Impacts of Roads on Ethnic Dulong People and Their Coping and Adopting Strategies

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With the construction of a 96.2-kilometer long mud road in 1999, the Dulong ethnic group living in the Dulong River Valley in Nujiang Prefecture, Yunnan Province, China ended its history without roads. Then on April 10, 2014, a tunnel was completed that connects the beautiful valley with the outside world more closely. The construction of this road has big impacts on the ethnic Dulong communities and the ecosystem in the valley. This paper will discuss the history of the road construction in the area, road and development, road and socio-cultural changes of the ethnic Dulong people, road and social resilience.

Keywords: road construction, socio-cultural changes, social resilience, Dulong people

INTRODUCTION

Dulong people are one of the smallest ethnic groups officially recognized as one of the 56 ethnic groups in China. They have a population of 6,500 (Statistical Bureau of Yunnan Province 2015, 379), and about 4,300 of them live in the Dulong Valley of Gongshan Dulong and Nu Autonomous County in the Nujiang Lisu Autonomous Prefecture of Yunnan in Southwest China (Lu 2014). About 10,000 Dulong people live in Kachin State in Northern Myanmar who migrated there from China (Gao 2015,15). The Dulong ethnic group in Myanmar called themselves as Rwang, and declared that they had a population of over 100,000 (Yang and Li 2010). The Dulong people are well-known in China as the face tattoo people. The history of the Dulong is not well documented, because they have been living isolated in the Dulong Valley which sits in the mountains bordering Tibet and Yunnan, one of the most remote regions of China. Until 2014, the Dulong Valley was often closed to external communication for half of the year (Li and Li 2015).

There is scarce information about the Dulong people in the imperial histories and travelers' chronicles. The origin of the Dulong people has been traced by some scholars to Qiang people in ancient China who lived in the Qinghai and Gansu Plateau (Wang 1987, Zhang 2000). Some scholars believe that the Dulong people and the Nu people in Gongshan have the same ancestors (Hong 1994, Gao 2003).

The study of the Dulong people can be divided into three periods of time chronologically: the pre-1911 period when the Dulong people were recorded in some classic Chinese literatures and documents; the period of Republic of China (1911-1949) when serious investigation and academic study

of the Dulong people started as a result of the government's border-area construction programs; the New China period (1950-) when the investigation of the social history of the Dulong people was conducted in the 1950s and the 1980s which produced lots of data on economic, socio-cultural and environmental aspects of the Dulong people (Chen 2017).

In recent years, the Dulong people have become a hot topic of research in China, especially for those who study globalization or modernization and culture change. The Chinese government has invested heavily in the construction of infrastructure, health and education facilities, and various poverty-reduction projects in the valley. All these have bought about tremendous economic and socio-cultural changes to the Dulong people. This paper will focus on the construction of a road that connects the Dulong Valley with the outside world and its impacts on the ethnic Dulong communities.

RESEARCH SITE AND METHODS

The research was conducted in the summer of 2016 by a research team consisting of three teachers and two graduate students from Center for Social and Economic Behavior Studies of Yunnan University of Finance and Economics. Before that, a member of the research team conducted fieldwork there in January and February, 2015. The research team visited six villages in the Dulong Valley and finally chose Longyuan Village as the research site. It now has 135 households and 558 villagers. Among the villagers, there are 286 men and 272 women. Its territory is 210.20 square kilometers with only 409 mu (0.27km²) arable land, and the rest is mountain land. The altitude of the village is 1,800 meters. The annual average temperature is 15.7° C and the average annual rainfall ranges from 2930-3980 millimeters which appropriate for corn, potato, and other crops. ¹

As this research focused on the economic and socio-cultural changes of the Dulong people resulting from the construction of roads, we used participant observation to collect data about landscapes, crop cultivation, houses (outside and inside), meals, and people's daily activities in the village. This allowed us to incorporate more evidence about how the villagers live today. About 30 unstructured or conversational interviews were conducted with seniors, adult women and men, and the head of Longyuan Village in order to understand the villagers' lives and strategies they have used to adapt to the changes in their lives. Main themes of the interviews included issues related to household income and expenses, crop cultivation, livestock-raising, financial situation, government subsidies and aid, construction of houses, purchase of cars or trucks and other expensive equipment, religious and festival activities, problems they faced and strategies to solve them. Official documents at the county, township and village levels were collected to understand the village's economic, cultural, ecological, historic, and social backgrounds, and the construction of roads there. Other secondary data were collected through Baidu, CNKI and other internet databases by looking for keywords in Chinese and English including Dulong people, Dulong River Valley, and Dulong road construction. They provided different types of data that could compliment or discredit one another.

THE HISTORY OF THE ROAD CONSTRUCTION

The first road that connected Dulong Valley with the outside world was built in 1964, which was just one meter wide only for people and horses to walk (Fu 2015). It would take two days and one night to move from Gongshan Town to Dulong Valley. Food and other living and production goods were carried into the valley by horses before snow closed the mountain.

On July 1, 1995, the construction of a mud highway to connect the county town with the Dulong Valley was launched by China's Ministry of Transport. The length of the highway was just 96.2 kilometers, but it took over 4000 workers four years to complete and cost 98 million yuan. However, it marked the end of the history that the last region in China that was inhabited by ethnic peoples had no

highway (Zhang, et al. 2014). This old highway had low carrying capacity and could not be used for half a year due to the snow. It took about 9 hours to drive from Gongshan Town to the Dulong Valley.

On January 29, 2011, the reconstruction of the Dulong River Highway was officially started. The newly improved highway was completed on November 13, 2015. It has a tunnel of 6680 meters long which shortens the length of the highway by 16 kilometers and the driving time from 9 hours to 3 hours (Figure 1). It ensures that the highway can be used all the year around. The cost of its reconstruction is 780 million yuan. It ends the history that snow would close up the Dulong valley for half a year.³

The construction of another highway that connects the Dulong Valley with Tibet was started in May 2015. This highway was planned to be 27.54 kilometers long and would take four years to build. The Dulong Township now has over 100 kilometer highways and five suspension bridges over the Dulong River that connect all the villages in the valley, thus forming a transportation network (Bao 2020). The heavy rain in 2017 had caused severe damages to the highways in the Dulong Valley. On September 22, 2017, the county government declared that the Dulong Valley would be closed to tourists and visitors for two years (from October 1, 2017 to September 30, 2019) in order to improve its transportation and other infrastructure (Li 2017). It opened again on October 1, 2019 with access only to 500 tourists a day (Li 2019).

ROAD AND SOCIO-CULTURAL CHANGES

For thousands of years, the Dulong ethnic group lived in an isolated mountain valley. Their livelihood depended on agriculture, but the productivity remained very low. Slash-and-burn cultivation dominated in the production and crops grown there were limited to maize, buckwheat and beans. After the founding of People's Republic of China in 1949, their living conditions have improved dramatically with the aids from the government. Today, with the construction of the Dulong River Highway and the government's poverty alleviation programs, the Dulong ethnic people have experienced tremendous changes in their lives. They have been set up by the government as an example of "zhiguo minzu" (people who have entered the socialist society from "primitive society"). All the villages in the Dulong Valley now have highways, electricity and water supply, telephone, 4G internet, and radio and television services. The Dulong Township has become a bordering town with sightseeing, scientific investigation, exploration, and tourism activities (Xi 2015, 22).

The first obvious change that one notices when entering the Dulong Valley is the pattern of residence houses. The Dulong people used to build wooden or bamboo houses on the steep mountain slopes and along the river (Figure 2). These houses were scattered around with large spaces between them. Their houses were often two-storied with the second floor as the living quarters for the family and the ground floor as the storage and accommodation for the livestock. The open space was used as vegetable gardens or as grounds to raise chicken, pigs, goats, cattle and other domestic animals, or even as a burial ground for a deceased family member. It was a common practice there to bury the dead within 100 meters away from the house. The Dulong people believed that to bury a deceased family member away from home was hard to bear. Now all the families at Longyuan Village (and other villages as well) have moved into brick houses with five bedrooms and a living designed and built with funds provided by the Shanghai municipal government (76.7 million yuan) on one flat ground by the Dulong River and on both sides of the highway (Figure 3). The houses form several blocks with limited spaces between them. Every family has a separate kitchen room with a traditional hearth that symbolizes a family unit, and a pigpen at the back and side of the village.

Another change that our informants at Longyuan Village all mentioned is related to their livelihood. The Dulong people used to practice slash-and-burn cultivation. Hunting, fishing and gathering wild fruits and vegetables supplemented their agricultural production (Ling 2016). Today, the construction of the highway and houses, and the government's efforts to return land from farming to forestry in order to protect the ecological environment have taken away lots of their arable lands. The government has been promoting and subsidizing farming cash crops such as *caoguo* (cardamom), *chonglou* (Rhizoma Paridis, a Chinese medicine herb), *huajia* (Sichuan pepper) there, raising pigs and other livestocks, and opening

restaurants and hotels for tourists. The village has been designated by the county government as the tourism model village specialized for providing Dulong ethnic food.

Directly related to the construction of the highway is the rise in the alcohol consumption. The Dulong people had the tradition of drinking home-made alcohol before as a way to prevent or treat various rheumatologic diseases resulted from the long raining season from March to September. The production of home-made alcohol was restricted by the Dulong low agricultural productivity and yield. Today, trucks and trucks of factory-manufactured beers and low-quality alcohol are transported into the Dulong Valley through the highway. Drinking has become a social problem in the Dulong Valley. At Longyuan Village, we saw villagers drinking while working in the fields in the morning or in the afternoon. We were told that drinking caused divorce, family violence, loss of labor, accidental death or even suicide in the village. This phenomenon of drinking has happened in many ethnic communities across the world when they encountered modernization and globalization process that created a "cultural disrupt" that cut them off from their old traditions and had not yet adapted them well to the new era. To deal with this social problem, the Dulongjiang Township government issued a regulation to ban alcohol drinking on September 5, 2016. However, it has not been successfully put into practice. For the Dulong people, many of them today resort to Christianity to help them stop drinking. One study reveals that most of the Dulong people believe in Christianity (Zhou 2009). Being a Christian, one cannot drink alcohol nor smoke cigarettes. The influence of Christianity is still rising in the valley which now has quite a few modern-style churches from the lower valley to the upper valley (Figure 4). Traditionally the Dulong people are animists and believe that all living creatures have souls, and evil spirits exist everywhere and can bring calamities to people (Cai 2000).

The change in the beliefs of the Dulong people is another major cultural change in the valley. It is not just related to religious beliefs. The coming of tourists from the outside world, the easy access to internet, and the setup of a modern education system (primary school at the village, middle school at the township, high school at the county town) have all brought new values and ideas to the valley which affect the young generation of the Dulong people most.

Apart from these changes, we found changes in many socio-cultural aspects of the Dulong people. The hearth of a household used to be an important place where family members sat around chatting or listening to old people's stories. But now the family members sit in the living room watching TV programs or chatting on their smart phones. The hearth has become just a dining place and cannot perform the function of consolidating the family. The social relationship among the Dulong people has been changing. The Dulong people used to live scattered on the mountain slopes or by the river side. Every family had their own living space. Now they live in the village compound with very limited space between their houses (Figure 5). We often heard them complain that the village was too crowded, and too noisy at night to sleep. The relationship with the dead family members has undergone some changes. Now the dead are buried outside the village. As compared with the past, the ethnic identity of the Dulong people have been enhanced since the identity of the Dulong people is the important basis that the local government distributes material aids and enjoy preferential policies from the state (Zhang 2015).

DISCUSSION AND CONCLUSION

The construction of the Dulong River Highway in 1999 and the improvement of this highway with a tunnel in 2015 have set free the Dulong people from isolation and half-a-year of snow blockade.

This highway has brought tremendous economic, social and cultural changes to the Dulong people. It has put the Dulong people into the turmoil of the process of modernization and globalization. All these have been completed under the state government's slogan that "no ethnic group will be left to fall behind" and with various sorts of aid programs. This shows the power of the state. Neo-Marxist's critical theory (or philosophy) is equally applicable to socialist China. This critical theory claims that in Western bourgeois society, the elite classes maintain cultural hegemony through, aside from their control of the means of production, the dual forms of external political control in the form of state bureaucratic machinery-namely the legal system, the police, courts and the military, and internal moral persuasion through education, mass media, literature, arts and beliefs (Huang 1993, 164).

The Dulong Valley lies in the Zomia region. Zomia is a geographical term coined by historian Willem van Schedel of the University of Amsterdam in 2002 to refer to the huge mass of mainland Southeast Asia that would include the highlands of north Indochina, Thailand, the Shan Hills of Northern Myanmar, and the mountains of Southeast China. "These areas share a common elevated, rugged terrain, and have been the home of ethnic minorities that have preserved their local cultures by residing far from state control and influence". 5 Professor James C. Scott of Yale University used the concept of Zomia and argued that the tribes in Zomia are conscious refugees from modernity itself, choosing to live in more primitive, locally based economies and that they are "best understood as runaway, fugitive, maroon communities who have, over the course of two millennia, been fleeing the oppressions of state-making projects in the valleys" (Scott 2009:14-16). His argument does not fit the Dulong people, at least Dulong people since the 1950s. From our interviews with seniors and our observation, the Dulong people are sincerely grateful to the government to provide them with food and modern houses, and to liberate them from the exploitation by the Tibetan coming down to the valley from the North to collect land rents, and the oppression by the Lisu people coming into the valley from the East to capture the Dulong people as slaves and take away their valuable goods. They purposefully get engaged with the government, not run away from the government. They even wrote to Xi Jiping, President of the People's Republic of China in January, 2014 to report their social and economic development and got in return Xi's meeting their delegates in Kunming in January, 2015. They have been making the best use of the government's policies to survive and to thrive in the valley.

The sociocultural changes that the Dulong people have experiences fit the anthropological concept of culture that the culture is always changing and culture is adaptive. The open of the highway has connected the Dulong people with the outside world. As Zhou Yongming (2010) stated that roads promote the flow of people and goods, facilitate the development of economy and trade, and provide channels for people to enjoy public services and other social resources, the Dulong valley has taken on a new look. The change of the livelihood from subsistence farming to cash crop farming and the development of tourism have involved the Dulong people into the market economy. The facts that some Dulong people have failed to adapt to the new conditions by committing suicide, that some have been converted to Christianity, and that the Dulong people express emotional "love" to the Communist Party demonstrates that the Dulong people have been trying to adjust themselves and their cultures to the changing world which they are connected with by the Dulong River Highway.

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ENDNOTES

1. The data came from Baidu Baike at https://baike.baidu.com/item/龙元村/3038355, accessed October 6, 2020.

- 2. The data came from Baidu Baike at https://baike.baidu.com/item/独龙江公路/120257 93?fr=Aladdi, accessed October 6, 2020.
- 3. The data came from Baidu Baike at https://baike.baidu.com/item/独龙江/4432400# reference-[17]-2388954 -wrap, accessed October 6, 2020.
- 4. The information comes from wikipedia at https://en.wikipedia.org/wiki/Zomia, accessed October 6, 2020.

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APPENDIX

FIGURE 1 DULONG RIVER HIGHWAY TUNNEL



FIGURE 2 AN OLD TRADITIONAL HOUSE



FIGURE 3 A NEW HOUSE



FIGURE 4 A CHRISTIAN CHURCH



FIGURE 5 A BLOCK OF HOUSES

