The Challenge, Reason and Future of the Conflict between Man and Elephant in Dashujiao Village

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Abstract: The author spent a year to research the current situation of the conflict between elephant and human. Asian elephants are well protected in China, while the suitable area for Asian elephants to survive has not increased a lot. Therefore, Asian elephants have moved out of forest and started entering villages. This brings much inconvenience to local people. The local government also made several moves to help deal with the situation. This passage shows the villagers' attitude towards Asian elephants, and discusses about the possibility of the coexistence between humans and elephants. Local people are considering turning elephants as tourist resources.

1. Introduction

"Go away, elephant. Don't hurt our family and crops anymore." Said a little girl from Dashujiao village.

Asian elephants are a "first class" protected species in China. The number of Asian elephants living in China has increased from 170 in the 1980s to about 300 [1] today. At present, they are distributed in Xishuangbanna Prefecture, Pu'er City, and Lincang City in Yunnan Province.

With the improvement of environmental and wildlife protection efforts, the number of Asian elephants has increased and the range of their activities has also expanded. However, most of the nature reserves and surrounding areas are inhabited by a large number of villagers, and the space they use for farming and production and the space used by elephants are highly overlapped. As a result, the habitat of wild elephants is highly fragmented, and their original food sources are insufficient. In search of food and living space, wild elephants often break into human villages.[2]

According to villagers' recollections, the wild elephants began to "patronize" Dashujiao village in 2017, and have not left since then.[3]

"Elephants have been in our village for a long time, and our production and life are no longer guaranteed. The situation is really helpless." Mr. Ma, elephant watcher of Dashujiao village, said.

Since the arrival of wild elephants, the conflict between people and elephants in Dashujiao village have become more and more serious.



Fig.1 The Beautiful Dashujiao Village (Source: Yizhi Hu)

2. The Elephants Are Coming

"There used to be a big old tree in our village, so our village was called Dashujiao ("big tree foot") village. Although the ancient tree was struck by lightning in the 1950s, the name of the village has been handed down", the village elders tell the origin of the name of the village.

Dashujiao village, located in the southwest of China, is an administrative village in Jiangcheng County, Pu'er City, Yunnan Province. There are 14 villager groups in the village, about 2062 people in total. The majority of the villagers are Han, and there are also Hani, Dai and other ethnic minorities. Most of the villagers make a living by farming and animal husbandry.



Fig.2 The Location of Dashujiao Village(Source: Internet)

According to media reports, Asian elephants first appeared in Zhengdong town of Jiangcheng County in 2011.[4] After that, the elephant went all the way north along the Manao River, through Mankelao village and Manaojie village, and came to Dashujiao village in 2017. For several years, elephants have been moving back and forth around the three villages. According to the memories of many villagers, the elephants lived in Dashujiao village for as long as eight months.

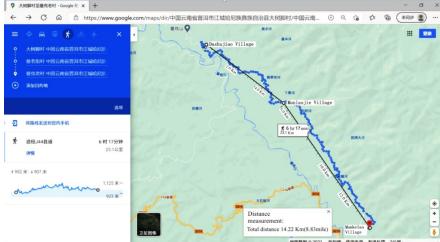


Fig.3 Elephant's Range of Activities Around Dashujiao Village(Source: Internet)

When the wild elephants first arrived in Dashujiao village, the villagers were full of curiosity about them. In their spare time, they often went to watch the elephants in groups. The local Dai people believe in Buddhism. In their belief, the elephant is a protective god. Therefore, some villagers hoped that the arrival of the elephants would bring good luck.

"I didn't see an elephant at that time, which was very strange. When we heard that there were elephants in the nearby villages, we drove to see them with our children. There we found many people, hundreds of people. Some people came from Pu'er City and Jiangcheng County. Some

people came from other villages nearby. The scene was very spectacular." A villager surnamed Zhang from Dashujiao village described his first encounter with an elephant.

When the first elephant arrived at Dashujiao village, he was very "honest". During the day, he mainly foraged in the woods near the village, and at night, he went to Manlaojiang village. At first, the villagers had no fear of elephants. It seemed that elephants were far away from them. As time went by, the elephant seemed to gain a "good understanding" of the surrounding situation, so he became more courageous and began to move towards the farmland.

In Dashujiao village, the mountains are rolling and the land is fertile. The villagers grow corn, sugarcane, rice and other crops in their fields, which are delicious food in the eyes of wild elephants.

"The villagers here are very hardworking. They all plant crops in the fields. The elephants will never leave if they have food." The villagers complained. Where an elephant goes, it often makes a mess. The harvest just around the corner quickly becomes the elephant's rations.

According to the elephant monitor, more than 40 elephants now roam around Dashujiao village. Nowadays, the villagers are very distressed, their production and life have been greatly affected.

3. Elephant, Please Go Away

"Because wild elephants are protected animals, we can't do anything about it." Zhang said helplessly.

In Dashujiao village, the impact of elephants on the villagers comes mainly in two aspects: first, elephants often damage the crops in the farmland, resulting in economic damage to the villagers; second, the elephants pose a huge threat to the personal safety of the villagers.

Elephants will eat up their favorite sugarcane, corn and other crops, leaving the owner of the farmland with nothing to gain. And crops like tea, which elephants are not interested in, may also be crushed and trampled by elephants and wither.

In addition, elephants may even enter the villager's yards directly, damaging vehicles, doors and windows, and furniture.



Fig.4 A Car Broken by Elephants(Source: Yizhi Hu)

"Nearly 2.9 million yuan will be compensated in 2020," said the loss assessor in charge of insurance compensation in Dashujiao village. The farmland of most families is invaded and damaged by elephants almost once a month, and some families' farmland even fall victim many times in a month. Every family loses more than ten thousand yuan in crops every year."

On the other hand, in addition to direct economic losses, the arrival of wild elephants has also brought many indirect losses.

"If the elephant goes in the direction where we do our work, we won't be able to finish it in one day." Yang said.

If the elephant comes during the harvest period, the villagers will not be able to go to the farmland for farming, which may cause the mature crops to rot in the field, resulting in significant losses for the villagers. However, because the farmland was not directly damaged by the elephants, this kind of loss is identified as indirect loss by the insurance company, meaning the villagers are not compensated.

"If the elephant destroys a house, the insurance company only compensates for the material cost, while the labor, transportation and other costs of building the house are indirect losses, and they do not pay for them." One villager complained.



Fig.5 Elephants Eating Corns in Field(Source: Yizhi Hu)

Compared with the economic loss, the villagers are more concerned that the elephants might hurt people.

"If the elephants just eat the crops, we can accept it because of the insurance compensation. But the fear of elephants attacking people is related to everyone's safety and has become the most worrying problem of the villagers. "Mr. Ma worried. He told a personal experience of meeting an elephant head-on.

"Once I was riding my motorcycle to find an elephant, but as soon as I turned the corner, the elephant stood less than 10 meters away from me. I left my motorcycle in a hurry and jumped down the hill a few meters. It was quite dangerous. The elephant ran after me right away. Fortunately, he was attracted to the motorcycle, so he played with it curiously. Only then did I escape."

The early warning officer, who has been dealing with elephants for a long time, only narrowly avoided a disaster. If ordinary villagers encounter this situation, the consequences may be unimaginable.

During the day, people can learn the location of elephants through the early warning system, so as to avoid them as much as possible. But night is the most worrying time for the villagers-because the elephants forage for about 16 hours a day, they will forage and play everywhere at night.

"One night, when I heard something outside, I knew it must be an elephant. I was so scared that I hid under the bed." one villager recalled, pointing to the door of her house which was dented by the elephant. "My father is so scared it stresses his heart," she continued, pointing to her shaky father.



Fig.6 The Elephant Crooked the Door of the Villager's House (Source: China House)

"There has been no case of elephant-caused death in our village. There are several cases of elephants chasing people, and some of the elderly are overly frightened." Yang said.

Nowadays, many villagers have changed their views on elephants. They pray, "elephant, please go away!"

4. The Possibility of the Coexistence of Human and Elephants

In order to relieve the pressure of the conflict between people and elephants, the local government and villagers has devoted themselves to finding solutions.

The government has focused on adopting insurance compensation and elephant early warning patrols to promote the harmonious coexistence of humans and elephants.

In 2010, Yunnan Province launched the "public liability insurance for wildlife accidents" program, funded by the government and paid by insurance companies, which compensates economic losses caused by wildlife and, and for the families of those killed by elephants.[5]

"These crops don't need to be collected or taken care of. It's good to get compensation directly." Zhang said.

"In 2020, the insurance compensation will be increased. The price of corn on the market is 2.4 to 2.5 yuan per kilogram, and the insurance compensation is 2.3 yuan. For the villagers, their actual income is about 2 yuan after the expenses of picking and transportation are removed. Now it's eaten by the elephant, and the insurance will pay 2.3 yuan per kilogram directly. "Said the insurance loss assessor. In addition, as the speed of compensation payment is getting faster and faster, the villagers are satisfied with the insurance compensation.

康平镇大树脚村整鲁组,三十二头象在秧田潭沙坝,晚上大小十二组请注意防范,荒猫田到香烟树河、曼炼山到黄草坝路段禁止通,明天早上未发布预警信息之前请不要随意出行!



Fig.7 Extract of Warning Information of Asian Elephant Warning Platform (Source: Asian Elephant Warning Platform)

"We see elephants moving and people doing farm work on the opposite hill. Because of the long distance, we will ask locals through a WeChat group if they know whose land this is, so that they can call to let them know. Everyone in the group is very familiar with each other, so we will inform the people who work in the field. "The warning officer said.

In addition, they will issue a warning sign in time to remind the villagers not to enter the area where there are wild elephants.



Fig.8 Temporary Warning Signs(Source: China House)

Now, before going out to do farm work, villagers are used to checking the whereabouts of elephants in the WeChat group. "This is what you must check when you go out to work every day. Make sure that the place is safe before you go." The villagers said.

In Dashujiao village, the villagers are finding some ways to reduce the losses themselves.

For example, some villagers will use firecrackers, lights, loudspeakers, and other means to drive away elephants. Some villagers put homemade fences at the gates of their courtyards to prevent elephants from entering the house.

Another villager said: "elephants are afraid of being hit by a catapult. We will take this measure now-hit its hindquarters and body with a catapult, and then it runs to the roadside."

Not only that, some villagers also use firecrackers to drive away elephants. "It's the kind they call mountain cannon. We used to use them to catch fish. Big and thick, we'd drop them in circles in the pond."

However, this method not only can cause harm to the elephants, but may eventually provoke retaliation. The warning officer warned: "the elephants are very vengeful, in the place where firecrackers are used fiercely, there have been elephant injuries."

Some villagers will use strong lights to drive away the elephants. As for the effect, they said, "if you shine a flashlight with a stronger light, it will be a little bit afraid, and it won't attack you directly."

However, due to the lack of streetlights in Dashujiao village at night, many places are dark, which has laid a hidden danger for the conflict between man and elephant.

"We can't provoke elephants in the daytime, but we can hide, but we really can't do anything at night. Now, we don't dare to go out at night. Sometimes when our family is sick, we don't dare to go to the hospital." A Dashujiao villager surnamed Zhang said dejectedly.

Villagers are eager to install solar lights in every household, so that they can see whether there are elephants around their courtyard. This provides the most basic level of protection.



Fig.9 Elephants Visiting Villagers during the Night (Source: Villagers)

Some external organizations have also carried out public welfare actions.

The author has visited the Dashujiao village two times, and based on this experience then worked to alleviate human-elephant conflict: in March 2020, we began a WeChat Official Account to introduce the status of Asian elephants to the public. Since August, we have held several photography exhibitions of Asian elephants with public welfare organizations to raise public interest in the plight of Dashujiao village and Asian elephants. In addition, the author has developed two key improvements to the solar anti-elephant lamps, both to improve their longevity and use flickering to further deter the elephants from human-occupied areas. At the same time, the author raised funds for the production of anti-elephant lamps by selling public goods such as Asian

elephant photos.

The anti-elephant lamp is expected to be installed in Dashujiao village in March 2021 to test its effects.



Fig. 10 Writer's Asian Elephant Public Photography Exhibition (Source: Jiping Li)

In addition, many local villagers have expressed their desire to promote tourism in the region.

"Now, all kinds of things will be eaten or trampled by elephants, and fish and duck farming will be killed by elephants. We hope to attract people from outside to see elephants, develop tourism, and bring us some income."

The public welfare organization "China House" is preparing to set up a public welfare project base in the local area. On the one hand, it will lead young people to explore the possibility of alleviating the conflict between humans and elephants. On the other hand, it will help villagers sell agricultural products and carry out farmhouse entertainment, so that villagers can benefit from the presence of elephants, avoid harming the elephants, and promote harmonious coexistence between humans and elephants.

In the future, in order to further alleviate the conflict between humans and elephants, public welfare actions will be launched in Dashujiao village.

In the fields of Dashujiao village, mother elephant and baby elephant play in the mud. As the sun sets, the earth turns into a golden arc. The villagers on one side were also deeply impressed by the harmonious scene, and laughed unconsciously.

5. Conclusion

The population of Asian elephants in China is increasing rapidly in recent years. However, the area of the suitable land for Asian elephants has not increased. Elephants are expanding to human territories, and the conflict between human and elephant is becoming more serious. Therefore, arousing people's awareness of environmental protection is necessary, and the conflict between human and elephant should receive more concerns from all walks of life.



Fig.11 Villagers Are Shooting Elephants on the Roadside (Source: Yizhi Hu)

References

- [1] https://mp.weixin.qq.com/s/ZZUkvVxXY5KUXBwigxUiGg
- [2] www.perd.gov.cn/gzyj/2018/0301/922.html
- [3] http://news.cnr.cn/native/city/20190228/t20190228_524524967.shtml
- $[4] \ \underline{http://env.people.com.cn/n/2014/0527/c1010-25072036.html}$
- [5] <u>http://www.gov.cn/jrzg/2011-12/28/content_2031914.htm</u>