
The Flow of Information as Empowerment and the Changing Social Networking Landscape in Rural China

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ABSTRACT

The article explores the ways in which Chinese villagers adapt cell phone technology to their needs and desires in the context of rural urbanization. The first part of the article uses an example from two villages in Western China to trace the adoption of cell phone technology by rural people, particularly those with minimal experience using landline phones. Then, by examining a case in which cell phones are being used as gifts in rural Chinese society, it goes on to reflect upon the ways in which ICTs are changing everyday interactions between family and kinship members. The second part of the article looks at how villagers use cell phones as substitutes for landline phones to obtain and exchange information in markets. Mobile adoption not only enables individuals to possess greater bargaining power in market exchange but also indicates that community-based information inclusion may be an effective means for diminishing regional disparities in China.

INTRODUCTION

After thirty years of successful economic reforms, China has become the world's second-largest economy. Between 1979 and 2009, its Gross Domestic Product (GDP) grew at an average annual rate over 9 percent (World Bank, 2011). This rapid economic growth has significantly improved the living conditions of China's population, particularly in the coastal areas of the nation. After the Financial Tsunami in 2008, however, new economic and social issues in Chinese society have gradually emerged and crystallized. In principle, Deng Xiaoping's reforms were intended to "let some people get rich first, and then help the rest"; however, inland areas have not shared in the positive economic effects of these reforms (Liu &

Zhang, 2010). The Chinese government has implemented several policies and programs, such as the Comprehensive Income Subsidy Policies on Grain and the Appliance for Home Subsidy Program, to accelerate economic and infrastructure development in rural areas (Heike, 2004). But increasing regional and social inequalities reveal that institutional barriers such as the Household Registration System and related social security arrangements have contributed to inequalities between nonagricultural and agricultural households (Long, Ye, & Wang, 2010; Song & Chen, 2007). Agricultural households also face more-serious competitive market pressure from powerful wholesalers, large food retailers, and transnational corporations. This is not only because these companies enjoy greater economies of scale but also because they have begun to employ advanced technologies to improve their market efficiency, gaining greater bargaining power to suppress individual producers and sellers and even excluding potential competitors from entering the market. In other words, China's economic growth is being driven by three simultaneous processes—industrialization, urbanization, and informatization—which makes the nation's path to modernization quite different from the Western path, where informatization came much later.

In view of the harsh reality of contemporary life in China, many local and international nongovernmental organizations have developed capacity-building programs in rural and remote areas of China. Many of these programs attempt to help local villagers empower themselves and resist market competition (Plummer & Taylor, 2004). These programs helped people living in rural areas lift themselves out of absolute poverty, especially in the 1980s. Meanwhile, more and more scholars in China recognize that the application of information and communication technologies (ICTs) may help rural villagers rise above poverty issues and close the income gap. For instance, Qiang et al. (2009) explored the possibilities and difficulties in promoting rural informatization as a way of helping poor people in China. Zhao (2008, 2009) conducted an action research project in Shangdong Province that attempted to integrate the Internet into farming activities to see if the adoption of technology could help rural entrepreneurs improve their businesses. Harwit (2004) suggested that the advancement of telecommunications tools help to bridge the urban-rural digital and communications divide in China. Many other studies examine the social impact of ICTs in rural China from a technology-pushed perspective. In short, information technologies are considered a powerful tool, one that is capable of having both a positive and a negative effect on society.

This article considers the normative and social implications of ICT use within specific social contexts. It shows how Chinese rural villagers actively adapt cell phones to their own needs and desires from an anthropocentric perspective (Fortunati, 2010). The analysis not only highlights the way

cell phones have helped empower individual peasants but also suggests that the domestication of ICTs in rural communities is evolving in a sociopolitical sense (Haddon, 2000). Hence the first part of this article will examine a unique social experience in two villages in Western China to trace the adoption of cell phone technology by rural people, particularly those having less experience in using landline phones. It then explores how the prevalence of cell phone use may be changing forms of everyday interaction between family and/or kinship members. It will then discuss the implications of cell phones' integration into the practice of gift giving in rural Chinese society. The second part of the paper will look at the ways in which rural villagers use cell phones as substitutes for landline phones to obtain and exchange information in markets. Mobile adoption offers farmers greater bargaining power in market exchange and indicates that community-based information inclusion may be one of the effective means for diminishing regional disparities in China.

The paper is one part of the large-scale project study "Social Consequences of Mobile Telephony in Mainland China," funded by The Hong Kong Polytechnic University Department of Applied Social Sciences, conducted from 2008 to 2011. Apart from doing a national survey in six cities in China, the study also conducted twenty interviews in each city during 2009, including Shanghai, Guangzhou, Dalian, Chengdu, Lanzhou, and Nanning. The discussion below is based on eight in-depth interviews in Nanning, the capital of Guanxi Province in Southwest China, and Lanzhou, the capital of Gansu Province in Northwest China. All interview materials have been taped and transcribed. All names are anonymized to protect confidentiality.

CELL PHONES AS A MEDIUM OF SOCIAL BONDING

Nanning and Lanzhou are two major inland provincial capitals in the southwest and northwest of China, respectively. Compared to coastal cities, these two spots—especially Lanzhou—have low levels of economic development. According to the National Bureau of Statistics of China, Nanning was sixty-fourth out of the top one hundred prefecture-level cities in the GDP ranking in 2010, while two major cities in Guangdong's coastal area, Guangzhou and Dongguan, were third and twenty-first, respectively. Lanzhou did not even make the ranking that year (Elivecity.cn, 2011). In terms of GDP per capita, neither Nanning nor Lanzhou ranked among the top one hundred cities in China in 2010. The former was ranked 104th with RMB 9,203, and the latter was ranked 112th with RMB 8,529 in 2010 (Zhongwenbaike, 2010). In recent years, the local governments of these two provinces have put more resources, subsidies, and investment toward boosting economic growth in order to serve as pilot zones for the "Open Up the West Program" by focusing on infrastructure and developing the equipment-manufacturing industry (Heike, 2004). For example, both landline and cell phone networks in Nanning and Lanzhou have now

reached 100 percent coverage. As the cellular system develops, more and more rural people abandon their landlines in favor of cell phone connections. In 2011, the number of landline service subscribers in Gansu and in Guangxi provinces decreased by 1.5 million and 3.4 million, respectively, while the number of cell phone users increased by around 2 million in each province (Gstj.gov.cn, 2012b; People.com.cn, 2011). The reason for this is mainly cost. Since landline phone infrastructure is expensive to build and maintain in rural areas, its service charges are comparatively high and fixed. Mrs. Wei, a thirty-nine-year-old female peasant from Lanzhou, remembered that her family had a phone line installed ten years ago but had it removed after almost two years. She said,

We peasants have to work in fields during the daytime; we just spend little time at home. It isn't economical to pay forty yuan for the landline service subscription a month. Even if you don't make calls, you still have to pay that amount of money. Cell phone subscription is different. You estimate how much credit you will need per month, and then you pay for that amount on your service.

In China, traditional landline services not only require users to pay a fixed amount of money for installation; they also require users to prepay one to two months' fees in advance as a service deposit.

In contrast, cell phone service gives users more flexibility in terms of service plans. This advantage is particularly important to rural people. Not all rural families can bear the costs of having more than one cell phone. Cell phones enable them to be more efficient in allocating resources by strategically sharing a family cell phone. Mr. Guo, a forty-seven-year-old banana farmer from Nanning, said that his family members shared a single cell phone. He explained that the phone was usually kept by his wife (who works in town). In case of an emergency, they call each other on the phone in the grocery store, which is near his home. If Mr. Guo is not at home, the grocery store boss passes the message to his relatives. In other words, the trend of using a cell phone as a substitute for a landline reveals that rural people adapt cell phones cost-effectively to everyday life.

They also manage the use of communication technologies by passing along old cell phones to family members. Since people living in these two villages do not have extra money to spend on consumer goods, one way they try to overcome the difficulty of getting connected is by sharing cell phones via gift exchange. Mr. Deng, a 39-year-old peasant from Nanning, has five siblings, including one older brother, one older sister, and three younger brothers. His three cell phones were all sent by his relatives. He said,

My first cell phone was sent by my brother—he knew I need to keep in contact with those who offered me part-time work—but unfortunately it was dropped while I was working in the field. The second one was given by my sister, but again, it was stolen after only two days. The third

one was sent by my cousin, and is now kept in my wife's hands as she needs to work outside.

Although personal connections have been commonly treated as instrumental and particularistic in Western scholarly literature (Yan, 1996), Mr. Deng's relatives apparently did not intend to benefit from sending the cell phones as gifts in exchange for favors. They were trying to fulfill the moral and social obligations of being senior family members in Chinese society (Hsu, 1981). This practice cannot be simply considered an economically calculated act, that is, striving to pursue personal interests through gift exchange. Rather, it is part of a system of social and family support. Since personal relations in China are relationally based, individuals are not treated on equal terms (Hsu, 1983). Family members are in principle the closest and most significant layer in Chinese society, which is composed of several webs woven out of countless personal relationships (Fei, 2002). When one family member faces difficulties, the others are morally bound to provide help. Even if one member has migrated from an inland village to a coastal city, he or she is expected to treasure and cherish the family bonds and try to keep them as strong as possible. Reciprocal exchanges help create a moral connection and emotional attachment between the giver and the recipient (Kipnis, 1997). This helps rural communities maintain a comparatively stable and harmonious social order. The next questions, however, are: Why and how are cell phones now perceived as an important and valuable gift for exchange in rural villages of China? What does this phenomenon mean, especially since accelerating urbanization and economic growth in rural China is supposed to be sustained by internal consumption and the building of infrastructure?

In the early reform period, thousands and thousands of rural laborers flocked to the coastal areas of China in search of jobs. Their goal was simple—to earn more and improve their families' living conditions (Lee, 2007). While they were working, they felt homesick in face of the harshness and boredom of factory life (Pun, 2005). In the past, they could send letters or make quick phone calls from telephone booths to their family members. The Chinese Lunar New Year was considered the most important festival for rural workers because they could finally have a long holiday to enjoy an annual family reunion. But since the mid-2000s, with the rise of cell phones, workers find it relatively easy to keep in contact with faraway family members (Law & Peng, 2006, 2007). Mr. Wei, a fifty-seven-year-old railway worker from Lanzhou, said,

Today's youngsters aren't willing to stay in villages anymore. Some feel staying at home is too boring; some think farming is too hard; some indeed don't have any farming skills or knowledge. . . . What they can do now is "go out," and find jobs in cities. But before that, they need cell phones. Like my nephew, the thing he did with his first month's salary was to buy a cell phone. Why? A common motto is "We rely on

our parents at home but on our friends in the outside.” If you don’t have a cell phone, how can your friends and relatives contact you? Even you don’t eat well or dress warmly, you still need a cell phone.

In a sense, then, the significance of cell phones in rural China not only rests on its functional value but on its normative implication. The process of urbanization in China has more or less torn rural families apart; cell phones make it possible for rural people to maintain family relationships. (Cheng, 2011). From another point of view, this kind of connectedness not only reflects the ways in which cell phone use is embedded in villagers’ social relations but also highlights how rural people are actively responding to the changes of the sociotechnical landscape of rural China.

THE FLOW OF INFORMATION AS EMPOWERMENT

Job Searching over the Cellular Networks

With the improvement of transportation and basic infrastructure, China’s rural cities have attracted more and more investors and entrepreneurs. Some rural workers have returned to their hometowns to start small businesses and build new houses, raising the standard of living in the villages in the process (Murphy, 2002). In Guangxi Province, fixed investment has significantly increased from RMB 1,769 billion in 2005 to RMB 7,800 billion in 2011 (Gstj.gov.cn, 2012a). Lanzhou Province’s fixed investment has also increased, from RMB 259.59 billion in 2005 to 950.57 billion in 2011 (Tjj.lanzhou.gov.cn, 2012). Economic development in these areas has offered rural people a set of alternative ways of making a living. For example, some people have opened small shops where they mainly sell vegetables, clothes, and snack food; some work part-time jobs at night; and some work in the service industry—largely in catering and hotel service. Mr. Deng said that he worked as a construction worker when he had free time. Although he had not received any formal training, he maintained that basic construction was easy to learn and handle. He said,

I have been building houses for more than five years. We don’t work too far away because transportation costs are too high. We mainly work on projects in the village. For instance, we built the village committee building. Normally, we start at eight in the morning and work till noon, and then go back home for lunch and a one-hour rest. Then we go back and work till six in the evening . . . We don’t have weekends off because we are paid a daily wage. You know, we live hand-to-mouth. If you work one more day, you will get fifty to sixty yuan more per month. In total, you may earn around ten thousand yuan a year, so that extra days can really help a lot.

Not everyone is as lucky as Mr. Deng. Some villagers maintained that the chances of getting a regular part-time job depended on personal connections, also known as *guanxi* (Yan, 1996). Mrs. Wei mentioned that her husband occasionally worked as a welder. She said,

My husband sometimes works for two months, or three months at the peak season. If there were no jobs, he would just stay at home and rest. Honestly, it's hard to find work, really hard. Luckily, my husband has been working in the town for three years. He has made some acquaintances and friends who get him jobs. Otherwise, you can knock on all the doors you want, but no one cares about you. If you're from the village, no one knows you in the cities—they don't know who you are, or if you are trustworthy.

Some villagers who worked outside also established personal networks of colleagues and friends in their workplaces. These networks then became valuable assets when they returned to their hometowns. Mr. Li, a forty-one-year-old peasant from Nanning, mentioned that his son had worked in Dongguan (an industrial city in Guangdong Province) for a few years, but returned home afterwards. He said,

My son told me working on the assembly line was too dull and boring, so he decided to come back home and rest. He said he had made some friends in the workplace, and they could get him some work to do. He's now working in the market to help people pack and deliver bananas.

Although introducing jobs to one another is a common practice in contemporary Chinese society, it is rather new to villagers. Before the economic reforms, it was not necessary for rural people to make friends with those who were outside their kinship circles. Apart from marriages or some special situations, their lives were simple and routinized. Working from dawn to dusk was the typical form of rural life. With the recent adjustments in China's economy, however, things have changed. Having and maintaining good *guanxi* is considered the first step in increasing one's opportunities. Moreover, many villagers work part-time jobs during non-farming time. Such work opportunities are not regularly scheduled and mostly come up through friends and acquaintances. Mr. Li said, "When my friends need help, they'll give me a call and see if I'm available or not. Since most of the jobs are immediate, you might miss the chance if people can't reach you. Sometimes I need to sell bananas in the morning; then I have the rest of the day to wait for a call."

This does not mean that this convenient method of communication encourages villagers to be more calculating and realistic in social relationships. Mr. Wei felt that cell phones certainly allowed villagers to build and maintain social relationships, though their use also clearly reflected the pragmatic side of Chinese traditional rural culture. He said, "Today's peasants won't give you a call unless it's something special. If they do, it means that they may need help or they want to ask for your advice. . . . But this doesn't mean they don't have 'hearts.' This is only the way they live." The construction of social relationships in rural Chinese social life rarely takes private emotions as a significant and legitimate basis for relationship building. Since everyone in rural China is related somehow, kinsmen are

often considered “insiders” in relation to whom it is not necessary for them to cultivate affection specifically (Potter & Potter, 1990). Therefore, making occasional phone calls to show care and concern is not a common practice in the rural Chinese context. Rather, the value of cell phones is to provide an effective and even hopeful means to improve the living standards of families in the eyes of rural people. Mrs. Wei said,

Before I got married, I did have my own ideas. But you know, when you have a family, you ought to know what you have to do. Sometimes you need to make a sacrifice. Honestly, I now just place my hope on my son. If he’s able to enter senior high school, we will buy him a cell phone. As you know, we’re living in an information age. If you don’t have information, you know nothing.

In fact, more and more rural people have recognized the importance of the adoption of cell phones. This is because cell phones have become a necessity in everyday life in rural China. People feel that knowing how to use the Internet and other ICTs helps them extend their life’s possibilities.

The Role of Cell Phones in Rural Time Management

In addition to social networking, the growing significance of cell phones in rural societies can be attributed to the fact that the device allows users to be engaged in various kinds of information exchange. In the 1990s, it was still difficult for the villagers to get telephone connections in rural and remote areas of China. People had to ride bicycles for miles to use public telephone services in the county centers. As a result, interactions between villagers were mainly face-to-face. After completing their farm work, they would gather in the center of villages. This moment was particularly important for rural people because it was the time when they could share news and information about farming and other matters. Thus, the distinction between work and leisure in rural life was not obvious.

The recent economic reforms and the emergence of commodity markets in rural areas of China have gradually changed the form and dynamics of communication. Although villagers still gather together, as in the old days, to play cards or mahjong, some informants observed that cell phones provided them the fastest way to get “fortune.” Mr. Deng said,

Fewer people buy paper lottery tickets nowadays because you’ve got to walk for a while to get to the nearest store. It’s too inconvenient. People now prefer to buy Mark Six lottery tickets simply by making a call. Like me—I used to buy ten to twenty dollars’ worth of tickets each time, but now I’ve got to control myself because my wife gets mad at me if I spend more than I earn from doing part-time work.

In the eyes of villagers, lotteries are probably perceived as a “hope” for escaping poverty. But it is almost impossible to win, and the management regulation of lottery distribution and sales in China is not well developed (Zhang, 2012). Underground lotteries with local bookies are common in

rural areas; some of them are even fake (Bosco, Liu, & West, 2009). Therefore, the cell phone lottery might be seen as a new form of exploitation (Reith & Ferguson, 2002), in which the rich and the powerful extract money from the poor by providing the false hope that if you do not gamble, you will never know when good luck comes to you.

With the development of rural towns, there are more and more non-farming job possibilities available to villagers—including construction, retail, and restaurant work. Time management has become a crucial element for farm work and other businesses. As a handy and convenient communication tool, cell phones are well-suited to this need. Prior to and during the early stage of economic reforms, many rural Chinese villages were still practicing agricultural collectivization. The central government largely controlled the processes of planning, producing, and distributing goods, as well as people's everyday lives, through the implementation of the people's commune system (Yang & Fang, 2003). These cooperatives relied on the centralized and planned economy, meaning that the distribution and allocation of necessities were in accordance with different criteria such as sex, age, and number of persons in household. Since peasants did not need to worry about market situations and sales revenue, their lives were quite simple: they focused on fulfilling their portion of the targeted output set by the people's communes. Therefore, the quality and efficiency of farm production and processes was relatively low.

With the development of market-driven agriculture, however, rural peasants have had to learn to navigate and cope with the practice of free-market economics. In Nanning, the local government has strategically focused on developing the banana industry. In recent years, it has aimed to improve seed quality and develop new cultivation methods in order to boost total output. (In Guangxi, the production of bananas is one of the major industries; it ranks as the second-largest production base in China in terms of output and planting areas.) Nanning, the provincial capital of Guangxi, generally produces more than one-third of the total output of the province. In 2005, the amount of bananas produced by this province was 0.86 million tons; by 2012 the amount had increased to 2.4 million tons (Gxtv.cn, 2012). Since the distribution infrastructure in the area is underdeveloped, the sales of bananas and processed products are mainly handled by merchants and wholesalers from other provinces. For this reason, individual peasants have limited bargaining power, particularly in good harvest years. As Mr. Deng said,

I've been growing bananas for seven years. Meanwhile, I plant corn and peanuts, but I don't sell them because there's no money in them. Actually, most people in the village rely on selling bananas for a living. A few of them may even earn enough to build new houses, but it isn't easy to do so because the profits from selling bananas aren't stable. Normally, a hectare of land yields 100 to 130 bunches of banana, ap-

proximately 5,000 pounds in total. Last year, one pound went for RMB 0.6 yuan, but the price dropped seriously this year. Even if you sell them for RMB 0.3 yuan per pound, no one will buy them because there are too many in the market. This year, I just threw them away; they all went bad. Even worse, those banana trees have to be cut down this year for crop rotation. Even if you add more nutrition to the soil, they cannot grow good bananas.

The situation in Lanzhou is more complicated than in Nanning, where the villagers mainly grow tomatoes, cucumbers, and Chinese cabbages. Compared with bananas, the wholesale price of these vegetables is unstable. As most types of bananas in Nanning are harvested over the course of the growing season, peasants have more flexibility in determining when would be the best time to pick bananas. In Lanzhou, however, the season is much more compressed. Once the vegetables are ready to be harvested, peasants have to pick and send them to the wholesale markets immediately. The earlier they sell, the higher the possibility is for them to get a good price. As Mrs. Wei said,

I've to go to the market as early as two to three in the morning every day. Normally, you don't meet the wholesalers in person; there are many traders and middlemen involved who buy a certain amount of vegetables, and resell them to retail markets in other places. The ideal situation is to maintain stable, long-term exchange relationships with the buyers so that you can save time in the negotiation of prices. Otherwise, they will force you to lower your offer—if there is enough supply in the market. In other words, you've got to go to the market as early as possible if you want to make more money. But usually you can't sell out because the middlemen only want the good ones. All you can do is keep the rest or sell them in the retail market at lower prices.

In addition, because some vegetables may be harvested more than once a year, Lanzhou's peasants must maintain a reasonable schedule of cultivation. Mrs. Wei complained that she used to plant tomatoes and cucumbers in spring and Chinese cabbages in early to midsummer, but there was an unexpected bumper crop in the late 2009 that caused her to lose thousands of dollars because of competition. Her experience reveals that in the process of rural urbanization and commercialization, China's peasants have to deal with new difficulties. The intensification of market competition not only decreases their share of the profits but has brought about a structural change in agribusiness supply chains. Along with the growth of local markets, many large retailers and wholesalers try to maximize their market share and pursue the best prices through vertical integration of the chains. They not only own their transportation teams but establish close relationships with national food chain companies. Therefore, they tend to enjoy greater bargaining power when it comes to price

negotiation. Rural peasants, in contrast, being at the bottom of the chain, confront downward pressure on prices or even monopolization of the market exchange as a result.

Surprisingly, some peasants have started to make use of cell phones and their existing social networks to share immediate information in response to this challenge. Without the help of cell phones, price negotiation is mainly face-to-face. Peasants need to hustle up and down the streets in search for price information. If they find a good deal, they have to rush back home and send the vegetables to the markets immediately. This process is time-consuming and increases the risk of unexpected loss during transportation. The adoption of cell phones among villagers not only lowers transaction costs but also minimizes the problems caused by the power asymmetry between large retailers and wholesalers, on the one hand, and individual peasants on the other. Mr. Deng said,

We used to gather around the school's playground to have chitchats, sharing where to sell the vegetables to get higher prices or when prices will most likely increase. But you can't rely on this alone because it's often too late to take action. . . . I feel everything will become faster and easier with cell phones. Things are going to get much better. If the price of bananas increases, we'll give a call and urge each other to pick bananas. Besides, prices may vary in different markets, so we've got to keep updated with the latest information. If the price in another market is higher, we'll move there immediately. Sometimes it's too much to cut and pack the bananas in a short period of time. What you can do is to make a call and find help.

This kind of information sharing not only assists in the process of transactions, but also encourages peasants to share farming experience and planting information. Mrs. Wei said,

It's common for some vegetable prices to fluctuate with the weather so that you can't be sure the same type of seed will produce plants with good yields all through the year. Thus, it's very important to obtain updated information about the price and quality of seeds. Especially with tomato and cucumber seeds, you've got to buy the newest and latest ones because they're stronger and produce plants with higher yields. So you've to ask for advice and learn from others frequently, and for this the most convenient way is to call your friends and relatives.

From these cases, we can see that the network of cell phones among farmers can function as an information-sharing resource during market exchange on the grassroots level (Castells, 1999). It also allows farmers to be more proactive and have more autonomy in negotiating with powerful buyers, managing schedules of farming activities and other businesses, and resisting national and international market forces by building networked business relationships with established personal connections (Horst & Miller, 2006).

CONCLUSION

China's economic development has undoubtedly raised people's standard of living, particularly in the coastal cities. The impact of urbanization on rural areas, however, has generated new social problems. Because of their comparative advantage (among other political and institutional reasons), some large retailers and wholesalers, national food chain companies, and transnational corporations are able to dominate the food supply chains. Although the government has implemented several policies and measures to help rural villagers out of poverty, peasants' standard of living has shown little improvement as a result of the economic boom. Under these circumstances, the advancement of communication technologies provides an alternative way for rural Chinese villagers to negotiate their life possibilities. To begin with, the adoption of cell phones enables them to manage their social networking. Those villagers who have left are able to maintain close relationships through cell phones. However, although cell phones are becoming cheaper, many rural families still cannot afford to have more than one handset. In view of this situation, the communication device has become a valuable present for gift giving, as well as an invaluable means for searching for part-time jobs. The examples examined in this essay not only reflect how cell phones have become embedded in Chinese social relations but also highlight the importance of being connected in everyday ways in rural China. Villagers make use of cell phones to deal with the changes in rural society. In the face of increasingly serious competition from powerful buyers, they share information immediately and build networked-based relationships through the use of cell phones, enhancing their bargaining power, maximizing profits, and resisting market pressures. In other words, the use of cell phone technology offers an effective way to address the problems of regional disparities in China.

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