



汶川地震灾区居民重建恢复情况 调查报告

Restoration and Reconstruction in Sichuan Earthquake-hit Areas: a Household Survey Report

中国科学技术发展战略研究院

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Report of the Survey on Residents' Restoration and Reconstruction in Wenchuan Earthquake-hit Areas	93
I. Basic Information	93
II. Major Findings	94
1. Ninety percent of residents in the affected areas now have moved into permanent housing with improved living conditions, but supporting facilities need to be further improved	94
2. The unemployment rate maintains low, but the potential unemployment risk should not be ignored. The employment and training needs of the residents have not yet been fully met	96
3. Agricultural production is less than what is desired. Arable land loss warrants attention; family business is active, longing for government support and better business environment	96
4. Medical care, education and other public services are significantly improved, but the quality of medical services and education equity deserve more attention	97
5. Residents are helpful to each other and full of public-spirit. The focus on their policy needs has shifted from survival issues to development issues	98
6. Social attitude of the residents remains stable, with a high degree of satisfaction in living conditions and good perception of social security, but the sense of social injustice is also on the rise	99
III. Policy Suggestions	100
1. Water and sanitation issues should be the focus in post-earthquake construction in rural areas	100
2. It is necessary to expect a drop in the employment rate when the reconstruction ends, and to improve the training system	100
3. Attach importance to and solve practical difficulties relevant to production and living conditions in the earthquake-hit areas	101
4. As well as strengthening the "hardware" facilities of public services (e.g. health care and education), "software" development such as quality and fairness of the public services should also be guaranteed	101
5. Draw on the initiatives of the affected people, encourage them to help each other and to be more actively involved in the public-interest reconstruction activities	102
6. Keep on increasing implementation power and public confidence of the grass-root government officials in the disaster areas in order to deal with more difficult tasks in the future	102
7. Strengthen the openness, transparency and public participation of post-earthquake reconstruction, so as to increase public satisfaction and trust towards government	102
8. Through active policy interventions, reduce social differentiation and improve social harmony and stability	103

“汶川地震灾区重建恢复情况调查”课题组成员

课题组成员：

赵延东（负责人）：中国科技发展战略研究院科技与社会发展所，研究员
王奋宇：中国科技发展战略研究院副院长，研究员
杨起全：中国科技发展战略研究院副院长，研究员
孔欣欣：中国科技发展战略研究院科技与社会发展所，副研究员
马 纓：中国科技发展战略研究院科技与社会发展所，副研究员
邓大胜：中国科技发展战略研究院科技与社会发展所，助理研究员
薛 姝：中国科技发展战略研究院科技与社会发展所，助理研究员
王东明：中国科技发展战略研究院科技与社会发展所，助理研究员
张文霞：中国科技发展战略研究院科技与社会发展所，副研究员
何光喜：中国科技发展战略研究院科技与社会发展所，副研究员
张艳明：中国科技发展战略研究院科技与社会发展所，研究助理
乔卫国：中国社会科学院世界政治与经济研究所，副研究员
李 钢：中国社会科学院工业经济研究所，副研究员
孙秋鹏：中国社会科学院马克思主义研究院，副研究员
王水雄：中国人民大学社会学系，副教授
毕向阳：中国政法大学社会学院，副教授
尉建文：中央财经大学社会学系，副教授
李睿婕：中国人民大学社会学系，研究生
唐丽娜：中国人民大学社会学系，研究生
周 婵：中国科技信息研究所，研究生
赵国飞：中国社会科学院工业经济研究所，研究生
董敏捷：中国社会科学院工业经济研究所，研究生

技术顾问：

Jon Pedersen：挪威 FAFO 应用国际问题研究所研究员
Kristin Dalen：挪威 FAFO 应用国际问题研究所研究员
张化枫：挪威 FAFO 应用国际问题研究所研究员

Task Group Members of the "Survey on Restoration and Reconstruction in Wenchuan Earthquake-hit Areas"

Task group members:

Zhao Yandong (team leader): researcher, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Wang Fenyu: researcher & vice president, Chinese Academy of Science and Technology for Development

Yang Qiquan: researcher & vice president, Chinese Academy of Science and Technology for Development

Kong Xin-xin: associate researcher, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Ma Ying: associate researcher, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Deng Dasheng: research assistant, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Xue Shu: research assistant, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Wang Dongming: research assistant, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Zhang Wenxia: associate researcher, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

He Guangxi: associate researcher, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Zhang Yanming: research assistant, Institute of Science, Technology and Society, Chinese Academy of Science and Technology for Development

Qiao Weiguo: associate researcher, Institute of World Politics and Economy, Chinese Academy of Social Sciences

Li Gang: associate researcher, Institute of Industrial Economics, Chinese Academy of Social Sciences

Sun Qiupeng: associate researcher, Institute of Marxism, Chinese Academy of Social Sciences

Wang Shuixiong: associate professor, Department of Sociology, Renmin University of China

Bi Xiangyang: associate professor, Department of Sociology, China University of Political Science and Law

Wei Jianwen: associate professor, Department of Sociology, Central University of Finance and Economics

Li Ruijie: graduate, Department of Sociology, Renmin University of China

Tang Lina: graduate, Department of Sociology, Renmin University of China

Zhou Chan: graduate, Institute of Scientific and Technical Information of China

Zhao Guofei: graduate, Institute of Industrial Economics, Chinese Academy of Social Sciences

Dong Minjie: graduate, Institute of Industrial Economics, Chinese Academy of Social Sciences

Technical Advisers:

Jon Pedersen: Head of research, Fafo Institute for Applied International Studies, Norway

Kristin Dalen: research coordinator, Fafo Institute for Applied International Studies, Norway

Zhang Huafeng: researcher, Fafo Institute for Applied International Studies, Norway

Report of the Survey on Residents' Restoration and Reconstruction in Wenchuan Earthquake-hit Areas

I. Basic Information

In July 2009, in order to facilitate the mid-term assessment of “the Overall Planning for post-Wenchuan Earthquake Restoration and Reconstruction”, the Chinese Academy of Science and Technology for Development, entrusted by the Ministry of Science and Technology, conducted two surveys on the restoration and reconstruction in the Wenchuan earthquake-hit areas. The first was "the survey on residents' restoration and reconstruction in the Wenchuan earthquake-hit areas" and the second was "the survey on small and medium-sized enterprises (SMEs) restoration and reconstruction in the Wenchuan earthquake-hit areas". This report focuses on the main findings and the policy recommendations on the residents' restoration and reconstruction survey.

The survey was supported by the Administrative Office of the Ministry of Science and Technology (MOST), Department of Social Development of MOST, Department of International Cooperation of MOST, Sichuan Provincial Science and Technology Department, Institute of Public Administration of Sichuan University, and Sichuan Research Center for Science and Technology for Development.

“The survey on residents' restoration and reconstruction in Wenchuan earthquake-hit areas" was based on a random, representative sampling of households and individuals. The survey covered 26 affected counties (cities, districts) in Chengdu, Deyang, Mianyang and Guangyuan¹⁹. Of these, there are 8 worst-hit counties (cities, districts), and 18 seriously-hit counties (cities, districts)². The survey covered a total of 142 communities (villages, neighborhood committees and urban communities), and 29 temporary settlements with prefabricated shelters. The field survey was conducted between July 17 and August 2, 2009. The survey teams visited 5,549 households, and successfully interviewed 4,037 households, accounting for 72.8% of the total households visited. Over 14,000 items of personal

¹⁹ The Probability Proportional to Size (PPS) sampling method is used; and 26 counties or cities are included in the survey: Dujiangyan, Pengzhou, Chongzhou and Dayi of Chengdu; Jingyang, Mianzhu, Shifang, Zhongjiang, Luojiang and Guanghan of Deyang; Fucheng District, Youxian District, Beichuan, Pingwu, Anxian, Jianguo, Zitong, Yanting, Santai of Mianyang; Lizhou District, Chaotian District, Yuanba District, Qingchuan, Jiange, Cangxi and Wangcang of Guangyuan.

² The differentiation between the worst-hit and the seriously-hit is based on the list released by the 23rd meeting of the State Council's Earthquake Rescue and Relief Headquarters on 12 July 2008.

information have been collected, which represent the situation of 13 million population in the 26 affected counties (cities, districts).

The main objective of this survey is to explore the recovery of production and living conditions in the earthquake-hit areas during the past year. The survey touches on many aspects including housing and infrastructure, basic demographic information, education, medicine, health, employment, agricultural production, household management, social support, public participation, public attitude and public evaluation. We have strived to make the survey as accurate and vivid as possible and to grasp a profile of residents' life and attitude in the affected areas.

In 2004, the task group carried out a similar survey in Sichuan, which covered 4400 households. In addition, the task group had conducted another survey through the same sampling methods and research tools, in the same geographical areas in July, 2008 (one month after the earthquake). This one covered nearly 4000 households, 3000 of which are also included in the survey in 2009. These two surveys provide us with a great deal of background information and a baseline for better observing the changes in people's life in the disaster-stricken areas during the last year.

If the needs of the affected people are the best guide for post-disaster reconstruction planning, then changes in the life of the affected people and their feelings are the best measures of the reconstruction. We hope that this survey can provide accurate data in light of assessing "the Overall Planning for post-Wenchuan Earthquake Restoration and Reconstruction", as well as to be a useful reference for the government on prioritizing future reconstruction work, so as to deliver some scientific and democratic post-disaster reconstruction policies.

The following recounts the main findings of the survey from several angles, including living environment, housing reconstruction, employment, production, public service, public participation, policy evaluation and social attitude.

II. Major Findings

1. Ninety percent of residents in the affected areas now have moved into permanent housing with improved living conditions, but supporting facilities need to be further improved

The earthquake destroyed many houses, rendering a large number of people homeless. The survey showed that about one third of the houses had

collapsed or been severely damaged, thus needing to be rebuilt. Moreover, more than half of the houses were moderately or mildly damaged, needing to be reinforced or repaired. Therefore, the government defines housing reconstruction as the primary task of post-disaster restoration and reconstruction.

At present, housing reconstruction is moving forward. During the survey, 90% of the households were living in permanent housing, with only 9.8% living in temporary housing like prefabricated houses and tents. Those moving into new houses are quite content with their new dwelling, since 86.2% report being satisfied with their new homes.

Of the families moving into newly-built houses after the earthquake, the vast majority (95.5%) build new houses themselves, with only 0.5% obtaining their new houses through exchange, purchasing or other means.

The Government's policies for rebuilding houses have been carried out. Among those moving into reinforced or repaired houses, over 80% have received relevant subsidies granted by the government. Among those moving into rebuilt permanent housing, 96.8% received housing-rebuilding subsidies from the government. Over 60% of the households had access to bank loans in terms of housing reconstruction.

As for the families still living in temporary housing, most of them have a clear reconstruction plan. It is noteworthy that 16.1% of the families have indicated that in the future "they cannot have permanent housing by themselves", so these families may become the focus and difficulty of the post-disaster housing reconstruction.

Overall, the amenities and environment of the affected households have been improved remarkably after the earthquake, leading to a more convenient life than before. At present, 80% of households have access to improved water supply, and almost all households (99.1%) have access to electricity, and washing and bathing facilities. However, garbage disposal is still a big problem. Half of the households (53.5%) dump garbage in open-air garbage dumps or litters. Nearly four-fifths (79.0%) of the households feel that their current living is more convenient than, or at least the same to it was before the disaster.

2. The unemployment rate maintains low, but the potential unemployment risk should not be ignored. The employment and training needs of the residents have not yet been fully met

After delivering "safe dwelling" to the inhabitants, how to ensure "happy work" is the most complex and difficult issue. During the year after the earthquake, residents in the affected areas not only have had to face the economic destruction caused by the earthquake, but also to bear the pressure of financial crisis. Helping to recover production, employment and development is the key to the reconstruction plan.

The survey shows that after one year, the employment situation has improved with the current unemployment rate at 1.9%, which is lower than the figure got just after the earthquake. The urban unemployment rate has witnessed a more significant drop (falling from 4.7% in July 2008 to 3.6% at present). Among the unemployed, over 90% want to be re-employed and most of them are in good position to find a job, paving the way for addressing unemployment in the future.

With the promising employment picture, we should also note the potential problems. Among the current working population, 20% are newly employed in the post-earthquake period. A significant proportion of the employed are engaged in unstable temporary work. Agricultural production, self-employment and day laborers are the main forms of employment. Even among the urban dwellers, only 40.4% have relatively stable jobs. Nearly 40% of the employed has less income than they did before the disaster. About 12% of the employed are worried that they may lose their jobs in two to three years, and are not optimistic with future employment situation. With the completion of the large-scale reconstruction, we should be aware of a rising unemployment rate and should work against the possible storm.

The residents have strong demands for pre-work training showed by nearly a third (27.9%) asking for such training. But the survey shows that in the last year, only 3.2% of the affected population have received such training. More attention should be paid to the huge gap between the demand and the supply merits.

3. Agricultural production is less than what is desired. Arable land loss warrants attention; family business is active, longing for government support and better business environment

Agricultural production is generally stable, with more than 90% rural

households still engaged in agricultural production after the earthquake. But the post-disaster agricultural production appears bleak since about two fifths (41.5%) of the rural households feel that the post-earthquake agricultural production deteriorates. It is partly because of the arable land loss. Over a fifth (23.4%) of the households have experienced agricultural land loss, which is mainly caused by post-disaster reconstruction and damage due to the earthquake.

Non-farming family business is an important force for driving economic restoration in the affected areas. Family enterprises are quite common, with 9.4% of the households engaging in family-run business, such as wholesale and retail business, catering, accommodation and beauty salons. They not only meet people's needs but also increase employment. But family enterprises are also faced with many difficulties. Almost half (49.2%) of the households feel their post-earthquake business is worsening. They desperately want support through governmental loans, tax relief, market access and so on.

4. Medical care, education and other public services are significantly improved, but the quality of medical services and education equity deserve more attention

The accessibility and availability of medical services in the earthquake-stricken areas have improved significantly. Less than one percent (0.6%) of the sick have no access to treatment due to lack of suitable hospitals nearby. Economic reasons are given by 28.8% for being unable to seek treatment, much lower than before. However, the quality of the hospital services still has space for improvement, and about one-quarter (23.2%) of the residents are not satisfied with the services provided by community hospitals.

Health insurance covers the majority of the population, with 94.0% now having insurance. This is mainly a result of the implementation of "New Rural Cooperative Medical Scheme" in rural areas. But it is noteworthy that part of the urban population and those with higher education lag behind regarding health insurance, since their proportion of joining health insurance is much lower than other groups.

Primary- and secondary- school infrastructure have been seriously damaged by the earthquake. As of June 2009, 38.6% of the students are still in transitional classrooms, and the figure of the worst-hit areas is as high as 66.0%. Permanent school construction is in progress - 5.3% of the students have moved into entirely new schools; 8.5% have moved into partly new schools; and 28.2% have moved into repaired or reinforced schools.

In terms of facilities in the primary and the secondary schools, the situation

generally has deteriorated, but the education quality remains stable or improved in some cases. Up to 40% of the students think that their facilities are worse than before, but only 12.9% believe the education quality has dropped. On the contrary, 22.6% of the students agree the education is getting better; and 84.2% of the parents are satisfied with the quality.

New schools have been rebuilt with high quality standards. Up to 77.1% of the students at new schools think that the hardware facilities are better now and 48.7% feel that the quality of education has been improved. The evaluation of the primary and the secondary schools is much better than that of any other type of schools. Therefore, development of the primary and the secondary schools uncovered by the reconstruction plan also deserves attention.

More than half of the students in the primary- or the secondary- schools have enjoyed some benefit from government policy, but high school expenses are still a serious problem. As many as 23.7% of the primary- or the secondary-school students pay more than 5,000 RMB (including living expenses) each year to schools. The proportions among high school students (29.3%) and boarders (58.8%) are even higher.

5. Residents are helpful to each other and full of public-spirit. The focus on their policy needs has shifted from survival issues to development issues

Over 80% (80.7%) of the residents in the disaster areas have received some public support. The government is still the primary source of public support. Furthermore, social support networks (e.g. friends and relatives) are starting to take on a more important role.

As well as receiving assistance from outside, people also help each other to tide over difficulties, showing a strong tendency of cooperation and selflessness. Within one year after the disaster, over 40% (42.4%) of the residents have helped others for free; over 40% (43.1%) have participated in patrolling, distributing materials, building bridges or roads, or some other public interest activities. Compared with 2008, the proportion of inhabitants participating in public related activities has significantly increased. People are more united than before, according nearly nine-tenths (88.1%) of the residents. Trust among the residents and towards the government in the quake-hit areas remains high. All these, as trustable "social capital" for the post-disaster reconstruction, contribute to the restoration and development of the affected areas.

Residents are satisfied with disaster relief policies since the policies indeed aim at the needs of residents in the affected areas. "Housing subsidy", "living

subsidy in cash" and "living supply" are the most popular among the residents.

At present, the main needs of residents in affected areas have been shifted from survival issues to development and equity issues. There are fewer needs related to living issues and more on large scale infrastructure, such as road and transportation, compared with last year.

A considerable proportion of residents are questioning the fairness of policy implementation, and 30% of the residents believe that unfair cases do exist in the post-disaster policy implementation. It is noteworthy that public trust and satisfaction towards the grass-root governments decreased significantly compared with last year. For example, the satisfaction rate towards county governments, township/neighborhood and village/residents committees, in terms of their performance in the post-disaster reconstruction, are 82.5%, 65.3% and 64.6%, reduced respectively by 1.7, 7.2 and 8.0 percentage points. The causes of this trend should be identified in future research and analyses.

6. Social attitude of the residents remains stable, with a high degree of satisfaction in living conditions and good perception of social security, but the sense of social injustice is also on the rise

Recovery of life in the earthquake-hit areas is going on well with high public satisfaction and confidence of the future. Over 60% (64.5%) of the families feel that the standard of living "has been restored to pre-quake level", but 13.5% of households are pessimistic because they "do not know when they can recover from the disaster" or even believe it is "impossible to recover". The households with low-income before the earthquake are more vulnerable to the disaster, and therefore deserve special attention from the government. Nearly 80% (79.8%) of the residents are satisfied with their current life, which not only shows an optimistic public climate, but also reflects the achievement of the post-disaster reconstruction. The residents are quite optimistic about their future, with 60.8% believing that life will get better next year, 31.7% foreseeing no change, but only 7.5% insisting life would be worse next year.

Overall both the society and the social attitude in the earthquake-hit areas are presently relatively stable. The survey shows, that in the past year, about 2.5% of the total affected population have complained to the authorities or have taken part in petitions, which is similar to last year. In addition, when being asked for the cause of the school infrastructure collapse, 84.6% would blame the earthquake while only 15.4% take an opposite point of view. Compared with last year, the proportion of people considering the cause to man-made dropped by 9 percentage. But we should also notice that the public sense of

inequality is getting stronger. Up to 40% (39.5%) of the residents feel the poor-rich gap is becoming larger. About 30% of the residents have questioned the fairness of the post-disaster policy implementation.

Although aftershocks still cast a shadow over the residents, social security in the affected areas is generally good, with strong sense of social security among the residents. In response to "Do you feel safe going out after 10 p.m.?", 56.3% of the interviewees said yes, 36.5% said they felt safe in most cases (92.8% in total with a high sense of security), and only 7.2% said they did not feel safe. In contrast, residents appear to be more worried about threats from earthquakes. Over 60% (62.7%) of people still feel that they are threatened by earthquakes. It seems that recovery in the area of social psychology will take more time than the economic recovery.

III. Policy Suggestions

1. Water and sanitation issues should be the focus in post-earthquake construction in rural areas

The survey shows that the problems related to improved water supply, washing and bathing facilities and garbage disposal in the rural areas are still serious and common. This is a long-term issue. So regarding the reconstruction in the rural areas, we should focus more on solving problems related to sanitation and convenience in rural life, such as water supply, garbage disposal, toilet hygiene and bathing, and so on.

2. It is necessary to expect a drop in the employment rate when the reconstruction ends, and to improve the training system

The current low unemployment rate has much to do with the reconstruction. Many employed residents are just held in temporary jobs. **With the completion of the reconstruction, the unemployment rate is likely to rebound, and we should foresee and prepare for this.** Skill training should be provided, which may create favorable environment for workers to be self-employed and start their own business. Efforts should also be made to creating new job opportunities and take precautions to ward off pitfalls. **In order to meet employment and skills needs, channels of employing and training need to be further enriched.** The government should gradually retreat from the specific means of training and entrust them to other social organizations and market. The government can support and encourage the development of training institutions and enterprise training through financial subsidies, training service purchase, tax incentive, or special commission; and

regulate their activities through supervision and inspection. The content of training should be in line with the post-disaster employment policy – tailored training should be available for the unemployed; as for agricultural skill training, attention should be paid to different technical needs of households with various education background and economic development levels. Different capacities of learning should also be taken into account so as to provide appropriate technical services and support.

3. Attach importance to and solve practical difficulties relevant to production and living conditions in the earthquake-hit areas

Attention should be paid to the production and living conditions of the farmers who have lost their land, especially those who lost their land due to post-disaster reconstruction. Not only reasonable economic compensation, but also training or job opportunities should be provided. **We must support family business, which provides more relaxed business environment.** In addition to the direct policy supports like tax exemptions and loans, more efforts should also be made to create a good market growth, to cut off unnecessary administrative intervention, so as to avoid excessive micro-management and strangling regulation. Through this, more relaxed environment for family business can take shape. Sometimes, the "Laissez-faire" approach and "less regulation" themselves represent a higher level of management.

4. As well as strengthening the "hardware" facilities of public services (e.g. health care and education), "software" development such as quality and fairness of the public services should also be guaranteed

During the one-year post-disaster reconstruction, the government and society have pumped in a large amount of investment in medical care, education and other infrastructures. There has been considerable progress in improving the facilities of schools, hospitals and health centers at all levels. The focus of future work should be put on beefing up the "software", such as improving the quality of medical services. For example, better teachers, more training to medical personnels and streamlined procedures for medical treatments can deliver safer, more convenient and satisfiable education or medical treatments. As for education, attention should be paid to the schools that are not rebuilt and to improve them to act as well as the rebuilt ones. At the same time, concerning the high cost of boarding schools and high schools, efforts should be made to ensure that students from economically disadvantaged families are not deprived of education

5. Draw on the initiatives of the affected people, encourage them to help each other and to be more actively involved in the public-interest reconstruction activities

This not only makes up for the shortcomings of the reconstruction hosted by the government, but also promotes civic spirit, as well as the ability of self-organization and self-development. In terms of organizing public-interest activities, we should give full play to the public initiatives, in order to encourage the residents to organize and regulate themselves by community. We can take this opportunity to explore new forms or approaches of community management.

6. Keep on increasing implementation power and public confidence of the grass-root government officials in the disaster areas in order to deal with more difficult tasks in the future

In the past year, capabilities of the grass-root governments have been greatly promoted. In the future reconstruction, they have to face two main challenges – a shifting reconstruction focus and a falling degree of public trust and satisfaction. Therefore, capacity and integrity of the grass-root government officials should be further strengthened. Firstly, a variety of training opportunities shall be provided to them, in order to increase their democratic awareness and management capacity through theoretical study; secondly, to stick on the "counterpart" approach, which offers opportunities for the grass-root government officials to learn from the more developed regions.

7. Strengthen the openness, transparency and public participation of post-earthquake reconstruction, so as to increase public satisfaction and trust towards government

Post-disaster reconstruction is a complex and arduous process. Efforts should be made to ensure openness, transparency, and public participation in policy-making and implementation, to effectively monitoring the whole process, to reduce inefficiency, waste and corruption, and consequently to increase public satisfaction and trust towards government.

8. Through active policy interventions, reduce social differentiation and improve social harmony and stability

Judging from the current situation, many residents in the affected areas believe that the gap between the rich and the poor is widening, and the sense of social injustice is also on the rise, which is negative to the stability of social attitudes. Therefore, as well as promoting the reconstruction and development, the government should also adopt policies (such as taxation policy) to narrow the rich-poor gap and to strengthen social security system. A "safety net" is required by the disadvantaged and by the harmonious development in the affected areas.