

Digital Divide in Rural China

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Abstract

Many rural residents have already integrated new media into their everyday experience. Yet the digital divide is quite huge between urban and rural areas. Owing the low income, the rural residents face up to limited digital literacy. For those pupils in remote and rural areas, poor access to the internet has become a great barrier to online classes. The digital divide has caused inconveniences, especially to the elderly in rural China. In digital time, to realize the goal of modernizing rural areas, it's urgent to bridge the digital gap between urban and rural areas. The government makes attempts to promote the applications of digital technologies in rural areas to boost local development.

Keywords

New Media, Rural China, Rural development.

1. Digital Divide between Urban and Rural Areas

Statistics indicate that the growth rate of digital spending on Alibaba's e-commerce platforms in rural areas reached 23.8 percent last year, 4.5 percent higher than that in first-tier cities of Beijing, Shanghai, Guangzhou and Shenzhen. The huge consumption potential in rural areas should be turned into a major engine of growth as a result of the digital economy, more internet access and faster logistics.[1] Information and digital technologies can help revitalize the rural economy. Yet, as for new media development and engagement, digital divide between rural and urban areas is still huge. Despite decades of economic growth, the development gap between China's urban and rural areas remains wide. Home to more than 570 million people, the countryside lags far behind the cities in terms of income, living standards and public services. By December 2018, the Internet penetration rate in urban areas topped at 74.6 percent; while, in rural areas, it only rose to 38.4 percent. More strikingly, there are still 562 million people — mostly distributed in rural areas — who are left out of digital inclusion. These rural areas and countryside in West and Northeast provinces present a huge growth potential for most internet giants in the near future.[2]

The 47th Statistical Report on China's Internet Development said that, Internet use grew rapidly among older people during last year's COVID-19 outbreak, but an urban-rural divide still remains. The rise came alongside an epidemic-induced drive to move many services online to reduce personal contact at brick-and-mortar agencies. The official embrace of digital technology to trace close contacts and check vaccination status has also widened the appeal of smartphones among people who didn't previously use the devices. In recent years, central authorities have worked to bolster the digital infrastructure in less-developed rural regions as part of a broader effort to boost e-commerce and curb poverty. That narrowed the rural-urban gap in internet access. By the end of last year, internet coverage in urban areas was 79.8 percent, compared with 55.9 percent in the countryside. The gap narrowed by 6.4 percentage points. By the end of last year, China had 309 million rural internet users, up by about 55 million from March last year. Despite the progress, the report noted that rural netizens still account for less

than one-third of internet users overall.[3] The digital disparity should arouse our immediate attention and efforts should be made to address it.

2. Great Barrier to Online Education

Due to the novel coronavirus epidemic, countries around the world have accelerated integration of technology into various aspects of people's work and life. In the sphere of education, for example, taking online classes has become a universal means for Chinese students to continue studying. Nonetheless, not all the people who have access to 4G networks are internet surfers. An analysis reveals that three factors impede the usage of internet in China: educational attainment, skills for internet surfing and cost of internet access. Not knowing how to use computers and the Internet or not having equipment to get online are the main reasons. For many poor rural students, internet connectivity—or even a mobile phone—is a luxury they cannot afford. For those in remote and rural areas, poor access to the internet has become a great barrier. While other students and parents choose from all kinds of online study platforms, rolled out by different companies during the epidemic, Niang is not aware of most of them[4]. According to a research, though the urban-rural digital divide at school is modest due to regular use of computers in both rural and urban public schools, the digital divide at school was much wider when we tested for more advanced computer skills such as using educational software. The divide widened even further for student use of computers and Internet at home: urban students reported having greater access than their rural counterparts.[5]

The digital divide was also a topical issue at this year's Two Sessions. Professor Zhu Yongxin proposed providing an internet usage subsidy for poor students to support their online learning and scale it up to all primary and secondary students step by step. He also suggested providing selected learning resources free of charge to the public through government procurement from service providers.[6] These proposals are good news for rural pupils. Online learning platforms are more valuable for students and teachers in rural areas.

China will pour more resources into promoting telecom universal services, as part of a massive push to reduce the digital divide between rural and urban residents, the country's top industry regulator said on Thursday. Zhang Feng, chief engineer of the Ministry of Industry and Information Technology, said telecommunication universal service embodies the fundamental rights and interests of all citizens in a country. "So far, 98 percent of China's administrative villages have been covered by the 4G network and optical network, offering an effective way for rural residents to enjoy remote education, internet medical services, e-commerce and other internet-enabled services." [7]

3. Limited Digital Literacy for Elderly

The digital divide has caused inconveniences, especially to the elderly in rural China.

Owing to novel coronavirus, "Health checkpoints" have come up across China. People should show their "health code" – a digital pass that comes in green, yellow or red. The health code is generated by a smartphone app based on the user's recent travel history and other data. The health code-based virus control measure has been extended nationwide. The code has confused rural elderly since they are not familiar with new media and apps. Usually their daughters or sons help them install the app by submitting a host of their personal data. Even with their smartphone in hand, the elderly couldn't figure out how to scan the square-shaped Quick Response code to register at a health checkpoint.

For elderly, their online reach has been limited largely to games, short videos and news disseminating apps. For any cyber-based exploration requiring online payments or typing in home address – such as online shopping or using food delivery or car-hailing services – the

elderly seeks the help of family members. The elderly are marginalized in this era of health code, digitalized hospital registration system and car-hailing services. The digital divide can also reduce older worker's employability as many things have gone virtual to reduce physical visits to government offices. Yang Yifan, deputy head of the National Interdisciplinary Institute on Aging, said that, "In the digital age, we need to make appropriate use of information and communications technology to lower the threshold so that older people can connect with the information age at their current cognitive level,"[8]

4. To Promote the Applications of Digital Technologies

Digital infrastructure is foundational for everyone to benefit from the opportunities of going digital. To unleash the potential of e-commerce and big data in the countryside, the government should accelerate the construction of communication infrastructure in the rural areas, especially in the central and western regions, and encourage investors to engage in developing new internet-enabled agricultural projects.[9] China plans to promote the applications of digital technologies in rural areas to boost local development, according to the guideline jointly issued by the general offices of the Communist Party of China Central Committee and the State Council. The country has vowed to achieve initial development of building digital villages by 2020, with 4G internet accessible to more than 98 percent of the administrative villages and the digital economy growing rapidly in rural regions, the guideline said. With the upgrading of internet technology, 2025 will see a notable narrowing of the urban-rural digital gap. To fulfill such targets, the country will accelerate the construction of IT infrastructures in rural areas, upgrading rural internet facilities and information services. [10]

The arrival of latest 5G technology promises to be a game changer by connecting everything around us to a network that is 100 times faster than our mobile connection and 10 times faster than our fastest home broadband. [11] Starting from the end of 2015, the central government and telecom carriers including China Telecom, China Mobile and China Unicom, have invested more than 40 billion yuan (\$5.8 billion) in total in three rounds of pilot projects to expand optical networks to 130,000 administrative villages, including 43,000 poor villages. [12] China Mobile, the nation's largest telecom carrier aims to achieve continuous 5G coverage in rural towns across the country. Yang Jie, chairman of China Mobile, said, "We will work hard to ensure continuous 5G coverage in rural towns across China by the end of 2022, as well as effective coverage in important parks and developed rural villages by then." [13]

5. How Far Will We Need?

The average income of rural residents is only a third of their urban counterparts. To correct this imbalance, the State Council, China's Cabinet, issued a plan for the integrated development of urban and rural areas on Sunday, which puts greater emphasis on narrowing the institutional gap between urban and rural areas, so more rural residents can reap more benefits of reform and opening-up. The plan says the situation in rural areas should be markedly improved by 2035. Which means rural residents' incomes should be raised and more resources allocated to the countryside. Digitalization is seen as key to future of rural vitalization. In digital time, to realize the goal of modernizing the agricultural sector and rural areas, it's urgent to bridge the digital gap between urban and rural areas. To some extent, it depends on the improvement of cultural quality of rural residents, especially youngers. Limited education resources in the countryside lead to a high dropout rate among rural students. Almost half the students in rural areas drop out of school by grade nine, and two-thirds by grade 12.[14] High dropout will aggravate the digital divide. it's a great challenge to bridge digital divide in rural China.

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