

Connotation Reform and Problem Response of Rural Social Relations under the Influence of the Earthquake: With a Review of Wenchuan Decade

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Abstract—The occurrence of Wenchuan earthquake in 2008 has led to severe damage to the rural areas of Chengdu city, such as the rupture of the social network, the stagnation of economic production and the rupture of living space. The post-disaster reconstruction has become a sustainable issue. As an important link to maintain the order of rural social development, social network should be an important content of post-disaster reconstruction. Therefore, this paper takes rural reconstruction communities in earthquake-stricken areas of Chengdu as the research object and adopts sociological research methods such as field survey, observation and interview to try to understand the transformation of rural social relations network under the influence of earthquake and its impact on rural space. It has found that rural societies under the earthquake generally experienced three phases: the break of stable social relations, the transition of temporary non-normal state, and the reorganization of social networks. The connotation of phased rural social relations also changed accordingly: turn to a new division of labor on the social orientation, turn to a capital flow and redistribution in new production mode on the capital orientation, and turn to relative decentralization after concentration on the spatial dimension. Along with such changes, rural areas have emerged some social issues such as the alienation of competition in the new industry division, the low social connection, the significant redistribution of capital, and the lack of public space. Based on a comprehensive review of these issues, this paper proposes the corresponding response mechanism. First of all, a reasonable division of labor should be established within the villages to realize diversified commodity supply. Secondly, the villages should adjust the industrial type to promote the equitable participation of capital allocation groups. Finally, external public spaces should be added to strengthen the field of social interaction within the communities.

Keywords—Social relations, social support networks, industrial division, capital allocation, public space.

I. INTRODUCTION

SINCE the beginning of the new century, the incidence of geological disasters in China has remained a high level. Statistics show that there have been nearly 40 earthquakes with magnitude of magnitude 6 or higher, and the total number of people affected by the disaster has exceeded 200 million. The negative effects of strong geological disasters have caused great damage to the urban and rural construction environment,

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economic ecology, social structure and residents' psychology, etc. which has promoted post-disaster reconstruction and recovery as a world-wide social issue. As an intrinsic motivation influencing the social interaction among individuals, households and organizations and capital operation of rural areas [1], social relations (referred to as SR) have become an important part of the post-disaster reconstruction of rural areas. Lin put forward that the core of rehabilitation and reconstruction of post-disaster villages is the reorganization of social network from the perspective of sociology, and he believed that the stability of rural society should be maintained through the support of social network [2]. Sun argued that such as rural post-disaster reconstruction planning should attach importance to the role of market and the social relationship strength [3]. Hu proposed that the development variables and demands of rural SR should be fully taken into account in comparison with the post-earthquake reconstruction model of Wenchuan and Lushan, so as to realize the optimal spatial layout of the reconstruction community [4]. Meanwhile, SR played an important role in social production as an invisible hand, and embed economic actions such as currency circulation, commodity trading, market operation and so on [5], which determined the social nature of the entire production system in the rural areas.

Since the 2008 Wenchuan Earthquake, the rural areas of Wenchuan have undergone a decade of reconstruction and restoration, and also have entered a new stage of social development. Compared with the change of rural SR before and after the earthquake, it is found that the rural social structure has been reorganized under the influence of the earthquake, and the connotation of rural SR has also undergone a qualitative change. This kind of significant change has also brought about social, capital, space and other social reality problems while promoting the healthy development of rural society and economy. Based on this and the social research of the rural reconstruction community in Dujiangyan and Pengzhou, this paper studies the connotation of the rural SR under different stages of development, examines the current rebuild social problems of the community, thus providing some reference for the post-disaster reconstruction of rural areas.

II. CONNOTATION FRAMEWORK OF RURAL SOCIAL RELATIONS

Social relations are used to describe the general terms of the relationship that people form in the process of common material and spiritual activities. It is state by Marx that social

relation is a kind of network which is connection, which is generate by means of intercourse between material production, and has the characteristic of production, irreducibility and special characteristic [6]. Rural social relationship is made of different groups or different complex relationship in the

process of rural development [7], and is complicated by the differences in rural development stage, social organism and human activities, and interweave into complex social network. This kind of complexity is manifested in the society (division of labor), capital (currency) and spatial dimension (Table I).

TABLE I
CONNOTATION INTERPRETATION FRAMEWORK OF THE RURAL SR ON SOCIAL, CAPITAL, SPACE DIMENSIONS

Connotation dimensions	Index	Characteristic
social	social support network	interrelation of different social stratification under the division of labor
capital	capital cooperation	contractual relationship between capital flow and distribution
	capital competition	interpersonal confrontation, competitive economic SR
spatial	land field	2D mapping of the internal role of SR on the land level
	relation field	3D network under the interaction of complex SR
	time-space domain	iterative effect of social organisms in natural regeneration

A. Social Dimension: Social Support Network under the Labor Division

As an important form of human production activities, the social labor division means the distribution relationship between production conditions and workers in different production areas and different subjects [8]. Through the job-matching of the social members and the networks built on the interaction of the production activities, the social support network can promote the interests exchanges among the social members, so as to improve the labor productivity and play the maximum utility of social cooperative production.

In China, the rural areas have been dominated by blood relationship, which lead to a distinct inter-generational labor division. Under the system of family management, social members are assuming different social roles that support, contact, communicate with each other, and formed a social support network with certain characteristics of labor division. In this support network, rural society can grow in an orderly way. At the same time, there appear social stratum with different attribute characteristics in the rural areas due to the difference of the labor division, such as officer, farmer, businessmen, gentlemen and other strata, which has led to a differential social structure with stratification.

B. Capital Dimension: Economic SR under Market Catalysis

Marx believed that the core of maintaining SR is the production relations. He thought that the capital is the catalyst of social development, and effective capital accumulation can promote the stable development of SR.

While in the contemporary rural society of China, with an external capital inflow, a new model of social capital allocation has been formed on the basis of the labor division system. The external effect of capital release has given a rise to the rural market, and also has further encouraged the stable market trade practices in rural society. On one hand, under the catalytic action of the market, it has formed the economic SR of mutual cooperation and mutual benefit inside the villages. But on the other hand, the competitive advantages of owning capital can also turn the social production to materialization, interest and monetization. Driven by egoism, the production of materialization conflicts with the perception of human nature,

which presents the economic SR of interpersonal confrontation and competition.

C. Spatial Dimension: Complex Social Configuration under Field Construction

Pierre Bourdieu, a French sociologist, put forward a concept of social field when he was researching the social space. He thought that field is a network of configuration built by the objective relations between the various positions [9]. That is, the social space form constituted by the complex social network, and it carries the social labor division, capital exchange and other human activities.

From the point of spatial dimension, as an important link to maintain the social structure of "family-clan-village", the rural SR show a dominant effect on urban and rural space under a demarcation of community form and social stratum [10]. Under this dominance, a fractal rural social field (space) is formed, such as market domain (market), sacrificial field (ancestral temple), family field (yard), etc. These fields become the materialized space which carries the socialization of rural society, maps the complexity of SR, and also the physical space of various production and living activities in the countryside. At the same time, as a kind of complicated social construct [11], rural space includes three levels: land field, relationship field and time-space domain. In the multidimensional rural field, various rural SR have been continuously interwoven and formed a complex rural social configuration.

III. "STABILITY-TRANSITION-COHESION": REFORM COURSE OF SOCIAL RELATIONS UNDER THE INFLUENCE OF EARTHQUAKE

The 2008 Wenchuan Earthquake has caused a sudden change of the traditional rural social structure in the western Sichuan of China. The original rural social network was broken. With the emergency rescue, recovery and reconstruction, the rural SR have gradually shifted from the abnormal temporary network to the normal. By comprehensive carding the rural SR during the different periods of the reconstruction, we found that the rural SR of the affected area generally experienced the transformation from stability to transition to cohesion (Fig. 1).

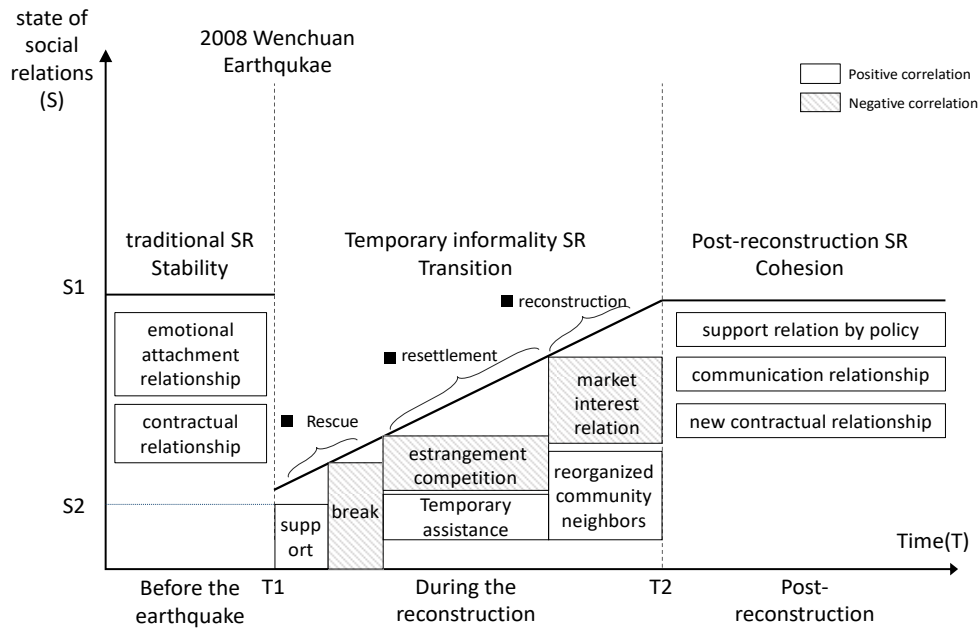


Fig. 1 The changes of rural SR influenced by earthquake

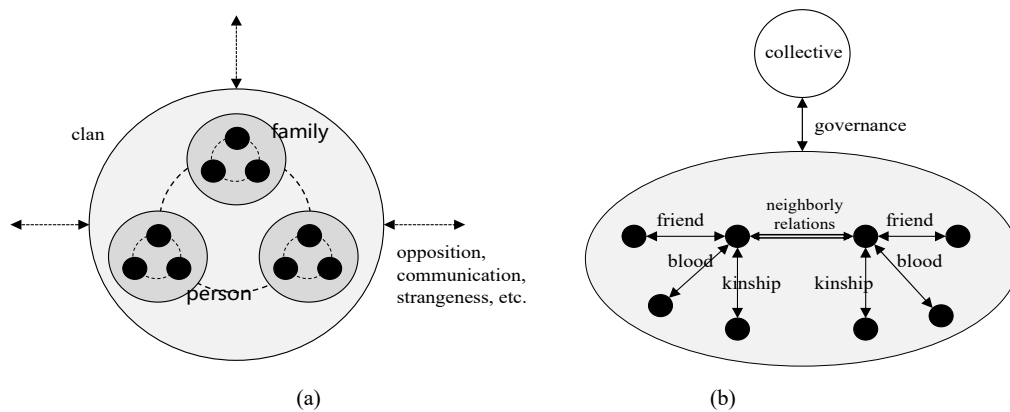


Fig. 2 (a) Emotional attachment supported by blood relationships; (b) Emotional attachment supported by geo-emotional relationships

A. Stability: The Rural Social Order Maintained by Emotion and Contract Relationship

The traditional rural social relationship in China is a social network composed of personal relationships, and it is a social structure based on kinship, blood relationship and geographical relationship [12]. The social network connected by the relationship is the link to maintain the traditional rural social order. And with the rural land and economic reform in the society widely concluding all kinds of contractual relationship, the rural SR show the state of internal emotional attachment and external rational transaction, and the traditional kinship and geopolitical relationship gradually loose in the process of currency intervention [13], thus forming two kinds of relationship paradigms. One is the emotional attachment relationship based on kinship, geography, etc. The other is the contractual relationship based on currency (capital).

1. The Emotional Attachment Relationship

Before the earthquake, the village of west Sichuan was mainly inhabited by the clan type of forest plate and the geographic mountain village. Among them, the former is an emotional attachment network composed of individual, family, clan and other units, and maintains the rural social structure based on kinship, blood, etc. (Fig. 2 (a)). The latter is a network of geo-emotional relationships by taking individuals, neighbors and villages as the core, including neighborhood relations, friendship and governance relations, etc. (Fig. 2 (b)).

2. The Contractual Relationship

Since the reform and opening, the rural land system reform and revitalization of the rural enterprises have brought enormous social capital investment for rural areas. And the capital flows and currency trading behavior between the urban and rural areas have been increased. The residents tried to establish a contractual relationship with the neighborhood,

businessmen and the government, so as to maintain the contractual relationship based on the monetary transactions, including employment relationship, cooperative relationship, transaction relationship, etc. (Fig. 3).

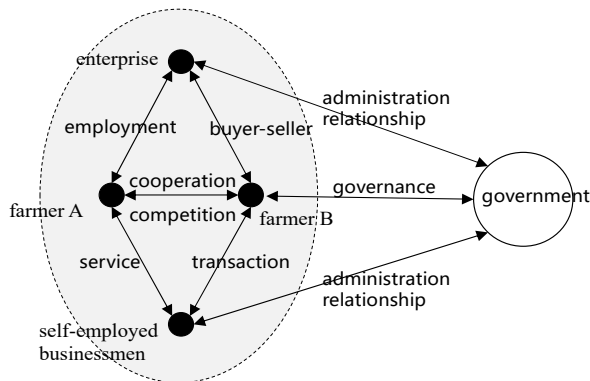


Fig. 3 Monetary contractual relationship under the capital involve

B. Transition: A Collection of Temporary Informality SR

Unlike normal stable rural SR, temporary informality SR is formed by the quality transformation of the social organisms, the support of network mutations and the interconnection of the multiple components under certain events (such as natural disasters, special policies, etc.). It also has temporary characteristics due to its short duration.

The 2008 Wenchuan Earthquake has not only damaged the local natural and built environment, but also changed the long-term social order in rural areas, which has made the disaster area into the abnormal state of society. During the emergency response process of the government, the rural areas have experienced three stages of rescue, resettlement and reconstruction. And the different stages are characterized by different temporary social relations due to different social organisms and different social interest demands.

1. Rescue: A Temporary Rescue under a Broken Relationship

With the negative effect of the earthquake, the stable rural social order has been divided and the traditional rural social structure has been collapsed. The main body of rural SR has degenerated into disconnected independent individuals, and the support network of SR has also been broken.

For emergency rescue, the central and local governments quickly organized rescue strengths to carry out rescue operation. The disaster area has presented a temporary relief SR which was established in the group of governments, social teams and affected people. And the SR has continued until the end of emergency transfer and excavation, lasting about three months.

2. Resettlement: Estrangement and Competition under Mutual Assistance

As of July 31, 2008, Chengdu has completed the transition of the affected people in a comprehensive way, with a total of 1,543 centralized settlement sites and 19.86 million transitional housing units. In the process of resettlement, the

affected residents spontaneously formed a benign social network of mutual help and mutual support, which became the main social support network to maintain the stability of the settlement. However, due to the difference of the social roles, it is common for resettlement residents to have unfamiliarity and uncommunicative individual characteristics [14]. At the same time, the limited social assistance resources have led to a problem of group vicious competition, which would weaken the social network.

3. Reconstruction: Reorganized Neighborhood Affected by Government and Market

With the orderly migration of residents from temporary settlements to permanent resettlement communities, a new type of community relations network has begun to sprout. However, unlike the stable neighborhood of the pre-earthquake community, the SR in the resettlement community presented a complexity characteristic due to the heterogeneity of residents. And it formed a reorganized neighborhood relationship by multi-attribute social subject interaction.

C. Cohesion: A Reorganization and Regeneration of SR's Support Network

In January 2012, the development of post-disaster community in Chengdu has entered a new era -- post-reconstruction era. It gradually forms a new social support network based on the characteristics of the new environment and the new industry in the new community, such as the new geo-neighborhood relation and the new industry economic relation.

1. New Geo-Neighborhood Relation

On the basis of fully enjoy the dividend policy, the residents in the resettlement community have established a manage system and constructed a new type of residents' mutual assistance relation by themselves, thus breaking the original alienation individual characteristics and increasing the frequency of daily exchanges of residents. This kind of system has strengthened the construction of resident activities in communities, and enhanced the interaction frequency, emotional intensity, intimacy, trust, and alignment between the community residents, so as to build new geopolitical neighborhood relations under the new community life.

2. New Industry Economic Relations

After solving the problem of housing demand, employment, facilities supply, welfare enjoyment and other related issues have become the focus of residents. And a new round of market economic activities appeared in the post-disaster villages. Since 2011, the post-disaster villages (especially in Dujiangyan and Pengzhou) have vigorously promoted modern agriculture, manufacturing, and rural tourism characteristic industry under the policy of "one village one product" and "tourism development" led by governments at all levels. According to statistics, the visitors of Chengdu villages has reached 102 million in 2016, and the rural tourism income has reached 26.09 billion CHY, which has directly or indirectly provided more than 2 million urban and rural employment.

The settlement point starts to excavate its own advantageous resources, and the residents are mutually beneficial to each other and form a supportive network of friendly and mutual social relations. At the same time, some business transactions began to appear in the community, and residents began to have informal economic relations such as business and cooperation.

IV. THE CONNOTATION CHANGE OF RURAL SOCIAL RELATIONS UNDER THE INFLUENCE OF EARTHQUAKE

Under the influence of the earthquake, the traditional rural SR has generally experienced the transformation from stability to transition to cohesion, and each phase on the three-dimensional connotations also showed a different characteristic (Fig. 4).

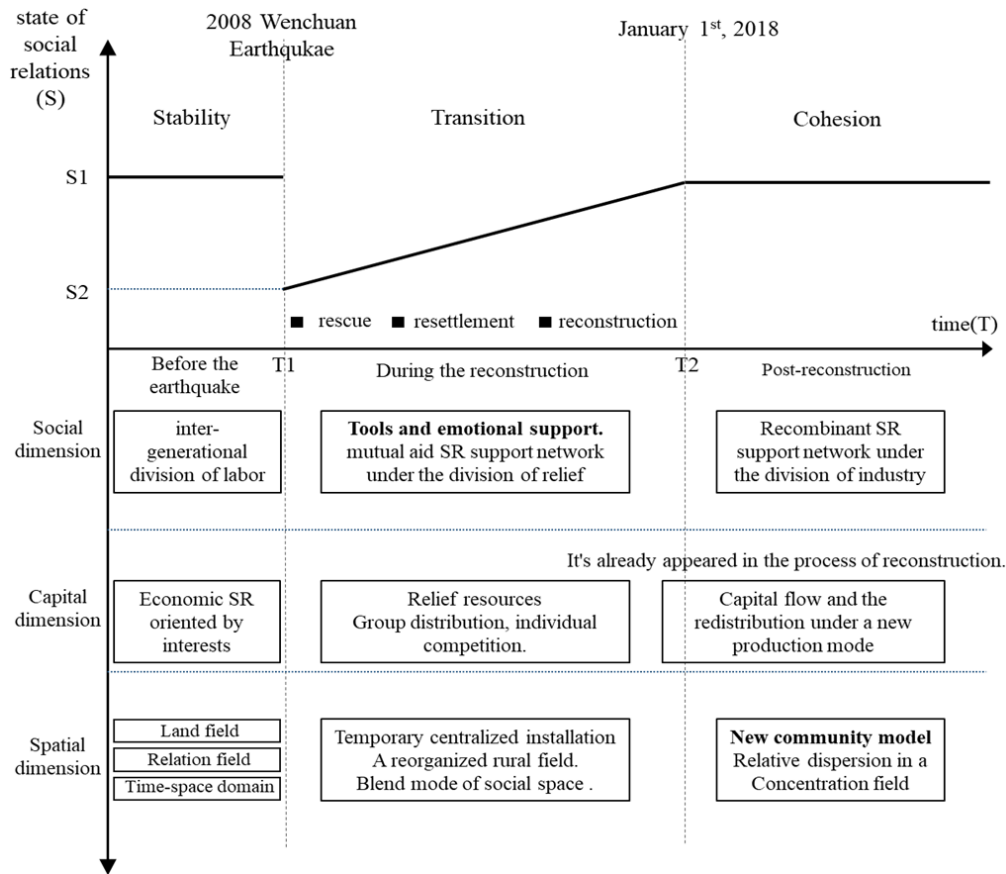


Fig. 4 The connotation interpretation framework of the phased rural SR

A. Social Dimension: With the Support of Social Network, The Inter-Generational Division of Labor Has Transferred to the Industrial Division of Labor

With the occurrence of the earthquake disaster, the traditional family system and the geographical inter-generational division system was collapsed, and the rural traditional social network was fractured. And then during the recovery of the rescue, the external rescue forces, such as disaster relief forces, aid construction groups, social workers and volunteers have participated in the rescue, which formed a reasonable system of relief work within the coordination of the government. Various groups have undertaken different social relief functions, and also have built the external support network of social relief on the dimensions from the objective instrumental assistance to the subjective spiritual comfort. And self-organizing social assistance groups are spontaneously formed in the affected population. Thus, it

forms an internal mutual aid relationship with certain division of labor characteristics, and a new SR of mutual aid with the external social organic forces together (Fig. 5 (a)).

In time of disaster reconstruction, the social relief force is orderly withdrawn and the social reconstruction of the community is restored to normal. The resettlement community residents shall be transformed from relief and survival mode to the living mode of labor employment, and gradually form the social division system which is dominated by the division of labor industry, and build a recombinant social support network, which turns the social dimension from the inter-generational division of labor to a new era of industrial division of labor (Fig. 5 (b)).

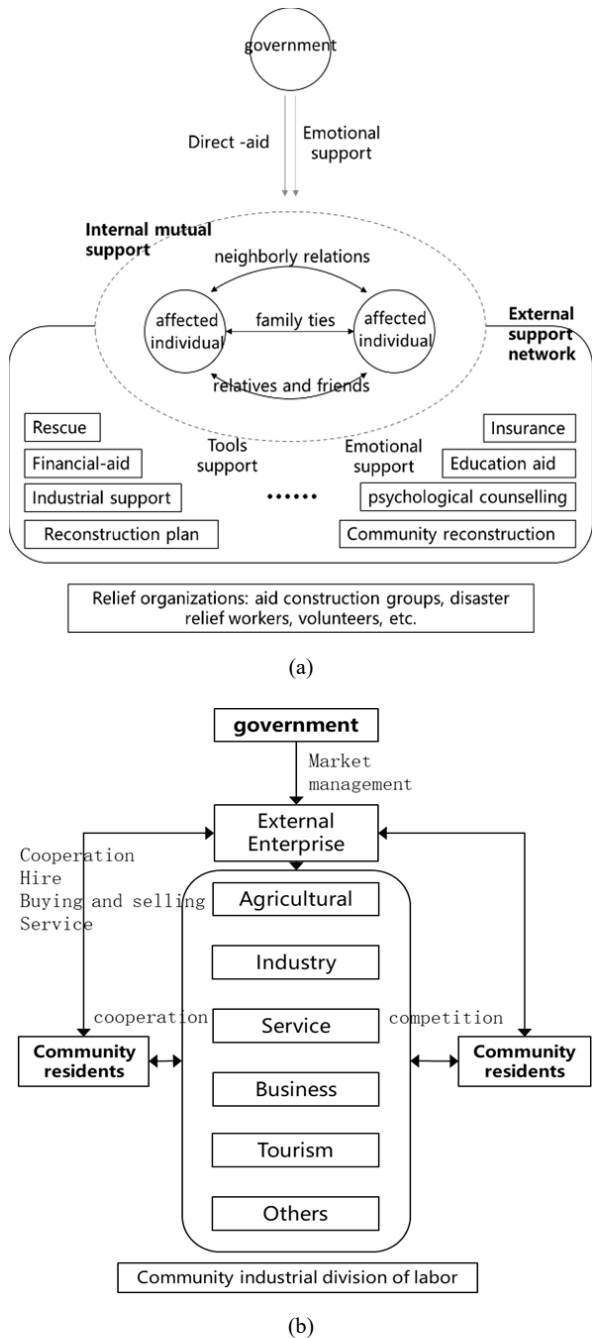


Fig. 5 (a) SR of Mutual Aid; (b) SR of Recombinant)

B. Capital Dimension: Reconstruction of Social Production, from Rescue Capital Accumulation to Capital Flow and the Redistribution under a New Production Mode

The occurrence of natural disasters has blocked the original social production behavior in the countryside, and the villagers have changed their social identity to the victims, so that the social floating capital has turned from the transaction currency (including commodities) to the rescue capital. With the influx of massive social assistance resources and the cultivation and excavation of their own resources, the disaster areas have

obtained huge capital accumulation. And under the system of division of labor, the rational allocation and efficient utilization of reconstruction capital are realized. Of course, there are also some individual competition in the distribution process of the rescue capital, which is the inevitable choice of human interest behavior and has been going on till now.

In the process of post-disaster reconstruction, there have been marketable transactions, which are based on the money subsidies, the land displacement and the housing and the relocation policies, and the social contract is maintained in the reconstruction of the neighborhood. With the adjustment of government industrial policy, the new production mode dominated by modern agriculture, rural tourism and other industries has become the mainstream, driving the capital to shift from one direction to multiple flows and realizing the redistribution of capital according to the new labor division.

C. Spatial Dimension: The Traditional Rural Area was Broken, and the Space Was Turned to a Relative Dispersion in Concentration Field from the Mixed Steering of the Temporary Cluster

The square, ancestral hall, public space, family courtyard and other stable rural land fields formed under the time-space iteration were broken after the earthquake, and the relation field of the original maintenance of rural daily life was also collapsed. When social aid groups enter, a support network of social support established in the temporary settlement has created a new countryside land and relationship area. And in this temporary rescue mode, the country space is reorganized and re-engineered in the aftermath of a break. However, due to the shortage of land, the rural areas with clear zoning and scattered layout must be centrally located, each of which has a variety of spatial functions such as residence, communication and mutual assistance, and presents the feature of mixed-use space utilization.

And as the neighborhood is growing, the new neighborhood has been redeployed to the next iteration. Unlike the rural field before the earthquake, the new residential community has a vertical concentration of neighborhoods. However, this kind of concentration has reduced the public space in the neighborhood, and also reduced the frequency of social interactions in the neighborhood, which has increased the social dimension, and led to the relative dispersion of social behavior in the neighborhood, in the neighborhood, the capital flow.

V. THE CHARACTERISTICS AND RESPONSE MECHANISM OF RURAL REALITY IN THE POST-RECONSTRUCTION ERA

Into the reconstruction era, along with the normalization of social relation network and the social order, the society, economy, and ecology of rural reconstruction community has orderly recovered, and presented a stable and benign development trend. Due to the urgency, timeliness and performance characteristics of post-disaster reconstruction, some deviations were shown in the planning, construction and management of post-disaster reconstruction, which have led to the real problems of social, capital and space in the rural

reconstruction community.

A. Characteristics of Rural Reality in the Post-Reconstruction Era from the Perspective of Social Relations

1. With Competition under New Industry Division of Labor, the SR Ties Were Weakened

Research Case 1 Xiaoyudong town in Pengzhou city

Located in the mountainous area of northern Pengzhou city, Xiaoyudong town is one of the important nodes in the rural tourism of Peng-Qing line in Chengdu. And it supports the living and employment needs of the residents with the support of ecological agriculture, special agricultural products processing and rural tourism. In recent years, under the policy of the integration of agriculture and tourism, the rural tourism situation of Xiaoyudong town has been very strong. According to statistics, in 2015, the town received more than 1 million tourists, and the number of the peak day transit tourists reached 100,000, and the tourism revenue exceeded 30 million yuan. The strong tourism market has attracted the residents to invest in the tourism service industry. In 2016, there are 162 new agritainments in the whole town with a total of more than 300, and the employment of agricultural production and production is as high as 1,300 people, accounting for 37% of the total employment in the town. These agritainments are clustered along Pengbai road and have good development prospects. However, due to the competition of internal interests in the same industry, these agritainments are not communicating, but competing with each other. They have destroyed the market and social ties, which has brought less communication within the community, indifference to neighborhood relations, and increased internal conflicts in the community.

Under the system of industrial division of labor, the interests of both inside and outside the industry have become an important factor affecting the employment choice of residents, and the industries with high economic value tend to become the employment fields that people compete for. As an inevitable link in the development of advantageous industries, inter-industry competition also appears in the resettlement community. Due to the lack of effective control of the market and the lack of clear division of labor in the industry, the competition of the passenger, price, and market, etc. continues to take place under severe competition, thus reducing the daily interaction frequency, intimacy degree, information sharing degree, and emotional connection strength of the settlement residents. The SR support network shows the weakening phenomenon of connectedness, which also exists in other post-disaster resettlement towns, such as Bailu town, Juyuan town and so on.

2. Residents Have No Land and No Jobs under the Mode of Unified Construction, and the Redistribution of Capital Was Significantly Different

Research Case 2 Taiping community of Anlong town in Dujiangyan city

Taiping is a resettlement community established in the mode of unified planning and unified construction by the 2008

regulation of Anlong town, Dujiangyan city, and the totally community has 495 households with over 2000 residents, and the residents are relatively far apart from the original place of residence within 1.5 to 10km. While the government set up the community, they chose a mode of land to house, which means that the settlement was built by the social developers, and the residents use their land to replace a new house. In this mode, although the villagers live in the new house, they have lost the land they used to live on, and some villagers still have to pay a certain amount of housing purchase to increase the economic pressure of the residents. At the same time, according to the government regulations, the residents in the mode of unified construction can not engage in commercial activities such as agritainments and hotel accommodation in their own houses, while the original production type land is far away, causing the residents to lose their jobs. However, with the expiration of the three-year rescue policy, residents have no rescue capital to ensure their livelihood. They can only go out to work, with a small amount of the capital gain and lower incomes. The statistics show that the residents of the community in 2016 are only \$35,000 a year, far below the average of the neighborhood built in the mode of self-reconstruction.

In fact, the national, provincial and municipal relevant policies formulated by the local government in the process of post-disaster reconstruction is valid only for three years. After entering the post-reconstruction era in January 2012, various social support exits from the resettlement area, and the resettlement communities are shifted from rescue capital accumulation to capital flow and the redistribution under a new production mode. However, three years' capital support (including funds, housing, industry, public service, etc.) has created a capital support dependency within the community, which has led a social maladjustment after the withdrawal of support. In particular, the residential communities under the unified construction mode can only indirectly engage in modern agriculture, tourism services and other industries under the land use restriction, and cannot directly participate in the capital allocation under the new production mode, which made them living at the bottom of the social capital flow. The distribution of this social capital has directly affected the development of SR in the neighborhood, and that has led to the development of the relative deprivation and imbalance in the neighborhood. According to the author's survey, more than 35 percent of the residents in the construction and resettlement communities have expressed regret for choosing the traditional model, and asked the government to return the land so that they can participate in tourism development.

3. Lack of Communal Public Space and Low Frequency of Residents in Centralized Mode

Research Case 3 Zhima community of Xinxing town in Pengzhou city

Zhima community is located in the northwest of Xinxing town in Pengzhou city, where the original village was destroyed. In the post-disaster reconstruction, the whole

community was relocated to the north of Pengbai road for the construction of mass relocation. And it was completed in 2010, with over 350 households installed in the community, mainly residential quarter residential quarter in the 4-5 storey. In order to implement the housing demand of residents as soon as possible, there is a lack of prejudice on the demand for social interaction of residents. In the case of land shortage, the residents are forced to go upstairs, and only two public Spaces are left in the construction process (figure 6a). During the investigation, it was found that the use of public space in public space was mainly used for drying crops, parking, etc., while the use of the traffic was relatively small (figure 6b).



Fig. 6 (a) Distribution of the public space; (b) Using status quo of the public space

After the disaster, the reconstruction of housing has been diversified. But it is restricted by the land, which made most of the resettlement communities choose the unit townhouse as the main resettlement form. In the mode of “centralized moving into storied houses” and “compact resettlement”, the public space for residents’ daily communication is often small [15]. In addition, unit houses hinder the daily communication of the villagers, causing communication plight in vertical elevation difference: “discipline and punishment of the stairs”, low social interaction frequency and lack of external public space. Meanwhile, the only public space in community fails to have substantial effect; and the connective degree of community neighborhood and the interaction frequency among residents are low.

B. Response Mechanism to the Multiple Rural Problems

In order to alleviate the social problems in the rural reconstruction community, the response mechanism is put forward from the perspective of the scale of labor division, capital participation and public relations, so as to realize the scientific and rational growth of rural reconstruction community.

1. Reasonably Determine the Scale of Labor Division and Realize the Supply of Diversified Commodities

In the rural reconstruction community, the root cause of the malignant horizontal competition is the overlapping of social division of labor, which leads to competition and commodity convergence in the industry. As a rural area with the supply of

special resources, especially agricultural production and travel service rural reconstruction community, it is very easy to have aggressive rivalry problems. Therefore, aiming at the realistic development demands of these regions, it is suggested that the scale of different division of labor should be reasonably determined in the case of full play of the advantages of characteristic industries, so as to achieve differentiated and diversified production from the perspective of commodity supply, and maintain normal market supply order.

In the case of Xiaoyudong town in Pengzhou city, the market managers should reasonably control the agritainments’ quantity and employment structure, and adjust the commodity supply of agricultural products for the needs of different types of social groups. In addition, the community should provide other types of commodity supply such as accommodation and entertainment, and increase the development of community industry chain, so as to realize diversified and differentiated commodity supply within the community.

2. Adjust the Industrial Model and Promote the Fair Participation of the Group of Capital Flows

Social justice is an important factor to maintain the stable development of social relations, and also an important indicator to measure the civilization degree of social and economic development. From the perspective of capital dimension, the foundation of building a harmonious and stable social structure is to realize the fair participation of the whole population in the social capital flow and redistribution, and to promote the participation of the whole population in employment and to build the delivery platform of capital to the whole population while reasonably determining the scale of division of labor. In particular, we need to make a reasonable adjustment to the rural reconstruction community industry development model based on the current situation characteristics of the community residents in different reconstruction modes, such as unified construction, self-construction and maintenance, and the employment demands of residents participating in different types of industrial development. In addition, we should build a diversified industrial structure system of modern agriculture, new industry, life service, rural tourism and special service industry, so as to provide all residents with employment, employment and entrepreneurial opportunities, eliminate the negative effect caused by the withdrawal of the rescue capital and the unemployment of residents, reduce the group difference of capital allocation, and realize the fair participation of the group of capital flows.

3. Increase External Public Space, Create Harmonious and Open Communication Environment

In the case of limited construction land, the reconstruction community with a mode of unit townhouse as the main resettlement form will become a trend, and the public fields such as private houses, ancestral halls and theatre buildings in traditional villages will be difficult to reproduce. Therefore, in order to increase the frequency of residents’ exchanges in the rural reconstruction community, we should increase the

external public spaces such as squares, sports fields and alleyways, so as to create a harmonious and open interpersonal environment where the residents can carry out social activities such as square dancing, physical exercise, playing cards, entertainment and daily communication. And also, we should provide adequate outdoor space for community grass-roots management, so as to realize the reorganization and regeneration of social support networks in the community.

VI. CONCLUSIONS

The increasingly high frequency of geological disasters has great impact on the rural construction environment and social structure, and the construction of rural social network has a significant effect on the rural social and market order after the disaster. In this paper, the selection of Wenchuan earthquake reconstruction for nearly 10 years after the largest reconstruction has very high research value. From the view of the rural SR, the reconstruction of the rural SR in the post-disaster reconstruction has shown a certain evolutionary mechanism, and also shown qualitative and social problems in the three dimensions of social, capital, and space. The conclusions are as follows:

1. Firstly, the rural SR under the impact of the earthquake has experienced the evolution of "stability - transition - cohesion", namely, the transition from the stable rural order before the earthquake to the temporary informality transition under the broken SR, and then to the reorganization and regeneration of the social network in the self-recovery period.
2. Secondly, the connotation of rural SR under the impact of earthquake has changed: In social dimension, the inter-generational division of labor has transferred to the industrial division of labor with the support of social network. In capital dimension, it is changed from rescue capital accumulation to capital flow and the redistribution under a new production mode. In spatial dimension: the traditional rural area was broken, and the space was turned to a relative dispersion in concentration field from the mixed steering of the temporary cluster.
3. Thirdly, the reconstruction of the community under the change of connotation has shown that there are multiple social problems, such as horizontal competition under new industry division of labor, significant difference in capital redistribution under different reconstruction modes, lack of communal public space and low frequency of residents, which leads to the weakening of rural SR and the lack of social network.

CONFLICTS OF INTEREST

The author(s) declare(s) that there is no conflict of interest regarding the publication of this article.

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REFERENCES

- [1] Lin Nan. How does Chinese Studies Contribute to Sociological Theory(G)// Chinese Society and Chinese Studies. Beijing: Social Sciences Academic Press (China), 2004: 64.
- [2] Lin Juren. Research on the Significance and Ways of Social Relationship Reconstruction in Social Reconstruction (J). Jilin University Journal Social Sciences Edition, 2008, (05):115-118.
- [3] Sun Shiwen, Hu Liping. The Planning for Reconstruction, the Duty for Future(J). Urban Planning Forum, 2008, (04):6-10.
- [4] Liu Wei, Hu Wen. Towards a Self-Organization Mode: Case Studies on Post-Earthquake Reconstruction Planning in Wenchuan and Lushan(J). City Planning Review, 2015, 39(09):27-32.
- [5] Lin Juren, Du Jinyan. The Analysis on Characteristics and Problems of Social Relations in Present Rural China(J). China Agricultural University Journal of Social Sciences Edition, 2007, (03): 34-42.
- [6] Zhou Zhishan. Multidimensional Interpretation of Marxist Theory of Social Relations(J). Study and Exploration, 2007, (04):7-11.
- [7] Huang Wei. The Construction of New Social Relations in China's Urbanization(D). Fujian Normal University, 2016.
- [8] Marx and Engels Complete 1, page 427.
- [9] Wang Chong. Research on the composition and management of urban community public space in China(D). Zhejiang University, 2005.
- [10] Chen Yu, Zhang Bin, Sun Hongliang. A Study on the Relationship between Social Communication and Urban Space(J). China Ancient City, 2016, (06):49-54.
- [11] Derek Gregory, John Urry. Social Relations and Spatial Structures(M). XIE Lisheng, LV Zengkui, et al. Translate. Beijing: Beijing Normal University Publishing House, 2011.
- [12] Fei Xiaotong. Rural China(M). Beijing: People's Publishing House. 2008.
- [13] Li Lulu, Li Ruijie, Zhao Yandong. Transformation of Natural Disaster and Rural Social Relations: A Case Study of a Village in Wenchuan Earthquake-affected Area(J). Social Science Front. 2015, 01, 190-200.
- [14] Zhang Yu. The Route Exploration of Social Relation Restoration and Reconstruction after Disaster-- The Practice of Social Work Intervention Based on Q Resettlement Community(J). Journal of East China University of Science and Technology (Social Science Edition), 2008, 23(04):1-6.
- [15] Gu Yuliang, Jiang Lihua. Changes of the Rural Social Relations under Spatial Perspective: a Case of L Village in Zaozhuang of Shandong Province(J). Human Geography. 2015, 04, 45-51.