequate equipment are also the main reasons. The government is also making

considerable efforts from time to time, to enhance digital education among the students of tribal area but due to natural calamity like heavy snowfall, shortage of road connectivity, low income etc. the students of the tribal areas are unable to attain the benefits provided by the Govt. of Himachal Pradesh. There is no dedicated policy framed out by the Govt. to cope up with these situations and hence lacks in providing digital education to the students of tribes. So, the government has to come up with technically feasible solutions that are appropriate for the local environment as a greater achievement of tribal social inclusion. Simultaneously, we must reconsider licensing and spectrum laws and other legislative obstacles, which may impede the growth of local community networks. The expectation is seeing subsequent to opening the Atal tunnel to associate the tribal region during weighty snowfall.

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