

# A Study on the Sustainability of Farmers' Livelihoods in Cliff Village, Zhaojue County

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**Abstract:** The livelihood development of farmers in Cliff Village is based on the existing knowledge and experience of the villagers, and gradually introduces and acquires new skills and livelihood strategies as a primary or secondary source of income. Livelihood diversification is of great significance to improve the protection and resilience of rural households in cliff villages, as the more sources of income, the less vulnerable they are to the crisis, and therefore the more resilient their livelihoods are. The sustainability of livelihood in Cliff Village means that even after the completion of the assistance from all parties, the livelihood activities of the farmers can continue, and the effectiveness and resilience of the livelihood activities can be continuously improved, so that the livelihood of the farmers in the Cliff Village will be better and better.

## 1. Introduction

Cliff Village, formerly known as Atulier Village, belongs to the former Zhiermo Township of Zhaojue County, is located on the bank of the Meigu River at the junction of Zhaojue, Meigu and Leibo County, 72 kilometers away from Zhaojue County, with the lowest altitude of 628 meters and the highest altitude of 2400 meters. The cliff village has a dangerous terrain, sufficient light and heat, simple folk customs, and excellent ecology, and is a "paradise" in the war years. But for modern society, the electricity here is unstable, there is no network, there is no mobile phone signal, information is blocked, and it is almost in a state of isolation, so it is called "the place where the monkey stays". Before 2016, it was called "Cliff Village" because the villagers on the mountain had to climb a cliff with an altitude difference of 800 meters and 218 rattan ladders to enter and exit the village. In December 2015, a reporter from China Central Radio and Television came to Atulier Village, Zhaojue County, a village located on an 800-meter cliff deep in the Daliang Mountains. After the "two reforms" in 2021, the former Zhiermo Township under the jurisdiction of Atulier Village, Shuozhu Village, Lailuo Village, Lailuo Society, and Guze Society were merged to form Cliff Village, which was under the jurisdiction of Guli Town, with an area of 21.92 square kilometers. Since 2019, the income of villagers has grown steadily, and the per capita disposable income in 2022 reached 16,011 yuan, an increase of 12.2% over the previous year. Since 2019, Cliff Village has been awarded the "National Poverty Alleviation Investigation Site", "The First Batch of Rural Tourism Key Villages in China", "Sichuan Province Rural Revitalization Key Assistance Excellent Village", "Liangshan Prefecture Poverty Alleviation Global Real Scene Exhibition Point" and "Liangshan Prefecture Rural Revitalization Demonstration Village".

## 2. Analysis of Farmers' Livelihoods before and after the Relocation of Cliff Village

### 2.1. Before the Construction of the Steel Ladder, the Traditional Livelihood of the Cliff Village was Obviously Restricted by Traffic

Before 2016, there were many constraints to the improvement of the livelihood of rural households in Cliff Village, such as the education level and work ability of human capital were far lower than the average level of Zhaojue County, the family network and participation in social and

economic activities in terms of social capital were very limited[1], the vehicles, irrigation facilities, machinery and equipment, and network facilities in terms of physical capital were basically blank, the savings, income, insurance, pensions, and remittances of financial capital were little or none, and the available land, water resources, and fruit trees of natural capital were very limited. In addition, the common constraints of farmers living on cliffs come from the unfavourable living environment, that is, the extremely inconvenient mode of transportation that needs to climb the cliff: first, it magnifies the role of the vulnerable background, such as diseases that are not treated in time and family members fall off the cliffs, which occur almost every year; Second, it leads to a market environment that is not conducive to raising incomes in terms of livelihood output, such as the lack of reasonable bargaining space for the sale of agricultural products, especially the fact that heavier livestock products cannot be brought back to the villages on the cliffs.

## **2.2. Poverty Alleviation has Enriched the Livelihood Capital of Rural Households in Cliff Villages**

In order to help poor rural households get rid of their difficulties and achieve common prosperity together with other rural households, governments at all levels from the central government to the local government have taken the following targeted assistance actions for Cliff Village: (1) help poor families accumulate capital, especially human and social capital, such as skills training, mastering better agricultural production or agricultural product processing technology, and expanding sales channels and increasing sales prices with the help of online sales platforms and live broadcasts; (2) Implement policies and institutional mechanisms conducive to poverty alleviation; (3) Improve the livelihood resilience of cliff villages and poor rural households, and strengthen disaster risk management at the county and township (town) level to mitigate the adverse impacts of vulnerability backgrounds. Agricultural livelihoods are susceptible to market fluctuations and are affected by changing climate or weather conditions [2]. In order to strengthen the assistance force of cliff villages, Zhaojue County has sent an additional village-based team member on the basis of the original three village-based team members, and cooperated with relevant departments to pass the dynamic monitoring of "January 1 investigation" and the "one household, one policy" assistance plan. The registered population of Cliff Village is 355 households and 1,578 people, including 942 people from 194 poverty alleviation households and 636 people from 161 general rural households. The per capita disposable income of the people lifted out of poverty in the village is stable, exceeding 8,000 yuan in 2022, and there is no risk of returning to poverty.

## **2.3. The Relocation has Created Favourable Conditions for the Improvement of the Livelihood of the Farmers in the Cliff Village**

The villagers moved off the cliff to open a window of opportunity, which greatly broadened the employment opportunities of the farmers, and the cliff village as a whole has better livelihood security and economic development space. The relevant government departments have developed new livelihood strategies and provided training in new skills for these farmers. From the perspective of development, the livelihood diversity and livelihood transformation and upgrading of rural households in cliff villages often go hand in hand with the improvement of livelihoods. For example: (1) the diversification of crops grown by farmers and the types of livestock and poultry raised; (2) Processing, packaging and building a "local specialty" brand for sale; (3) Development of new livelihood activities (opening farmhouses, small shops, engaging in ethnic handicrafts, part-time jobs, etc.) [3]. The transformation and upgrading of livelihoods means major changes in livelihood methods: for example, from growing olive oil to establishing small businesses or cooperatives, processing and producing olive oil and building green food brands, connecting with supermarkets in big cities, or developing markets as local products for rural tourism.

### **3. The Vicissitudes of Livelihood Capital in Cliff Village**

#### **3.1. The Infrastructure is Constantly Improving**

In June 2017, villagers used 1 million yuan raised from Liangshan Prefecture and Zhaojue County to build steel ladders and handrails to ensure safety on the cliff leading to the village. After the completion of the steel ladder, it is no longer difficult for villagers and students on the cliff to travel and students to go to school because of the 2,556-step stable steel ladder, and the village has also built a new communication base station, implemented safe drinking water and rural power grid upgrading projects. At present, governments at all levels have invested more than 270 million yuan to build 2 new communication base stations for "Cliff Village", laying 75 kilometres of optical fibre, and achieving full coverage of 4G network; Invest more than 1,800 million yuan to coordinate the implementation of the "cliff village" and the power grid planning of two neighbouring villages without electricity; More than 50 million yuan was invested in the construction of water reservoirs and drinking water pipelines, and the village-based team also coordinated the installation of free solar energy storage lamps in the village. The villages on the cliff not only have stable running water and rural network electricity, but also can freely connect to WiFi, the two clinics on the mountain and under the mountain are interconnected, and the villagers on the cliff can also apply for microcredit services, and many young people even become online anchors. The breakthrough in infrastructure construction has shortened the distance between the villagers and the outside world, and the quality of life of farmers in Cliff Village has been greatly improved.

#### **3.2. Educational Security has been Continuously Improved**

In order to "eradicate the root of poverty" and integrate the development of resources, at the beginning of 2014, the county party committee and county government moved the primary school from the special soil community on the top of the mountain to the Niuju Society at the bottom of the mountain, and built a new primary school to radiate the surrounding four villages, and in 2015, the village branch activity room and village clinic were built next to the school. In 2017, the Cliff Village Primary School was expanded to achieve a large boarding system management, so that the children did not have to go home on weekends. At present, three new preschool education centres have been built in the mountains and up and down, and children living in the mountains can receive preschool bilingual education at their doorsteps. In the preschool education centre, the "preschool learning Mandarin" is fully promoted, and children at the age of five or six can already speak Mandarin fluently. The original primary school has raised 13.51 million yuan through the society, and has been expanded into a full-boarding village complete primary school that can accommodate 600 people, implementing a full-boarding system and closed management, and the annual subsidy for students' living expenses is 4,500 yuan per student. All the children who moved to the city were also placed in 7 new primary and secondary schools and 4 kindergartens around the county, and none of them dropped out of school.

#### **3.3. The Medical Service Guarantee is Constantly Improving**

With the help of all parties, the medical service guarantee of Cliff Village has been continuously improved, and there is now a clinic next to the Cliff Village Primary School at the foot of the mountain, equipped with 4 general practitioners, and a clinic is built on the mountain to ensure that the villagers are urgently ill and urgently treated. With the help of the province's counterpart medical assistance, Cliff Village has carried out a comprehensive health examination for the poor households that have been registered and registered, and implemented the "Eight Exemptions and Five Subsidies" plan for medical and health care and family planning poverty alleviation. Cliff Village cooperated with Jingdong Group to introduce drone mobile clinics to carry out drug distribution, and a single round trip flight only takes 10 minutes.

#### **3.4. Moving into the County "Steel Ladder to Staircase"**

All the houses of the three groups on the mountain in the cliff village are adobe houses, and there are also many collapsed old houses, tiled houses and straw-roofed houses everywhere, and the

industry is mainly based on the most primitive planting and breeding methods, with no irrigation and water conservancy facilities, no fertile land, and is completely in the stage of self-sufficiency. Through the implementation of policies such as ex-situ poverty alleviation and relocation, falling off the edge and corners, linking increase and decrease and resettlement with resettlement, Cliff Village has resettled a total of 1,319 rural households in 291 households, including 1,171 people from 262 households in 5 large-scale centralized resettlement sites in the county, 148 people from 29 households in Zhiermo centralized resettlement site in Lailuo Village, and 259 people from 64 households who spontaneously relocated to Xichang, Dechang, Mianyang, Meishan and other places in the early years according to the policy of subsidy for falling off edges and corners. For example, the Muendi community, which is made up of small buildings and rows of shops with a distinctly Yi style, is home to many former "cliff village" villagers. The permanent population of Cliff Village has completed the "relocation of all the people", realized the historical change of "steel ladder to staircase", greatly met the living needs of preschool education, primary and secondary school reading, medical treatment, employment, culture and entertainment, etc., significantly improved the production and living conditions, and greatly improved the sense of happiness of the villagers. Today's cliff village, the industry is in the mountains, living in the city, the villagers are very convenient for skill training, nearby employment and business, and the per capita disposable income has increased significantly. After the masses entered the city, under the dual guidance of the community party branch and the cliff village party branch, they consciously abandoned the outdated and bad habits such as high bride price, extravagance and waste, heavy burial and poor maintenance, alcohol and gambling, and gradually integrated into modern urban life.

#### **4. Forge the Cornerstone of the Livelihood of Farmers in Cliff Village**

##### **4.1. Characteristic Tourism**

The cliffs and steel pipe ladders of the cliff village, together with the local mountain dwelling scenery, attract tourists from all over the world, and have become a well-known destination for rural tourism from a poor village [4]. The Zhaojue County Government regards characteristic tourism as a pillar industry for local development, and raises funds to invest in the construction of tourism infrastructure in Cliff Village, first, it invests 17.6 million yuan to build a 7.2-kilometer tourist road; the second is to invest 10.15 million yuan to build a drinking water project in the cliff village scenic spot, lay 21 kilometres of water pipelines and build a water plant; In 2018, the first phase of the camp on the Peak Platform was invested by the Tourism Development Company, which is mainly packed with hotels with a small number of cabins and camping tents, with a total of 16 rooms and 50 beds, which can accommodate 50 people for dining and accommodation at the same time. Mo Serabo, a villager in "Cliff Village", has been good at rock climbing and mountaineering since he was a child, and was selected by the tourism company to become an outdoor tourism and rock climbing leader, earning three or four thousand yuan a month. In 2021, Cliff Village received more than 20,000 tourists, generating more than 100 yuan in tourism income. The development of tourism has given the farmers in Cliff Village more choices for their livelihoods and 23 villagers have earned nearly one million yuan in tourism income by opening a kiosk, receiving food and lodging, and selling honey, green peppercorns, and navel oranges.

##### **4.2. Characteristic Planting and Breeding Industry**

The traditional industries of Cliff Village are mainly potato and corn cultivation and goat and beef cattle breeding. The rapid rise of local tourism has provided opportunities and impetus for the development of compatible related industries, such as navel oranges, walnuts and other fruits, and special products such as olive, Chinese herbal medicine, and green peppercorns. In 2016, Cliff Village won 150,000 yuan of industrial development funds, and Moselbu, who went out to work, saw the prospect of developing the local navel orange industry, and actively participated in the training of navel orange planting technology and planted 412 navel oranges. At present, there are more than 20 fruit farmers in the village, with a planting area of more than 100 acres. In order to

better realize the connection between small farmers and the big market, some farmers have begun to form professional cooperatives for navel oranges, and Cliff Village is also creating a standardized ecological demonstration park to explore the supervision and technical guidance of the whole chain of the navel orange industry from seedling breeding to consumers' tables, so as to achieve the high-quality development of the navel orange industry. At present, Cliff Village has formed a large-scale planting of 205 acres of olive, 100 acres of navel oranges, and 50 acres of Chinese medicinal materials. More than 50,000 cattles of navel oranges in the "Cliff Village" were sold in the form of east-west cooperative consumption assistance and farmers' self-sales, achieving an industrial income increase of nearly 300,000 yuan. Cliff Village has cultivated 11 local new business practitioners, engaged in online live broadcasts such as Douyin and Kuaishou to bring goods and sell special agricultural products for villagers, generating an income of more than 30 yuan. The industrial layout of Cliff Village has initially realized the "combination of long and short, interaction of planting and breeding, and integration of agriculture, culture and tourism".

### **4.3. The Collective Economy of Cliff Village has Grown**

The cadres and masses of the cliff village continue to carry forward the "ladder spirit", always adhere to the industrial development as the follow-up support for poverty alleviation and Benkang, and do everything possible to drive the masses to continue to increase their income and get rich through the development of characteristic industries and the expansion of the village-level collective economy [5]. Since 2021, more than 270 people have been guided to go out to work, work nearby, and return to their hometowns to start businesses, and the income of migrant workers has reached more than 570 yuan. Some of the villagers set up farmhouses, some planted navel oranges and peppercorns at the foot of the mountain, and the village collective also developed olive planting. The village now provides 22 hotel services, steel ladder management, olive management and public welfare posts, and the income of migrant workers is about 370,000 yuan. Since 2019, the villagers' income has increased steadily. In 2022, the collective economic income of the village will exceed 180,000 yuan, the per capita net income of the village's poverty alleviation households will be 10,400 yuan, and the per capita disposable income of the village's residents will reach 16,905 yuan, an increase of 18.46% over the previous year.

### **4.4. The Government Supports the Livelihood of Rural Households**

For villagers who have moved into the county, the government has encouraged them to find employment at their doorsteps by creating agricultural industrial parks near the relocation sites and developing public welfare jobs such as cleaners [6]. At the same time, order-based skills training is carried out to encourage young and middle-aged people to go out to work. In terms of follow-up support and development of villagers, the village encourages villagers to plant navel oranges, encourages young people to go out to work or start businesses, and carries out targeted training for the elderly and disabled people who lack some labour, so that they can master a skill and work in Yi embroidery workshops and garment factories around the county.

## **5. Conclusion**

Given the poor natural environment, the livelihood capital of the cliff villages is very limited, so it is necessary to adopt the method of relocation to reduce the vulnerability of their livelihoods. Through the development of tourism, characteristic farming and animal husbandry, Cliff Village has created a large number of employment opportunities, giving many farmers the opportunity to improve their lives through diversified income sources. The diversification of farmers' livelihoods in Cliff Village not only improves the sustainability of farmers' livelihoods, but also promotes social harmony.

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