

Treating disaster as a development opportunity

A study of earthquake recovery in Sichuan

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1. Introduction

This thesis is a study of some of the social consequences of the 2008 Wenchuan earthquake. It aims at describing how centrally formulated policies on post-earthquake restoration have been implemented locally, and how the lives of people in rural areas have changed since the Wenchuan earthquake in May 2008. By pursuing a bottom up approach to the implementation of official reconstruction policies, I hope to gain insight into the relationship between official strategies of recovery and economic development and the actual changes that are taking place at the local level.

The main problems of this thesis:

- How has the process of recovery and reconstruction following the Wenchuan earthquake affected the lives of people in rural areas?
- How has the process of reconstruction affected the level of social inequality?

I have tried to answer these two questions by examining both immediate effects of the post disaster recovery processes and by looking at what implications the current situation has for future development. Firstly, I have observed how social inequality manifests it self in post disaster housing patterns. Secondly, I have examined how the official strategies of resource allocation through the process of reconstruction have affected the overall financial situation in the village that was the subject of my study.

Background

The Wenchuan earthquake that struck Sichuan province on the 12th of May 2008 was one of the most destructive natural disasters in the history of modern China, both in terms of loss of human lives and material damages. The earthquake, that measured 8.0 on Richter scale and had a seismic intensity of 11.0 left more than 87 000 people dead or missing and almost 375 000 people injured.¹ It destroyed entire towns and villages within an area of 100 000 square kilometers, and made over five million people homeless in less that five minutes. To put the magnitude of this calamity in perspective, one might note that the number of people left homeless equals the entire population of Norway. Furthermore, public facilities such as school buildings and hospitals collapsed, the

¹国家汶川地震灾后恢复重建总体规划/ The overall plan for post Wenchuan earthquake restoration and reconstruction: 9 69,226 dead; 17,923 missing; 374,643 injured. August 25, 2008.

infrastructure was severely damaged and the supply of water, gas and electricity was cut off.

A little over one year after the earthquake, in August 2009, Sichuan was starting to recover. According to a survey of living conditions carried out by research institutes CASTED and Fafo in July of 2009, two thirds of the houses that collapsed in the earthquake had been -or were in the process of being- reconstructed, together with most public facilities and infrastructure.² But the province is not merely returning to normal, it is currently experiencing unprecedented economic growth, something mainly due to extensive government investment in large reconstruction projects. Under the slogan “*Build Back Better*”, provincial authorities have treated the earthquake as an opportunity to improve the quality of infrastructure and public facilities, as well as to encourage modernization of residential buildings to reduce the vulnerability to future earthquakes. Moreover, measures have been taken to improve the pre-disaster conditions for industrial and agricultural production in the earthquake affected area, in order to at increase the overall level of economic output.

To treat disasters as development opportunities is becoming an important principle for actors involved in disaster management.(Asgary, Badri and Hajinejad, 2006: 3). For although natural disasters create massive destruction, they may also provide new opportunities for social and economic development. In the post-disaster stages or recovery and reconstruction, foreign investment, aid and government subsidies often provide the financial means for local authorities to enact both old and new development priorities.(Asgary, Badri and Hajinejad, 2006: 3). Furthermore, it is not uncommon for a disaster to be followed by a situation where it becomes possible - both politically and practically- for pro-growth forces such as government institutions and private actors to push for changes that are intended to promote economic growth.(Fordham, 2007: 337). In this thesis I argue that the development currently taking place in Sichuan can not be understood separately from the general trend of development that has been observed in western regions of China over the last decade. Rather, the governments willingness to place massive investments in the reconstruction of traditionally poor rural areas reflects its long term commitment to economic development in the western provinces. Consequentially, the Wenchuan earthquake seems to have sped up processes that were initiated more than ten years ago with the formulation of the 1999 Development of the west policy,³ including capitalist penetration,⁴ urbanization, industrialization,

² However, an approximate ten percent of the people that were left homeless by the earthquake were still living in temporary houses or tents at the time the survey was conducted.

³西部大开发. There exists various English translations of this policy, including “The Opening of the West policy.” In

and diversion of surplus rural labor into non agricultural work.

In regard to the immediate effects of post disaster recovery processes, previous research has shown that natural disasters have a tendency to not only reproduce patterns of social inequality, but also to exacerbate existing class differences, and that exclusively *market based* processes of recovery are particularly liable to increase the level of inequity.(Smith and Wenger, 2007: 235). Although post disaster reconstruction might create opportunities to improve the quality of infrastructure, public facilities and residential houses, underprivileged groups do not have access to the resources they need to attain full recovery and reduce their vulnerability to future disasters. In other words, patterns of social inequality are likely to reproduce themselves in the event of a natural disaster unless something is done to even out the effects of market produced inequality and vulnerability. It is therefore relevant to consider the role of the state in planning, organizing and financing post-disaster reconstruction. Of particular importance is the state's willingness to offer help to low-income households who might otherwise not be able to build a new house and regain their livelihood.

Based on these two lines of argument, it is relevant to ask what the consequences will be of treating disaster recovery as an integrated part of continued capitalist development in terms of development sustainability and social equality. Consequentially, this study is related to the fields of development and disaster sociology. Informed by these two bodies of literature, this thesis aims at describing the changes that have taken place in rural areas of Sichuan since the 2008 Wenchuan earthquake. The immediate effects of the official strategies for recovery and reconstruction can best be described by drawing on previous studies of disaster recovery. However, it is even more relevant to look at the recent development in Sichuan in the context of the general development discourse in China, in order to be able to discuss the potential long term consequences of the state induced changes.

My perspective lies with the people of Yin Chi, the village where I conducted my fieldwork. This village is situated in an area north of Chengdu that was classified as a heavily hit disaster area after the Wenchuan earthquake of 2008. Approximately 90% of the houses in Yin Chi collapsed during the earthquake⁵. However, due to the fact that the earthquake hit in the middle of day in the busy farming season when most people were out in the fields, casualties were few.

In Yin Chi, the process of recovery and reconstruction has been shaped by the interplay of actors such as the central state, the local government, various government institutions, local leaders and civil society. On one hand, I found that the people in Yin Chi played active parts in the

this thesis, it will be referred to as “The Development of the West policy.”

⁴Capitalist penetration is here fined as the extent to which the productive capacities of a national economy are symmetrically integrated into the global economy. (Jackson, 1979: 41)

⁵According to the village secretary, date of interview: 10.08.2009.

reconstruction of the village. They had been granted the opportunity to decide how to organize the entire process, seemingly without much interference from local authorities. Moreover, no Chinese or foreign NGO had been directly represented there since the earthquake. On the other hand, I found that although the villagers freedom of choice in most matters was not directly restricted by any outside authority, they were subjected to new economic restrictions, incentives and requirements that were shaping the choices they made, and thereby influencing the outcome of the recovery process.

The empirical findings that will be presented show that by implementing a growth oriented strategy of reconstruction, the Chinese government has brought about significant social and economic changes in the earthquake affected areas. Whether or not it was the intention of the policy makers to do so, they have created strong economic incentives for the farmers to become more productive by implementing a system of resource allocation that aims at rewarding individual effort and prevent aid dependency, most notably by allowing them to finance the building of new houses by credit loans. Since the earthquake, a large number of people have moved out of the agricultural sector and into wage work in order to be able to finance the reconstruction of their own houses. Their obligation to repay the relatively large bank loans they have been granted since the earthquake seems likely to result in a situation where many people continue to look for work outside of the agricultural sector after the process of earthquake reconstruction has finished and there are no more construction jobs available in the area.

While the state has been highly successful at encouraging self reliance and inspiring economic growth, it remains to be seen what long term effects its market based approach to recovery and reconstruction will have on the level of social inequality in the region. For now, there are great variations in the extent to which various groups have been able to attain recovery since the earthquake. Moreover, unequal access to resources during the process of reconstruction is also affecting the level of vulnerability towards future disasters across different social groups.

Structure of the thesis

In the second chapter, I will present my methodological approach to the question of disaster recovery in Sichuan, and discuss some of the problems that I approached during the work of this thesis: I will describe how I conducted my fieldwork, and explain how I solved the challenge of creating an analytical framework for my empirical findings.

The third chapter will provide definitions of relevant theoretical concepts, focusing on the relationship between disasters and development, and explain why I think it is necessary to combine

the perspectives from previous disaster studies with perspectives from the disciplinary field of development studies. Lastly, I will comment briefly on how previous processes of disaster recovery have been known to affected the level of social inequality.

The fourth chapter provides an overview of the historical context in which current strategies for economic development in China's western provinces were developed. Thereafter, the Chinese concept of coordinated urban and rural development will be discussed, focusing on the objectives of accelerating the process of urbanization, transferring surplus rural labor to the non agricultural sector and transfer of cultivated land from less to more capital intensive agricultural producers.

The aim of chapter five is to show how the government's plan for earthquake reconstruction in Sichuan relate to existing plans for long term economic development in rural areas. Here the official strategies for disaster recovery and resource allocation will be examined, and put into the context of the planned long term development that was discussed in chapter four.

In chapter six I will present my empirical findings from Yin Chi. In the first part of the chapter, I will describe how official strategies of disaster recovery and reconstruction were implemented and negotiated in the village. In the second part of the chapter, I will examine how the economic situation of people in the village have been affected by the earthquake, as well as by official strategies for resource allocation during the process of disaster recovery.

I will conclude by summing up the main findings of my field study, and thereafter discussing the two main questions of this thesis in the light of these findings, arguing that market driven disaster recovery in Sichuan has had the unfavourable effect of increasing the level of social inequality, something which has manifested itself in the levels of vulnerability of different social classes: For some, the earthquake has constituted a development opportunity, but on the other hand, already underprivileged groups have become poorer than they were before, both in terms of relative and absolute poverty.

2. Methodological approach

The arguments that are developed in this thesis are based mainly on a qualitative field study of the reconstruction process in the Yin Chi, a village that is situated in Shi Fang county 70 kilometres north of Chengdu, in a region that was classified as a heavily hit disaster area after the Wenchuan earthquake in 2008. My fieldwork was undertaken over five weeks in July and August of 2009. During this period, I conducted approximately thirty semi-structured interviews with villagers, team leaders and members of the village leadership.

In addition, I have read and analysed the official policy documents regarding post earthquake recovery and reconstruction; The overall plan for post Wenchuan earthquake recovery and reconstruction and the policy document that was issued by the local authorities in Shi Fang county regarding the implementation of this plan.⁶ I have also gathered relevant information from secondary sources in Chinese and English⁷. The theoretical framework of this thesis is based on literature from the fields of disaster sociology and development studies.

2.1 Choice of topic

Some time after the Wenchuan earthquake hit Sichuan on the 12th of May 2008, The Chinese Academy of Science and Technology (CASTED) was commissioned by The General Office of The State Council to perform a rapid needs assessment.⁸ The study was sponsored by the Norwegian ministry of foreign affairs, and developed with the assistance of researchers from Norwegian research institute Fafo. The main purpose of this analysis was to provide Chinese policy makers with information about the current living conditions of those affected by the earthquake.

A large scale quantitative survey was conducted in July 2008, with the help of eighty local volunteer university students. Information was collected from 3652 households, regarding a wide range of matters such as health condition, housing needs, employment and financial situation, willingness to relocate and level of satisfaction with the government. The results of the investigation then served as a scientific foundation for the formulation of The general plan for post-Wenchuan earthquake restoration and reconstruction, that was issued by The state council on the 13rd of September 2008.(CASTED, 2009:3). One year after the rapid needs assessment was carried out, members of the two research institutes CASTED and Fafo went back to Sichuan to do a follow

⁶ 国家汶川地震灾后恢复重建总体规划, 什邡市灾后重建总体规划

⁷Including research reports, newspaper articles and academic books and journals.

⁸A rapid needs assessment is a study that is undertaken immediately after the occurrence of a natural disaster. The purpose of conducting such an investigation is to get an overview of the resources that still avail exists in the affected area, in order to better understand the needs of the people who have been affected by disaster. This method of first obtaining basic information is seen as an important part of the process of disaster recovery.

up survey. As part of this project, three Chinese and three Norwegian master students were invited to come along and conduct a qualitative field study in the earthquake affected area, which is how I got the opportunity to do my fieldwork in one of the many villages that had been destroyed by the earthquake. It would be up to each student to choose a topic of investigation, according to her own fields of interest, and official research permits would be applied for and provided to us by CASTED.

The actual fieldwork was conducted over five weeks in July and August of 2009, in Yin Chi village. During this period I conducted approximately 30 semi structured interviews with villagers and members of the village leadership.

With me in the same village I had one of the other Norwegian students, as well as two of our Chinese fellow students.⁹ Because our topics of investigation were not related to each other, we did not work together on collecting data. However, we were introduced to the villagers as one team of students and researchers, and came to know some of the same people.

2.2 Field work

Practical approach: working with grounded theory

I headed for Sichuan knowing only that I wanted to study the social consequences of the earthquake. Because I had limited information about where I would be going and what the situation at the field site would be like, I was not able to decide on a final topic before going into field. It therefore seemed appropriate to use the research methodology grounded theory. This is a bottom up approach, by which the researcher takes the actual life situation of his informants as the point of departure for his investigation, and the goal is to identify and conceptualize their main concerns, strategies and actions. In accordance with the principles of grounded theory, I did not start my qualitative study by developing a hypothesis that I wanted to investigate, but rather by asking “*what is actually happening here?*” (Fafo/Pedersen, 2000:19; Nielsen, 1996) Starting with data collection, the aim of this approach is to make systematic descriptions that can be confirmed and turned into generalizations. A theory is developed by trying to find cases that expand the validity of the descriptions that are made until this is no longer possible. An important principle in this regard is decreasing marginal utility of interviews. This means that when the student comes to a point where new interviews tend to confirm what he already knows rather than generate new information, he

⁹That is, The Chinese students stayed in the village throughout the extent of our fieldwork, whilst the other Norwegian student and I were restricted to stay in the nearest city, as we were not allowed to stay overnight in the village. I will elaborate more on this point in the part about working with official research permits in China.

should reorientate by trying to find cases that are different enough to disprove his hypothesis.(Fafo/Pedersen, 2000:19; Pedersen, 2009). Through this process I was able to identify the problems that I wanted to focus on, and settle on a main topic for my thesis.

My field site was a village situated in one of the areas categorized as heavily hit disaster area. Approximately 90% of the houses there collapsed in the earthquake¹⁰, and at the time of our visit the villagers were in the midst of the reconstruction process. In the initial phase of my fieldwork, the majority of my informants were haphazardly selected from among the households in the village. I spent a lot of time walking around in the village, and came in contact with people by approaching -or rather being approached by- them in the street, or simply walking up to houses and knocking on doors.

The majority of people in the village had chosen to rebuild their houses individually. This meant they had taken the full responsibility of organizing reconstruction, and in most cases simply built a new house on the site of the house that collapsed during the earthquake. However, people in three of the fourteen neighbourhoods in the village had preferred to cooperate on reconstruction, and rebuilt their houses according to the model of *The new village*, also described as *unified reconstruction*.

The first thing I was interested in finding out was what reconstructing their houses in the model of *The new village* meant to the villagers, and why relatively few households had participated in unified reconstruction. I therefore set out to examine how factors such as socio economic stature, household composition and age of household members had influenced the strategic choices households had made in regard to recovery and reconstruction. In other words, what signified the households who had believed they would benefit from participating in collective reconstruction? And on the other hand, what were the reasons for many households to prefer individual reconstruction? I tried to answer these questions by studying and comparing two different neighbourhoods: One of the neighbourhoods where collective reconstruction had been organized, and one of the neighbourhoods where houses had reconstructed their houses individually. Observing the differences between the two enabled me to identify the factors that were influencing the choices people made in the process of disaster recovery. As I will come back to in the next chapters, it soon became apparent that less resourceful households had been more liable to prefer collective reconstruction: This option ensured that they would receive professional technical support, and the participating households would not have to be directly involved in the process of organizing and carrying out reconstruction. The job of organizing unified reconstruction was left to the respective neighbourhood leaders, and the job of actually building new houses was contracted out to

¹⁰According to the village secretary, interview date: 10.08.2009.

professional construction companies.

However, several underprivileged households that had originally wanted to participate in the collective solution had somehow been excluded from doing so. I therefore found it meaningful to try to identify the factors that had restricted people's freedom of agency in matters regarding the reconstruction process; by examining the roles of various actors in the process of village decision making, and by looking at the ways in which limited access to resources had affected their prospects at recovery.

I found that although the state had a strong degree of indirect control over the reconstruction process, – by setting the premises for decision making and organization, and by providing the villagers with fixed options for reconstruction, - the villagers freedom of choice in most matters had not been restricted by any local or outside authority, and concluded that the main reason why there were great variations in the extent to which various groups have been able to attain recovery since the earthquake was unequal access to economic resources. This caused my focus to shift once more, as I became interested in the relationship between official strategies of resource allocation and what was happening at the level of the villages. My distinct impression was that the way in which resources were allocated among the population in the village did little to even out the differentiating effects of the reconstruction process. I arrived at this conclusion after discovering that little or no support was extended by the state to the least resourceful households in the village. The direct monetary subsidies that were granted individual households for the purpose of housebuilding was allocated according to number of household members rather than household income. In addition to this, people were expected to take up paid labor and/or apply for a loan in the bank in order to finance their recovery. This system of resource allocation was causing the least resourceful groups; those who were neither eligible for bank loans nor fit to take up paid employment, to fall behind. I therefore wanted to find out to what extent the official policies on reconstruction that had been issued since the earthquake had been aimed at trying to even out the differentiating effects of market based reconstruction. In the field, I tried to answer this question by gathering information about the financing opportunities that had been offered the farmers during the process of reconstruction, as well as providing an overview over the welfare system. After I left Yin Chi, I also gained access to the official policy documents regarding post earthquake reconstruction.

Case selection

Focusing on the situation of households rather than that of individuals, I tried to select cases that could represent the variety in the village in terms of socio economic stature, household composition and age of household members. In later stages of my fieldwork I became more aware of what kind

of cases I wanted to study in order to increase variation and possibly disprove the assumptions that I had made so far, and began to make more active use of the knowledge and networks of people I had already come into contact with.

I should also note that due to the fact that more men than women were working outside of the household during the hours of day that we were allowed to stay in the village, and that it was therefore much easier to seek out female than male informants, my study has a slight bias towards more women. On one hand, I felt that this would not affect the outcome of my study, as it is not concerned with the experience of individuals. In most of the interviews, the informant was asked to represent his or her household, and asked questions regarding the family as a whole. At the same time I realized the importance of also taking into account the perspectives of some of the men in the village, in order to ensure variety. I tried to solve this problem by actively seeking out a number of male informants.

A comment on taking a bottom up approach to policy implementation

The so called bottom up approach emerged in the late 1970's and early 1980's, as a critique to the traditional top down approach to policy implementation. In stead of starting from the perspective of the policy makers and analyzing the process of policy implementation through the phases of formulation, implementation and reformulation, those who pursue the bottom up approach tend to focus their investigation on the strategies that are employed by various actors at the local level in order to divert central policy to their own purposes.(Sabatier, 1986: 30). Recent anthropological studies conducted throughout China have focused on identifying social strategies used by local groups in pursuit of their individual interests. A wide variety of different responses to- and outcomes of similar external circumstances have been pointed out, something which implies the value of using a model that is more actor-oriented when studying the local consequences of central politics. Nevertheless, the bottom up approach also has some limitations that one should be aware of. Firstly, by focusing on the perceptions and activities of groups and individuals on the local level, one might remain unaware of how external factors are affecting their behavior.(Sabatier, 1986: 34) An empirical study that takes its informants' understanding of their own situation as the only foundation of knowledge will be limited by a failure to account for how their experiences are shaped by official institutions and networks of power.(Tamara, 2004:4).

Throughout my fieldwork in Yin Chi, I found it difficult to find specific information about the policies that had been implemented there since the earthquake. Only a few written documents with detailed information regarding the topics of restoration and reconstruction were said to exist, and they were not available to the public. In China, it is not uncommon for policies to be communicated from higher levels of administration and all the way down to the peasants by way of oral

transmission. Furthermore, policies that are formulated by governmental institutions are often so vague and all-encompassing, and contain so little concrete information about the measures that are to be taken, that it is hard to define their exact purpose, (Oi, 2001: 3; Aarvik, 2005). Most of the specific information I obtained while in the field was therefore gathered not from official policies, but from second hand sources; for the most part from interviews with villagers, team leaders and members of the village leadership.

I sometimes found it difficult to determine with absolute certainty whether actions that were taken were the result of policy requirements or local initiative. One example was the solution of collective reconstruction that was chosen in three of the fourteen neighborhoods in the village. There seemed to be some confusion among the villagers as to who had initially proposed this solution. It was suggested that the idea had come from one of the team leaders, or possibly from someone in the village leadership. Conversely, I eventually found that the idea had in fact originated from somewhere somewhere much higher up in the bureaucracy, namely the central policy makers.

Secondly, by focusing solely on the goals and strategies of individual actors, one might easily underestimate the *indirect* influence that the policy makers have over a situation through their *ability to affect the institutional structure in which individuals operate*. (Sabatier, 1986: 34). It is therefore important to acknowledge this problem when conducting a study of public participation. In the initial stage of my fieldwork in Yin Chi, I was tempted to conclude that the villagers freedom of choice in most matters regarding the reconstruction process was in fact not restricted by any outside authority. This assumption was based on the fact that the villagers had been taking active part in decision making by attending meetings, participating in discussions and voting over important matters. However, my perception of the situation became somewhat more nuanced when I later made active efforts to find out more about the institutional structure in the county, and realized that the way in which meetings had been organized, as well as the various options for reconstruction that were discussed there, had been pre-decided by the official policy makers.

Practical and ethical challenges

Working with official research permits

Obtaining an official research permission is an absolute necessity for doing fieldwork in China over any period of time. Without such a permit, a non-Chinese student would not be allowed a long term stay in a rural village; one might not get the opportunity to interview officials, nor gain access to information such as local archives.

Obtaining research permits for the other Norwegian student and myself proved to be more difficult

than had first been assumed. CASTED applied on our behalf to several official organs, but little progress was made. Although the applications were not formally turned down, there seemed to be some general reluctance to allow foreigners to do a long term field study in the earthquake affected area. Consequentially, they were not approved either. Permissions were eventually obtained through the use of *guanxi*; the personal connections of one of the researchers at CASTED. Thanks to this contact, we came to be affiliated with a Tsinghua university research project that had already been granted authorization to do fieldwork in the village Yin Chi. Although obtaining research permissions was an absolute requirement, holding such a permit also creates some practical and ethical challenges that one should be aware of.

Harbsklov Hansen has written an article where she points to the fact that anyone doing fieldwork in China will somehow be walking in the footsteps of the Chinese Communist Party, who have a long tradition of conducting investigations of villages, institutions and individual households.(Hansen, 2006). Historically, there has been little distinction between scholars and bureaucrats in China, and throughout the communist period, numerous policy oriented investigations have been carried out at grass-root level. These studies have quite often had direct political and economic consequences for the subjects of investigation.(Hansen, 2006:82). Consequentially, people in rural areas are likely to consider an outsider holding an official permission to do fieldwork in their village as a representative of some kind of authority. In my case, ours was not the first team of students and researchers to visit Shi Fang county since the earthquake. Many of the villagers in Yin Chi were familiar with the fact that several surveys had recently been conducted by policy implementing institutions, and that the outcome of these surveys had likely influenced the amount of monetary support that had been granted them by the government. In order to avoid a situation where the villagers thought we would be able to influence their situation in any way, we tended to understate our (rather remote) affiliation with either of the institutions that had helped us obtain our research permits, and stress the fact that we were only there to gather information to use in our masters thesis. Even so, we still encountered a few situations where it was obvious that our respondents perceived us to be in connection with the official authorities, even when we expressively told them that we were not. This probably influenced their willingness to share information about private matters such as household economy and level of satisfaction with the local authorities. It demanded us to stay conscious of our ethical obligations not to take advantage of this situation, and be very clear about our (lack of) intentions.

Other influencing factors related to the fact that our fieldwork was organized through official channels include our choice of field site and the restrictions placed upon us by our research

permissions. Although we were not in a position to choose where to conduct our fieldwork, the village that was chosen for us proved to be a suitable place to study the social consequences of the Wenchuan earthquake. More problematic was the fact that we were not allowed to stay overnight in the village, and that the total duration of our fieldwork was shortened by several weeks because of the restrictive time limit to our research permissions. We solved the first problem by commuting to and from the village mornings and afternoons. The fact that we were only allowed to stay in the field for five weeks was somewhat disappointing, as a longer stay in the village might have provided us with even more insight. However, I feel that the time we had at our disposal was enough to conduct a thorough investigation of the aspects of the overall situation in the village that are of concern to this study.

Wealth ranking

After I discovered the relevance of studying the effect that the process of disaster recovery was having on the level of social inequality in Yin Chi, it became necessary to try and accurately rank my informants according to wealth and socio economic status. However, performing “wealth” ranking in a small community where people had recently lost everything they had and perceived themselves to be anything but wealthy was challenging in several ways. On the surface, the earthquake seemed to have evened out many of the economic differences between individual households. The newly constructed houses in the village looked almost identical, and one year after the earthquake, few people had more than barely recovered from the disaster. I tried to determine the economic conditions of my informants by trying to find out what resources were available to them for recovery and reconstruction; whether or not they had additional income sources to farming; whether or not they had been eligible for bank loans, and if so, whether or not they believed themselves able to replay their loan on time. Lastly, I asked most of my informants whether or not they had the financial means to seek medical assistance should they need to do so.

Language barrier

Language was one of the major practical challenges in conducting our fieldwork. Partly because Chinese is not my first language, and partly because the people of Yin Chi, the village where we conducted our fieldwork, speak a rather distinct version of the Sichuan dialect. This sometimes made the task of conducting interviews about complex and complicated matters quite challenging. There is obviously a risk that limited language skills might affect the conversation to such a degree that the student ends up with an over simplified understanding of the situation in the field site. I tried to minimize these risks by taping the interviews I made, so that it would be possible to go back and double check the information we got. I also had invaluable assistance from our Chinese fellow

students, and for some of the interviews I used a local interpreter. Moreover, I tried to minimize the risk of misunderstandings by consulting more sources than we otherwise might have done, in order to ensure that the information we had received was correct.

2.3 Creating an analytical framework

Observing how a small village in Sichuan was struggling to cope with the vast destruction caused by the Wenchuan earthquake reconfirmed something which has long since been pointed out by sociologists and social anthropologists, namely that an earthquake is not merely a natural phenomenon, but also a social and political event. After returning from my fieldwork in Yin Chi, I was convinced that the process of reconstruction had brought about significant socioeconomic changes in the village, and started to look for analytical models that would help me explain the effect that the aftermath of the earthquake seemed to have on civil society, as well as the tremendous changes that were taking place in the local economy.

Realizing the way in which external factors are influencing the local situation is a prerequisite for understanding the changes that are taking place in the farming community which is the subject of my study. A wide range of factors have been influential to this process, including long term government planning, the losses and opportunities created by the Wenchuan earthquake, the 2008 financial crisis, the booming post earthquake economy, and the local responses to the implementation of official policies. The development currently taking place in Sichuan can not be understood separately from the general trend of development observed in western regions of China over the last decade. It is not sufficient to treat the earthquake as the only explanatory factor when trying to understand the changes that are currently taking place. Because the rural area subject to this study was already in a state of transition when the disaster hit, a better approach to the question of current rural development might be to look at how the implementation of state-planned post-earthquake reconstruction have come to influence a process of development that was already in motion at the time of the earthquake.

I find my study to be related but not limited to the fields of disaster management and development. However, finding a ready made theory that takes into consideration the perspectives from both of these disciplinary fields, and that can be used to explain the effects that the aftermath of the earthquake has had on the local economy and the level of social inequality has proven to be difficult. While theories that focus on the traditional notions of reconstruction and restoration will allow us to perceive of the aspects of the situation directly related to the disaster, they fail to provide a framework for a meaningful discussion of long term disaster recovery. A more useful approach to the question of disaster recovery which focuses on long term community development would be a *comprehensive theory of sustainable community disaster recovery*. (Smith and Wenger,

2007:246). Yet although several scholars who work in the fields of disaster recovery and development have identified the need for such a theory to be developed, it still does not exist.(Smith and Wenger, 2007:245). This seems to be a result of the fact that the two categories of disaster recovery and development are still seen by many as separate areas of investigation and practice.(Fordham, 2007:335).

I decided to solve the problem of creating an analytical framework for my empirical findings by first placing them into the context of the contemporary discourse about planned rural development in China's Western provinces, and secondly by drawing on findings from previous studies of disaster recovery.

2.4 Analyses of official policy documents

As I became interested in the relationship between the official plans for disaster recovery and the changes that were happening at the local level, I needed to find out to what extent these changes were in fact government induced. Secondly, I wanted to examine the relationship between the plans that were made for disaster recovery and the pre existing strategies for economic growth in rural Sichuan. I approached these questions by first analysing the official policies on disaster recovery and reconstruction,¹¹ and secondly by putting my findings into the context of the public discourse regarding development of China's western provinces.

The main problem of attempting to analyze the above mentioned policy document was that it contains little information about the concrete steps that were to be taken towards disaster recovery. Rather, the document serves as lists of guiding principles for the reconstruction process. Consequentially, it becomes difficult to predict what effects the official plans are likely to have at the local level. However, I found it meaningful to examine how the overall policy objectives in the official policies relate to pre-existing plans for economic development in the earthquake affected area, and thereafter to look at how the changes that are currently happening in Yin Chi fit into this picture.

Of great relevance to the development process in China's western provinces are a variety of campaigns that have been launched and policies that have been issued by the Chinese government since 1999; the Development of the West campaign in particular.¹² However, even though the campaign has been often referred to, both in the Chinese media and in the scholarly debate, I have

¹¹ 国家汶川地震灾后恢复重建总体规划, 什邡市灾后重建总体规划

¹² 西部大开发.

not succeeded in obtaining any of the written policy documents. However, attempts have been made by scholars from several countries to evaluate the actual effect of this campaign, and their analyses' have formed the basis for my understanding of the current situation. (Shen and Yeung, 2004; Holbig, 2004; Aarvik, 2005; McNally, 2004). Information about other aspects of the ongoing development in Sichuan has been obtained from other Chinese and English second hand sources. (Shen and Yeung, 2004; Dong, Song and Zhang, 2006; Donnithorne, 2004; Fan, 1995; Huang, 2005).

I obtained information about how the socio economic situation in rural Sichuan has changed in recent years from three major sources: The report from the major survey of living conditions (MEDOW) that was conducted by research institutes CASTED and Fafo in China's western provinces in 2004 (CASTED and Fafo, 2006), the report from the rapid needs assessment that was conducted by the same research institutes immediately after the earthquake in 2008 (CASTED, 2008), and the report from the follow up survey that was conducted one year after the disaster (CASTED 2009). In this regard it should be noted that the reliability of statistical information from China has been a question for debate among scholars, because many Chinese research institutions are under direct state control. However, researchers from Norwegian research institute Fafo have participated in the work of conducting the above mentioned surveys, and co-authored the final reports that have been produced. Moreover, the complete data sets from all three surveys are available a Fafo. Fafo's involvement implies that the surveys have been conducted according to international standards of ethical research, something which puts their validity in a less uncertain position.

3. Theoretical concepts

The arguments that are developed in this thesis are based mainly on a qualitative field study of the reconstruction process in the Yin Chi. As mentioned in the introductory chapter, the immediate effects of the official strategies for recovery and reconstruction can best be described by drawing on previous studies of disaster recovery. However, I find it even more relevant to look at the recent development in Sichuan in the context of the general development discourse in China, in order to be able to discuss the potential long term consequences of the state induced changes. I have therefore chosen to create an analytical framework for my empirical findings by drawing on findings from previous studies of disaster management, and secondly by placing my findings into the context of the contemporary discourse about planned rural development in China's Western provinces.

The purpose of this chapter is to provide definitions of relevant theoretical concepts.

In this part I will also discuss the relationship between disasters and development, and show why it is necessary to combine the perspectives from previous disaster studies with perspectives from the disciplinary field of development studies. Lastly, I will comment briefly on how previous processes of disaster recovery have been known to affected the level of social inequality.

3.1 Development

Development is an elusive term. No single definition can account for all of its possible interpretations, and different disciplines operate with different definitions of the word. As I have chosen to rely on theories of economic development in my attempt to explain some of the changes that are currently taking place in Sichuan, I will consider the concept of development within the same theoretical framework. However, it is important to note that although development presupposes economic growth, the two terms are not synonymic.

While per capita income was long used as the primary indicator of overall economic growth, modern day economists and social scientists alike realize that GDP alone is not a sufficient measurement of development. Although some economists still hold that rising income levels inevitably will translate into higher living standards (better health and higher nutritional- and educational standards), (Debraj, 1998: 30) a definition that is so narrow as to treat economic development as something equivalent to economic growth will fail to provide us with understanding of how growth on a national level is actually affecting the broad layers of the population. This is because several factors that are crucial to the course of development are not accounted for when we only look at growth in per capita GDP, most notably the actual distribution of economic growth. Although the problems of using economic growth as the primary indicator of development are now widely recognized, this method, in the words of economist Debraj Ray ,*“has the virtue of attempting to reduce a larger set of issues to a smaller set, through the use of economic theory”*.

(Debraj, 1998: 9). Thus for practical reasons, economic growth will serve as one of several reference points in my discussion of the process of development in Sichuan.

Factors that are more relevant to the development discourse today include education and health, and the distribution of welfare. In this context, development could easily be defined as progress towards a set of welfare goals. Amartya Sen has introduced the concept of development as freedom, and pointed out that the discourse on economic development has moved from focusing on the value of individual freedom to a more narrow focus on the economic growth. (Sen, 1999). He argues that by doing so, economists have in fact confused the means and ends in the process of development, and neglected the central value of freedom itself: *"An adequate definition of development must go much beyond the accumulation of wealth and the growth of gross national product and other income related variables. Without ignoring the importance of economic growth, we must look well beyond it.* (Sen, 1999: 14)

According to his view, poverty should be defined as deprivation of basic social-, economic- and political capabilities, and not simply as low income. Freedom is defined as the opposite of unfreedom and deprivation, and includes economic and political freedom, social opportunities and basic securities such as welfare benefits and protection in time of famine and other natural disasters. Development is in turn seen as *the process of removing substantial unfreedoms.* (Sen, 1999: xii). This approach is useful, as it emphasizes how individual agency is constrained by lack of social-, political-, and economic opportunities alike.

Rather than trying to accomplish the impossible task of providing an agreed definition of the term development, I will try to clarify what it refers to in this thesis, namely the process by which a farming community in Sichuan is being incorporated into the national and in turn the international economy, a process that is being accompanied by other important changes in terms of social transformation. (Long, 1977: 4).

3.2 Inequality

Social inequality is commonly conceived of as differences in income and economic freedom. Economist Raj Debraj has defined inequality as *"the fundamental disparity that permits one individual certain material choices while denying another individual those same choices."* (Debraj, 1998: 170). In social science, the Gini coefficient is a frequently used measure of inequality. The Gini coefficient is derived from the Lorenz Curve, which plots the cumulative proportion of wealth against the cumulative population. is used to show how actual income distribution deviates from equal distribution. (Debraj, 1998: 170; Fafo/Zhang, forthcoming).

On the other hand, Amartya Sen's above mentioned definition of poverty as deprivation of basic

capabilities such as access to education and healthcare rather than merely low income, also implies that not all forms of social inequality can be measured in income related variables. (Sen, 1999: 20). It follows from this definition of poverty that social inequality manifests itself not only in differences in income, but also in differences in basic capabilities. I find the latter conception of inequality to be the most meaningful in regard to the subject of this study, because it also opens up for an understanding of social inequality as different capacity to attain disaster recovery.

3.3 Vulnerability

Since the 1980's, an increasing number of actors involved in the field of disaster management have shifted their focus from technical *hazard oriented prediction*, to using concept of vulnerability as a measurement of the actual threat that is posed by natural hazards. (Birkmann, 2006: 10).

The disaster literature today encompasses a variety of different definitions of the concept of vulnerability, and books regarding the topics of vulnerability and risk also operate with different conceptual frameworks. (Birkmann, 2006: 9). Vulnerability has been defined by the United Nations Development Program (UNDP) as: *A human condition or process resulting from physical, social and economic factors, which determine the likelihood of damage from the impact of a given hazard.* (Birkmann, 2006: 12).

The Vulnerability approach seeks to identify how social-, economic-, and political structures create vulnerability to disasters. This approach treats disasters as social processes rather than simply as natural events, by focusing on how actions that are taken and choices that are made before a hazard is activated is likely to influence its outcome. Consequentially, the degree to which the occurrence of a disaster affects a society can be seen as an index of the ability that this society has had to adapt to the environment through processes of development. (Hoffman, Oliver-Smith, 2002: 8).

The UNDP have developed an index of disaster vulnerability, by attempting to estimate the *relative vulnerability* of a nation to a natural disaster by dividing the number of people that were killed in the disaster by the number of people that were exposed to it. (Birkmann, 2006: 12).

At the level of households and individuals, vulnerability manifests itself in the inability to protect oneself against future disasters. Lack of information and lack of financial capital will retain individuals from taking precautions that might have made them less vulnerable. Consequentially, people are likely to become more vulnerable after the occurrence of a natural disaster, if they are forced to spend all of their reserve resources in the process of disaster recovery: Lack of financial resources will lead to low flexibility, inability to make choices that could minimize risk, and inability to cope with new unforeseen events.

3.4 Disaster and development

As previously noted, this study aims at describing how the lives of the people in Yin Chi have been affected by the Wenchuan earthquake and the following process of recovery and reconstruction. Before going into the specific situation in Yin Chi, I find it necessary to account for the ways in which that the concepts of disaster and development are interrelated. The purpose of this is to show why it is relevant to include perspectives from both the field of development and that of disaster. Moreover, examining the possible outcomes that a natural disaster might have on an ongoing process of development makes it possible to identify policy needs in regard to dealing with disaster recovery and planning for sustainable development, something which is necessary in order to be able to evaluate the strategies that have been used by Chinese authorities.

In the disaster literature, the relationship between the two concepts of disaster and development is described as mutually influential. The following diagram shows the possible outcomes of interaction between the two phenomena. (Fordham, 2007: 339; Asgary et. al., 2006):

- 1) Development might increase vulnerability to disaster.
- 2) Development might reduce vulnerability to disaster.
- 3) Disasters impede development.
- 4) Disasters provide development opportunities.

The first two assumptions regard the relationship between development, social inequality and vulnerability to disasters, something which is a central topic in disaster sociology. As previously mentioned, the so-called vulnerability approach seeks to identify how social-, economic-, and political structures create social inequality and disaster vulnerability. The vulnerability approach treats disasters as social processes rather than simply as natural events, by focusing on how actions that are taken and choices that are made before a hazard is activated is likely to influence its outcome. In the words of Anthony Oliver-Smith, a *disaster becomes unavoidable in the context of a historically produced pattern of vulnerability, evident in the location, infrastructure, sociopolitical organization, production and distribution systems, and the ideology of a society.* (Hoffman, Oliver-Smith, 2002: 3). Otherwise stated, the degree to which the occurrence of a disaster affects a society can be seen as an index of the ability that this society has had to adapt to the environment through processes of development. (Hoffman, Oliver-Smith, 2002: 8).

Assumption number one here reflects the fact that the process of development might place more people at risk. One example of this is how urbanization increases the chances that a great number of

people will be killed in the event of building collapse following a natural disaster. Development that is not adaptive to the natural environment is bound to further increase the level of vulnerability to disaster. A fairly obvious example of this is how people who reside or work in buildings that are not disaster proof are put at risk, become extremely vulnerable in the event of an earthquake. The first assumption also reflects something which has been pointed out by scholars such as Burton, Kates and White, (Burton, Kates, White, 1993), namely that the process of development itself might increase disaster vulnerability by rapidly changing social and economic structures and systems of resource management, and undermining traditional mechanisms for coping with disaster. (Fordham, 2007: 339). Lastly, the first assumption points to the fact that development that is unsustainable and harmful to the natural environment will make future generations more vulnerable to disaster.

On the other hand, as reflected by assumption number two, development might reduce peoples vulnerability to disaster for example by lifting them out of poverty and thereby enhancing their opportunity to provide safe, disaster-proof houses for themselves. It is an established truth among social scientists that poor and socially disadvantaged groups are the most vulnerable to disaster, and that their long term disaster vulnerability could be sufficiently reduced by implementing development programmes that also focus on reducing vulnerability. (Asgary et. al., 2006)

The second set of assumptions presupposes that a disaster is bound to have an effect on development, and provides a simplified overview of the possible effects that a disaster might have on this process.

Firstly, as pointed out by assumption number three, disasters impede development. They do so by causing human loss, by destroying built physical facilities such as houses, public facilities, farmland and workplaces; by setting the economy back, and by hindering students from continuing their education. (Fordham, 2007: 339-). Regarding the effect that disasters have on the development of rural areas, it is true that the occurrence of climatic variations and natural disasters make agriculture one of the riskiest sectors of economic activity. (The World Bank, 2008: 89). Moreover, lack of risk reducing instruments, as well as lack of access to insurance and/ or credit markets make people in rural areas particularly vulnerable. Smallholder farmers often have limited access to assets even before the occurrence of a natural disaster, and inability to cope with such a shock will likely cause their assets to decrease further. Moreover, recovering from a natural natural disaster takes a long time, and in some cases, full recovery is not attained by the time the next disaster occurs. Poverty and natural hazards are thus likely to lead to downward spirals of ever increasing poverty, and inability to protect rural households from the effects of economic shocks caused by natural disasters have long term consequences.(The World Bank, 2008: 72, 89, 148)

Conversely, disasters might provide development opportunities. Treating disasters as development

opportunities is becoming a very important principle for actors involved in disaster management who acknowledge that simply aiming at returning to the pre disaster state of affairs is not always the best approach to disaster recovery. (Asgary et. al., 2006: 3). Although natural disasters create massive destruction, they may also provide new opportunities for social and economic development. Researchers such as Birkland have observed that following a natural disaster, individuals and organizations alike may be more willing to consider making changes to the way things were done before. (Smith and Wenger, 2007: 240) Moreover, extensive investment in the reconstruction of areas that have been affected by a large natural disaster often provide new development opportunities. (Asgary et. al., 2006: 3). Bertrand has observed that in the stages of post-disaster recovery and reconstruction, foreign investment, aid, debt relief and private transfers might provide local authorities with the financial means to enact new and old development priorities. (Asgary et. al., 2006: 3). A rather consequent finding in studies of disaster management is that disaster has a tendency to induce short-term economic growth. (Hoffman and Oliver-Smith, 2002). Moreover, in regard to the long term economic consequences of disaster, the long standing view that disaster leads to economic stagnation has been challenged by scholars who argue that it does not follow logically that the occurrence of a natural disaster will retard the economic growth of a developing country. (Hoffman, Oliver-Smith, 2002).

A disaster might also create a situation in which it becomes possible for pro-growth forces such as government institutions and private actors to push for changes that are intended to promote economic growth. One example is how the implementation of a *post disaster livelihood development program*, if substituted for simple disaster relief, might not only facilitate the work of reestablishing what was lost in the disaster, but also provide households and communities with information and means to help them improve their livelihood. (Fordham, 2007). Lastly, during the process of reconstruction, effort is often made to improve planning and building regulations in order to reduce future vulnerability to disaster.

3.5 Disaster management and social inequality

The concept of disaster recovery has been theorized by representatives of many disciplinary fields, including sociology, geography, political science and economy, and the vast body of literature that exists on the topic of disaster management includes contributions from scholars with vastly different areas of interest and expertise.

Smith and Wenger defines disaster recovery as "*the differential process of restoring, rebuilding and reshaping the physical, social, economic and natural environment through pre-event planning and post-event action*".(Smith and Wenger, 2007). This definition is meaningful because it shows that the concept of disaster recovery implies *getting back to normal*, but at the same time it also

recognizes the fact that recovery does not follow a clearly defined path and that full recovery is not always achieved by all members of a society. That the process of disaster recovery is described as being *differential* implies that its outcome might have an effect on the level of social inequality. As pointed out in the previous chapter, poor households regularly suffer disproportionately more damage from natural disasters compared to other groups. Moreover, due to the fact that they have limited access to resources during the process of reconstruction, less resourceful groups also recover more slowly from the shock to their household economy caused by natural disasters. (The World Bank, 2008)

Some of the most central elements in the recovery process is the re-establishing of built facilities such as houses, infrastructure and public facilities. (Smith and Wenger, 2007). The process of housing recovery is one that has not been sufficiently studied, and little research has been done in the field of *post disaster housing patterns across social classes*. (Dash, Peacock and Yang, 2006). However, a widespread assumption among scholars who have done research on the topic of disaster recovery is *that pre disaster social patterns will shape permanent housing recovery*. (Dash, Peacock and Yang, 2006). We know that low-income families often live in houses of poor quality, and therefore are more vulnerable to disaster. One of the most consistent findings in disaster research is that in the event of a natural disaster, poor households suffer disproportionately more damage compared to other groups. (Dash, Peacock and Yang, 2006). Moreover, low-income families are particularly vulnerable because of their limited ability to finance their own recovery. As previously noted, disasters have a differentiating effect on the level of vulnerability across social classes. Post disaster reconstruction might create opportunities to improve the quality of infrastructure, public facilities and residential houses, yet underprivileged groups might not have access to the resources that they need to make changes that could reduce vulnerability to future disasters.

In regard to agricultural producers, we know that smallholder farmers who have limited access to assets even before the occurrence of a natural disaster often see their assets decrease further following the event of a natural disaster, something which offsets downward spirals of increasing poverty. In response to the shock to their household economy that is caused by a disaster, uninsured, underprivileged households may for example be forced to sell off their property in order to be able to buy food and other necessities. The threat that is posed by the possibility of a new natural disaster may also make agricultural producers more inclined to prefer low risk modes of production over more capital intensive activities with higher average returns. (The World Bank, 2008).

Based on these findings, we should be able to draw the conclusion that patterns of social inequality are likely to reproduce themselves in the event of a natural disaster, unless something is done to even out the effects of market produced inequality and vulnerability. In fact, previous research has

shown that natural disasters have a tendency to not only reproduce patterns of social inequality, but possibly also to exacerbate existing class differences. Haas has suggested that exclusively *market based recovery* may in fact increase the level of social inequality: "*The market is a suitable mechanism in disaster recovery if one wishes to maintain or increase pre-disaster social inequalities.*" (Dash, Peacock and Yang, 2006). These findings suggest an important role for official policy makers in improving the ability of households to cope with the effects of an external shock.

Something which becomes evident following a natural disaster is that ones neighbors cannot provide assistance if they are also under stress. (The World Bank, 2006). The ability of localities to cope from the effects of an external shock such as a war or a natural disaster is limited, as locally developed systems of mutual insurance are bound to fail in a situation where everyone is affected. Regarding the relationship between central and local governments in the process of disaster recovery, Smith and Wenger have noted that although local governments generally bear most of the responsibility for the local efforts that are made to ensure sustainable community recovery, they typically have fewer resources and less knowledge about the topic than state emergency management agencies.(Smith and Wenger, 2006). Covariate shocks therefore require external response. Only by helping those who are affected by a disaster gain access to resources during the process of recovery and reconstruction may a state be able to prevent the occurrence of a natural disaster from offsetting the downward spirals of increasing poverty previously described. A determining factor in regard to the effect that a disaster has on the level of poverty and social inequality is the role of the state in planning, organizing and financing post-disaster reconstruction. Of particular importance is the state's willingness to offer help to low-income households who might otherwise not be able to manage to build a new house and regain their livelihood. (Dash, Peacock and Yang, 2006).

Conclusion

This chapter has shown that the concepts of disaster and development are interrelated in several ways, and that a disaster is bound to have an effect on the course of development.

It has also been pointed out that underprivileged groups are particularly vulnerable to disaster. They suffer disproportionately more damage from disaster than other groups, and they also tend to recovery more slowly. Disasters thus have a differentiating effect on the level of both social inequality and vulnerability across social classes.

4. Historical context: The development discourse in China

As noted in the introduction, the development that has taken place in Sichuan since the Wenchuan earthquake in May 2008 can not be understood as separate from the general trend of development that has been observed in western regions of China over the last decade. Rather, the governments willingness to place massive investments in the reconstruction of traditionally poor rural areas reflects its long term commitment to economic development in the western provinces. In fact, the Wenchuan earthquake seems to have sped up processes that were initiated more than ten years ago with the formulation of the 1999 development of the west policy, including capitalist penetration, urbanization, industrialization, and diversion of surplus rural labor into non agricultural work.

The purpose with this chapter is to provide a brief overview of the historical context in which current strategies for economic development in China's western provinces were developed. Thereafter, the concept of coordinated urban and rural development will be discussed, focusing on the objectives of accelerating the process of urbanization, transferring surplus rural labor to the non agricultural sector and transfer of cultivated land from less to more capital intensive agricultural producers. In chapter number five, I will examine how the official plans for earthquake reconstruction relate to these strategies.

1980's: Favouring phased regional development.

In the Chinese development discourse in the 1980's and 1990's, two main arguments can be distinguished. On one side, there were the supporters of what came to be known as phased regional development, whose ideas largely correspond with traditional modernization theories¹³ such as dualistic theories of economic growth. On the other side, as it became apparent that the strategy of phased regional development was creating a developmental gap between the coastal regions in the East and the inland provinces in the West, a series of counter theories were developed.

Prior to the implementation of the first economic reforms in the beginning of the 1980's, advocates of the so called trickle-down theory argued that in the initial stage of economic development, China should concentrate its resources in the eastern coastal areas, as they were believed to be best suited to make economic and technological progress. (Fan, 1995). The theory predicted that there would then be a trickle-down effect, from the special economic zones of the

¹³ Traditional modernization theories treat development as a process along the dichotomy of traditional and modern, by which a society transforms from its original state to a state that is more advanced. They describe the relationship between development that takes place at the national /global level and changes that are happening at the local level as a process by which the traditional structures of rural societies are being incorporated into larger economic and political systems. It is their belief that in the course of this process, rural societies will acquire the features of a modern society and thereby acquire growth and prosperity. (Long, 1977).

coastal provinces and all the way into China's western regions. (Fan, 1995). This official strategy of phased regional development conform well with dualistic theories of economic development, and came to dominate the Chinese development discourse throughout the 1980's. Moreover, their approach to uneven regional development was based neoclassical theories that predict that in the level of social inequality will increase in the initial stages of market reform, but then start to decrease again later in the development process. (Long, 1977).

The best known of these theories is Kuznets' hypothesis of the introverted U, which predicts that in the initial stage of economic development, a society will experience rising levels of inequality. However, as the benefits of development permeate down to all layers of society, these disparities will eventually disappear. (Debraj, 1998: 199-). Those who argue for the plausibility of the inverted U hold that changes that are likely to create rising levels of inequality will occur in the initial stages of economic progress, while compensatory changes that will eventually lead to greater equality will take place when a country has reached a higher level of income. (Debraj, 1998: 199-).

Conforming to this hypothesis, dualistic theories of economic development picture developing countries as containing two different economic sectors; the progressive capitalist/ industrial sector and the backward agricultural sector. In this context, the dichotomy of modern/traditional is interchangeable with that of urban/rural. This view suggests that the two sectors are mutually dependent on each other. The industrial sector depends on resources from the agricultural sector to fuel its own growth. As the process of development proceeds, unemployed labor from the agricultural sector will flow to the industrial sector. On the other hand, the economic development of rural areas is considered to depend on the transfer of modern technology from the more progressive industrial sector. (Long, 1977).

The path of development that is described in neoclassical economic theory may create a situation where inequality first rises and then falls. It predicts that development¹⁴ will eventually lead to narrowing of income gaps and more equal levels of welfare across different layers of society: “*The fundamental implication of mainstream economic theory is that financial capital would move from places where it is abundant to places where it is scarce, bringing with it the latest and best products, processes and technologies. In this way the working of the market would potently and effectively address the problems involved in achieving economic growth.*” (Debraj, 1998: 199-). In the initial stages of development, only a few people have access to the advanced industrial sector. As the process proceeds, more people are transferred out of the poor agricultural sector and into the industrial sector. At the same time, rural areas gain access to modern technology, and the

¹⁴ -when accompanied by 1) utilization of new technology, 2) improved efficiency of production, and 3) efforts to accumulate human capital-

agricultural sector becomes less backward. (Debraj, 1998: 199-).¹⁵

1990's: Increasing transregional inequality.

As implied by Deng Xiaoping's often cited quote “Some must get rich first”¹⁶, (Leonard, 2008), the Chinese leadership envisioned that economic growth in some areas would eventually naturally lead to growth in other parts of the country, and that the disparity between the coastal regions and the rest of the country would then gradually be reduced. However, by the 1990's, observers considered this trickling down would not happen. Instead, China was seeing a widening gap in economic development between the eastern and the western provinces, accompanied by increasing economic inequality. (Holbig, 2004; McNally, 2004; Aarvik, 2005).

The fact that the gap between the developed eastern regions and the backward western regions has continued to grow ever since the implementation of the economic reforms, has provoked several counter theories to the trickle down theory.¹⁷ In critique of government's approach to economic development, scholars have argued that the ladder step theory had been applied on erroneous grounds, and that the alleged comparative advantages of the coastal regions were in fact commercially created disparities. The divide between the progressive capitalist sector in the west and the backward agricultural sector in the east was said to be a result of the official strategy of phased regional development itself, rather than of pre-existing technological advantages in the coastal regions. Anti trickle-down theorists held that the preference for uneven regional development had led to a systematic discrimination against China's inland provinces that there was no justification for. (Fan, 1995). By the 1990's, scholars from the political new left such as Hu Angang were starting to demand that the central party state should play a more active part in development, in order to ensure a more balanced regional development and stop the increasing economic gap between the eastern and western regions to grow any further. (Holbig, 2004). Arguing that the increasing levels of social inequality a direct cause of the governments *laisse faire* attitude towards development throughout the reform era, these scholars called for the return of a strong

¹⁵ The problem with the hypothesis of the inverted U is that it is hard to test, as reliable historical data on the level of equality in individual countries are not readily available. A variety of so called cross-section studies have been conducted that examine variations in the level of inequality in countries that are at different stages of the development process. However, the hypothesis remains controversial, as the conclusions derived from these studies remain ambiguous. Debraj sums up the debate among modern day economists by noting that contradictory findings *rule out the inevitability of the inverted U, but allow for the possibility of a bias in that direction.* (Debraj, 1998: 199-)

¹⁶ 一部分先富起来. There exists several different English translations of this quote, including “We must allow some to get rich first”, and “some will get rich first”.

¹⁷ There is an ongoing debate about whether or not regional disparities have increased or been reduced during the reform period. Different methods of measuring and analysing provincial GDP, industrial output, and level of government investment have turned out different findings. Although the majority of scholars now argue that the regional disparities have grown as a consequence of the official strategy of phased regional development, there are still those who argue that the disparities have in fact been reduced due to decline of traditional bases in the coastal provinces. (Shen, Yeung, 2004)

central party state to take a more active approach in resolving the problem of market created social inequality.

2000's: Shifting focus from economic growth to sustainable development and attempting to even out the differences between East/West and urban/rural.

The Chinese government signaled a shift in its strategy of planned economic development with the formulation of the so called Development of the west policy in year 1999. Sustainable development was now established as the new long term development strategy, and reducing social inequality was defined as the most important policy objective.(Fafo/ Zhang, forthcoming).

The objectives of the Development of the West policy are listed in a State council policy document that was published in 2000.¹⁸ (Shen and Yeung eds., 2004: 79-). Although the policy itself is somewhat vague and contains little concrete information about what measures that were to be taken, it explicitly aims at evening the gap between the wealthy coastal regions and the backward western regions by encouraging economic growth in the inland provinces and thereby increase the standard of living. (Shen and Yeung eds., 2004: 79-).

Since year 2000, the central government has demonstrated its continued commitment to development in the Western provinces by formulated a series of separate policies, aiming at increasing investments, continuing the process of marketization, supporting technological advancement in the industrial and agricultural sector, improving the standard of education in the region, and protecting the environment.(Shen and Yeung eds., 2004: 96; McNally, 2004).

Moreover, the central government committed itself to invest heavily in the development of infrastructure in the region. In year 2000 alone, Rmb 70 billion was allocated to construction of infrastructure in the provinces targeted by the development of the west campaign. In 2001, the amount of state funds allocated to infrastructure projects was increased to Rmb 300 billion, and an additional Rmb 200 billion was guaranteed to be invested into reforestation programs and ecological reconstruction. (Shen and Yeung eds., 2004: 38).

The Development of the West campaign has been described as a process of “*driving capitalism westwards*” by which the structural transformations that has previously been implemented in China's eastern regions have been extended to the western provinces. (McNally, 2004). The campaign has proven very successful at spurring economic growth in the western regions: Overall

¹⁸The State Council is the principal body of government administration, ministries, commissions and bureaus. It is appointed by the National People's congress. The state council constitute the leadership within China's government apparatus, together with the leaders of the Communist Party of China. (OECD, 2009).

GDP output of the 11 provinces that have been targeted by the campaign increased by 33% from 1999 to 2003. However, the overall GDP output of China's wealthy eastern provinces increased by 44% during the same time period. (Fafo/ Zhang forthcoming). In other words, the developmental gap between the eastern and the western provinces continued to grow in spite of the efforts that were made to stop it from doing so. Critics have questioned the true intentions of the policy makers, and noted that the campaign has had little or no effect on the developmental gap between developed and backwards regions. (McNally, 2004). Critics of the campaign also argue that not only has the campaign failed to reach its primary objective of diminishing the level of overall inequality, but paradoxically, by setting out to even the gap between the wealthy coastal regions and the poorer western regions, policy makers have in fact increased the large developmental gap that exist internally in the western provinces. In Sichuan, large disparities still exist between urban and rural areas. (Fafo/ Zhang, forthcoming).

Planned rural development in Sichuan: setting out to resolve *the three rural issues* by continuing coordinated urban rural development.

More recently, the Chinese government has shifted its focus towards development of rural areas. In the 11th five year plan (2006-2010), creating a *new socialist countryside* is listed among the main policy objectives. (OECD, 2009: 28; Dong, Song and Zhang, eds. 2006). By seeking to resolve the so called *three rural issues*; increasing the productivity of the agricultural sector, continue the development of rural areas, and improving the living conditions of farmers, the government has renewed its commitment to development of backward and rural areas. Since the above mentioned policy objectives were formulated, the central government has increased public expenditure for rural areas, through support for agricultural policy measures, investment in rural infrastructure and enhancement of social development. (OECD, 2009: 29).

The concept of *Coordinated urban rural development* incorporates the core features of the government's strategies for poverty reduction and rural development, including the promotion of technological advancement in the agricultural sector, continuing the processes of marketization and industrialization, improving infrastructure, accelerating the process of urbanization, transferring surplus rural labourers out of the agricultural sector, and transferring land from less to more capital intensive production. (Dong, Song and Zhang, 2006). As will become apparent from the following pages, these strategies are highly interrelated, as progress in either one of the above mentioned areas depend on progress in other areas. Scholars in favour of coordinated urban and rural development argue that surplus rural labor can not be transferred out of the agricultural sector if there does not exist a developed industrial sector and/or an urban labor market capable of absorbing these workers.

In turn, lack of off-farm employment opportunities will slow down the process of moving from less to more productive agricultural production: Participation in a combination of farming and non farm activities might provide households with the financial means to take up more profitable production. Conversely, lack of financial capital to invest in new technology make smallholder farmers more likely to keep up inefficient subsistence farming. (The World Bank, 2008; Dong, Song and Zhang, 2006; Shen and Yeung, 2004). It has also been argued that as long as the majority of farmers persist in inefficient family farming, land resources are not employed as efficiently as they might otherwise have been, and that the agricultural model of small family farms is hindering industrialization, specialization and commercialization of the agricultural sector. (The World Bank, 2008). Lastly, investment in infrastructure is necessary in order to facilitate trade and thereby enhance economic growth in the agricultural sector.

In 2007, the National Development and Reform Commission labeled provincial capital of Sichuan, Chengdu, and its surroundings an *Urban and rural agricultural demonstration zone*. (Source Justice, 2010; China.org, 2010). This meant that selected areas in the Sichuan basin were to be the first to implement the new official strategies for rural development, including the promotion of coordinated urban-rural development. (Sichuan provincial authorities, 2010). According to the policy document that was published by the National Development and Reform commission in this regard, the overarching aim of this development strategy is to “*make rural farmers and migrant workers able to enjoy the same rights, public services and living conditions as urban residents do.*” (China.org, 2010). Moreover, provincial authorities in Sichuan has stated that poverty reduction and economic development of rural areas shall be achieved by adhering to the principles of “*giving more, taking less, and loosening control.*” (Sichuan provincial authorities, 2010).

Poverty reduction: restructuring the agricultural sector and transferring surplus agricultural laborers into off farm employment.

Since the household responsibility system was implemented in the beginning of the 1980's, the predominant way of doing agriculture has been small family farms. Land is still collectively owned, but individual households are granted usage rights to private plots of land, and lease agreements between the village collective and the individual households are valid for a period of up to thirty years at the time. (OECD, 2009). The system of collectively owning and administratively allocating land has led to a relatively egalitarian “ownership” structure, in which land also functions as a form of social security. (The World Bank, 2008). However, as both theory and empirical evidence has shown that there is a direct relationship between average farm size and agricultural productivity, (The World Bank, 2008), it has been suggested that the Chinese

agricultural model of small family farms fosters inefficient use of land and stand in the way of building a modern, technologically advanced and more productive agricultural industry. Moreover, there is not enough cultivable land in rural areas for the large rural workforce to be employed in efficient agricultural production. The disparity between population and available cultivable land has lead to a large surplus of rural labor, also known as “hidden” unemployment. (Dong, Song and Zhang, 2004).

Traditionally, the Chinese government has sought to increase the incomes of people in rural areas by investing in- and increasing agricultural production. In Sichuan, the agricultural sector constitutes the foundation for economic development, and improving the quality of produce and moving towards more technologically advanced and capital intensive production are some of the main priorities in regard to economic development of the province's rural areas. (Shen and Yeung, 2004). However, scholars have pointed out that although the level of agricultural input might increase as a result of government investment in the agricultural sector, this does not mean farmers incomes will automatically increase accordingly. (Dong, Song and Zhang, 2004). One of the main reasons for this is that there is a large imbalance between the size of the rural workforce and the amount of land that is available for agricultural production.(Shen and Yeung, 2004).

Consequentially, transferring surplus rural labor into non agricultural work has become an important strategy for increasing farmers income level.(Shen and Yeung, 2004). Studies from several countries have shown that the rural households who are most successful at increasing their incomes were those who either diversified their farming activities, or diversified their income sources.(The World Bank, 2008). In contrast, those who proved least able to move out of poverty were the households who persisted in traditional farm production.(The World Bank, 2008). In China, most of the increase in farmers incomes since the mid 1980's has been a result of farmers participation in non agricultural work.(Dong, Song and Zhang, 2006; Fafo/Zhang, forthcoming). This may be either rural non farm employment, or labor migration to urban areas where workers also enjoy a higher level of wages. From 1989 to 2001, the percentage of farmers incomes constituted by employment in off farm wage work rose by almost ten percentage points.(Fafo/ Zhang, forthcoming). In 2006, approximately 65% of Chinese farmers were engaged in both farm and non farm activities, (The World Bank, 2008), and only 45% of the net income of Chinese farmers came from agriculture.(Dong, Song and Zhang, 2006).

Urbanization

The process of urbanization is closely associated with modernization and economic development.

Because the wage level is generally higher in urban than in rural areas, low levels of urbanization often lead to low per capital GDP. (The World Bank, 2008). In Sichuan, a survey of living conditions that was conducted in 2004 showed a particularly large disparity between the average income of rural and urban households: The average total annual income of an urban household was Rmb 16 188, while the average income of a rural household was only Rmb 9177. (Fafo/ Zhang, forthcoming). Moreover, urban citizens still enjoy a higher degree of social security than their rural counterparts: In spite of recent improvements, many people with a rural *hu kou* registration still don't have access to free basic medical care, unemployment or retirement pension.(Fafo/ Zhang, forthcoming). In regard to the development of China's western provinces, it is believed that the income level of people in rural areas will increase when more people are transferred out of the agricultural sector and into the urban labor market. Central policy makers assume that accelerating the process of urbanization will have the effect of reducing the developmental gap that exists between China's eastern and western provinces.(Shen and Yeung, 2004). However, up until recently, the process of urbanization has moved much more slowly here than in China as a whole: In year 2000, 46,1% of the population in eastern China had an urban *hu kou* registration, compared to only 28,7% of the population in the East.(Shen and Yeung, 2004). Moreover, surplus rural labor can not be transferred out of the agricultural sector if there does not exist a developed industrial sector and/or an urban labor market capable of absorbing these workers. In Sichuan, relatively slow development in secondary and tertiary industries has limited the opportunities for rural laborers to find non agricultural work.(Shen and Yeung, 2004).

Making more efficient use of land resources

As an increasing number of people leave the agricultural sector, more land is available to be cultivated by those who are left. Transferring land from smallholder farmers to actors who are capable of more capital intensive and technologically advanced agricultural production is a very direct way of increasing agricultural production, and has become an important strategy of governments in agriculture based countries in order to raise agricultural production.(Financial times, 2010; FSN, 2009). Moreover, in order for farmers who wish to take up off farm employment to be able to do so, they need to be able to rent out their land. On the other hand, access to rent additional land provides farmers who do not wish to become part of the labor force important development opportunities.(Huang, Otsuka and Rozelle, 2005). One of the most serious concerns that were raised in regard to the agricultural industry in the middle of the 1990's was the fact that China did not have a functioning land rental market, which is considered an essential factor in agricultural development. During the first ten to fifteen years of agricultural reform, it was virtually

impossible for households in rural areas to gain access to cultivate additional land, and even in the mid 1990's, only approximately 3% of cultivated land in China was rented.(Huang, Otsuka and Rozelle, 2005). As Chinese authorities realized that the lack of an open land rental market that could regulate land transfer was creating large inefficiencies in both use of land and labor reallocation by standing in the way of both the possibility of increasing agricultural productivity, and at the same time making it difficult for rural households to diversify their incomes. (The World Bank, 2008). Consequentially, they eventually opened up for the possibility of renting out land: Since 1995, open land rental markets have started to emerge, and the trend towards monetisation of land has continued into the 2000's. In 2003, more than 10% of farmers reported to have rented in land.(Huang, Otsuka and Rozelle, 2005). According to the World Bank, the new system of decentralized land rental has shown to be significantly more productive than the system of exclusively administrative reallocation of land. The results from a national survey that was presented in the 2006 World Bank report shows that the occupational structure in rural areas have changed since the opportunity to rent out land was introduced: “*While almost 60% of those renting out their land relied on agriculture before entering rental markets, only 17% continued to do so – while 55% migrated (up from 20%) and 29% engaged in local non-farm activity (up from 23%)*”.(The World Bank, 2008). Moreover, productivity has increased and net income for both those who rent land and those who offer land for rent have increased.(The World Bank, 2008). By today, monetisation and efficient use of agricultural land is considered important components of national economic growth in the years to come. (Financial times, 2010).

Conclusion

This chapter has shown how the official strategy of phased regional development in China during the initial phase of the reform era resulted in a large developmental gap between the country's eastern coastal regions and the western inland regions, and between urban and rural areas. Since the turn of the century, the central authorities have aimed at evening out these regional inequalities. The Development of the West campaign that was launched in 1999 aimed at spurring economic growth in the western provinces. More recently, the central policy makers have set out to resolve the so called *three rural issues*: increasing the productivity of the agricultural sector, continue the development of rural areas, and improving the living conditions of farmers. In this regard, the area in the Sichuan basin surrounding the provincial capital of Chengdu has been labelled an *Urban and rural agricultural demonstration zone*, meaning that this area will be the first to implement official strategies of rural development.

This chapter has also conceptualized *coordinated urban and rural development*, and identified the

main objectives of this development strategy: 1) To increase agricultural production by achieving a higher degree of industrialization and specialization in the agricultural sector; 2) To encourage rural households to diversify their incomes by taking up non-farm employment and/ or participate in labor migration, and 3) To make more efficient use of cultivable land.

5. Community based recovery and reconstruction: Yin Chi

The following chapters aim at describing the effect that the Wenchuan earthquake has had on the ongoing process of development in rural Sichuan. The official policies for earthquake recovery in Sichuan will be presented in chapter 5.1. This part will show that the plans for recovery and reconstruction of the earthquake affected area conform very well to the already existing strategies of poverty reduction and economic growth that were presented in chapter four. Thereafter, the effects of implementing these plans at the local level will be described in chapter 5.4

Hoffman and Oliver-Smith have noted that “*While much important data about disasters can be gathered by synchronic slices based on questionnaires, surveys and crash emergency overviews, the actual process by which people and communities respond to risk, threat, vulnerability, impact and recovery are best understood through on-site ethnographic research. The value of ethnographic research is particularly evident during the process of reconstruction, when people must traverse the difficult path between restoration and change.*” (Hoffman and Oliver-Smith, 2002).

The presentation of the local situation in Yin Chi will show that people in the village were facing a choice between simply aiming at returning to their pre disaster condition, and treating the disaster as a development opportunity. The suggestions and guiding principles that were formulated by central policy makers and passed down to the villagers were based on existing strategies for economic development in rural areas, and represented an opportunity for change. Still, many of the villagers seemed more concerned with simply restoring what had been lost in the earthquake, and attaining full disaster recovery. However, the economic situation of people in the village made it difficult for them to simply return to the traditional way of smallholder farming after the earthquake. In need of financial means to cover the cost of building new houses, many had moved out of the agricultural sector and into paid employment.

For the purpose of making my empirical findings conceivable to the reader, they will be presented in the reversed order of how I originally approached the study of earthquake reconstruction, which was bottom up. The direct relationship between overall strategies of economic development in China's western provinces, the official plans for disaster recovery, the strategic way of allocating resources after the earthquake, and the changes that are actually taking place can best be understood if they are presented in that order. However, the chapter will begin with a short introduction of Shi Fang county and Yin Chi village, in order to provide the reader with an understanding of the problems that were facing people in the area after the Wenchuan earthquake. Furthermore, the

administrative structure of the Chinese bureaucracy will be accounted for briefly.

5.1 Field site: Yin Chi

A short introduction to Shi Fang county and Yin Chi village

The village of Yin Chi is situated in DeYang, Sichuan, about 80 kilometers north of Chengdu. It is under the administration of ShiFang County, an area that was classified as a heavily hit disaster area after the earthquake that hit Sichuan on may 12th 2008. (CASTED, 2008).¹⁹

Yin Chi is situated on a flat plain, approximately ten kilometres outside of Shi Fang city. The village consists of about 1000 households, and has a total population of about 2700. Most of the villagers are smallholder farmers, who grow rice, wheat and garlic. Some of them also produce *mu er*, a kind of mushroom that is more expensive to grow, and that demands a higher buying price than the other kinds of produce, while others raise animals such as pigs, sheep and hen. The village consists mainly of small and traditional family farms. The farms and residential houses in the village are situated on both sides of the main highway, that runs from Shi Fang city, through all the main towns in the county, and all the way up to the mountainous areas in the north of Shi Fang. In the centre of the village, approximately 50 houses are concentrated along proper residential streets. However, most of the small family farms are scattered around the more remote areas of the village, and many of them are inaccessible by car.

In addition to farming, between 400 and 500 of the villagers do manual work in near by towns. The village also has a long tradition of outward migration. Approximately 100 villagers engage in labor migration to other provinces. In 2007, the average per capita income in Yin Chi was Rmb 3800.20 To put this number into perspective, the average per capita income in rural areas in Sichuan was Rmb 3100 in 2004, which means that the economic condition in Yin Chi is around or a little higher than the provincial average.(CASTED and Fafo, 2008).

¹⁹ The administrative structure of a Chinese county: During the process of collectivization in the late 1950's, China's natural villages were incorporated into larger communes (*gongshe*). In this new administrative structure, the natural villages became production brigades (*shengchan gongdui*), and each production brigade was again divided into production teams (*shengchan xiaodui*). (Oi, 2001: 4). The process of returning to household farming in the early 1980's was followed by an inversion of these changes. When the country abolished collective farming in the beginning of the 1980's, the communes turned into townships (*xiang* or *zhen*), and the natural villages re-emerged as independent administrative units.(Oi, 2001: 4). In most cases, the production teams were dissolved. However, in some villages -including Yin Chi- the production teams merely changed name to neighborhoods (*xiaoqu*) when the system of collective farming was abolished, and retained some key administrative functions. Today, the village (*cun*) is the lowest level of administration in the bureaucratic system. More concretely, it is the place where peasants work and live. It is also the place where state meets society, and where official policies are negotiated and adapted to local conditions. Central to this process are the village cadres, whose job it is to *interpret the will of the state to the peasants*.(Oi, 2001: 4). Each village has a village committee, consisting of the village leadership and other committee members.

²⁰Information obtained from an interview with the village secretary in Yin Chi: 10.08.2009.

In Shi Fang county, which has a total population of approximately 430 000, a total number of 6122 people were left dead or missing after the earthquake, and an additional 33 075 suffered injuries. Most of the villages in the mountainous areas in the north of the county were completely destroyed, whilst the villages that are situated on the flat plain surrounding Shi Fang city – including Yin Chi – suffered serious, yet more moderate damages. (ShiFang County, 2008)

In total, 340 000 people in the county lost their homes in the disaster. Infrastructure was seriously destroyed, the supply of water, gas and electricity was cut off, and communication paralysed. Moreover, large areas of farmland were completely destroyed, along with several large industrial production facilities. (ShiFang County, 2008).

The disaster also had a substantial impact on the economy in Shifang, due decreased production capacities in both the agricultural and the industrial sector. The estimated GDP output for 2008 was Rmb 15,1 billion, but because of the occurrence of the Wenchuan earthquake, the actual GDP output amounted to only Rmb 7,5 billion. In the agricultural sector, production declined as a result of large amount of cultivated land that was destroyed in the earthquake. Moreover, even the farmers who had not been directly affected by the earthquake had difficulties in getting their products to the market, due to the damages that were made to the infrastructure. In the industrial sector, several large size enterprises suffered both heavy casualties and great material damages during the earthquake, and have since been unable to resume production. In addition, tourism was halted by the earthquake, something which has resulted in large losses for the tourism industry. (Shi Fang County, 2008).

Like in most other earthquake affected villages (UNCRD, 2009), collapsed houses were the greatest cause for damage in Yin Chi. During the earthquake, approximately 90% of the houses in the village either collapsed or were so seriously damaged that people could not live in them. As in the rest of Shi Fang, the infrastructure in the village suffered severe damages, and electricity and water supplies were cut off. According to the farmers, the earthquake did not cause much damage to their farmland. However, mushroom farmers suffered extensive losses as most of the shacks that they use for mushroom production collapsed.

Although the earthquake caused severe material damages in the village, human loss was limited. The reason for this was that the earthquake struck at a time of day in the middle of the busy farming season when most of the farmers were outside working in the field. Only six people in the village were killed, while three were severely injured.

5.3 The overall plan for Post-Wenchuan Earthquake restoration and-reconstruction²¹

The overall plan for Post-Wenchuan Earthquake restoration and reconstruction was issued in September 2008, approximately three months after the Wenchuan earthquake.(The State Council, 2008). Although the document itself is more than one hundred pages long and touches upon a variety of topics, it is rather vague in its formulations and contains little information about what concrete measures that were to be taken. Rather, it serves as a long list of guiding principles for the process of reconstruction. I will not attempt to do a thorough analysis of the entire policy, as it touches upon many topics that are not directly relevant to this study. Rather, I will limit myself to comment on the the general introductory chapter, and on the chapter regarding reconstruction of rural areas.

The previous chapter has shown that primary policy needs for dealing with natural disasters in general and the Wenchuan earthquake in particular include resolving immediate problems of providing housing, restoration of livelihoods, reconstruction of infrastructure and public facilities and resolving the issue of unemployment. It has also been shown that processes of disaster recovery have a strong tendency to increase the level of social inequality, and that market based processes of reconstruction have proven particularly liable to reproduce existing class differences. My primary concern is to examine how the official policymakers plan to resolve these issues. Secondly, I will look at how the official plan of recovery and reconstruction conforms to the existing strategies of economic growth and rural development in the earthquake affected areas.

Main policy objectives

As stated in the introductory chapter of the policy document, the policy makers have defined a set of objectives and guiding principles for the process of reconstruction. The most important objective of the policy is to complete the process of reconstruction within a period of three years. The policy states that by then, the basic living conditions of people in the earthquake stricken area shall be as good as they were before the earthquake, and the level of economic growth shall *reach or surpass the pre-disaster level*. . More concretely, it is stated that the following achievements shall be

²¹国家汶川地震灾后恢复重建总体规划 – *guo jia wen chuan di zhen zai hou hui fu chong jian zong ti gui hua*

accomplished within three years.(the State Council, 2008).

- Every family shall have been provided with safe, permanent and land saving housing.
- At least one member of each household shall be permanently employed in paid labor.
- Infrastructure and public facilities shall be improved compared to the pre-disaster standards.
- Primary education, basic health services and public welfare shall be provided for all inhabitants of the earthquake stricken area.
- There shall be a continued focus on economic development. Furthermore, progress shall have been made in the process of restructuring and strengthening the industry.(the State Council, 2008)

These objectives are to be reached by adhering to the following principles:

- To put people first²²:
“Bear in mind the concept of people first. Priority shall be given to the reconstruction of urban and rural residential houses, as well as to the restoration of infrastructure and public facilities.”
- To plan for long term development:
“Meet the needs of future development by thinking ahead and acting in accordance with the strategy of the development of China's West. Continue the development towards industrialization and urbanization, intensify the support to poverty stricken areas, and promote restructuring and transformation.”
- To persist in market reform:
“Persist in market-oriented reform. Distinguish between government duties and market functions.”
- To encourage people to be self reliant:
“Give full play to enthusiasm, initiatives and creativity of the broad masses in the disaster area; encourage them to rely on self reliance and arduous struggle.”
- To take advantage of both existing government institutions and independent social organizations in the process of reconstruction:
“Build a reconstruction mechanism featuring the joint participation of governments, enterprises, social organizations and individuals; each with clearly defined responsibilities. Encourage openness and transparency, monitoring and multi-channel investments.”
- To protect farmland and think about saving resources:
“Adhere to the principle of using the land economically and intensively, while strictly protecting farmland and forestland.”

²²以人为本 *yi ren wei ben*

– To suit measures to local conditions:

“Reconstruction shall be carried out with respect to local situations. Economic-, societal-, and cultural factors shall be taken into consideration.”

– To place safety first:

“Place safety first and ensure quality. Rigorously implement the national construction standards and technical specifications, and strictly control the quality of design, construction and building materials, so as to ensure the quality of reconstruction projects”

– To respect nature in order to ensure sustained development. (the State Council, 2008).

Judging by the general principles that have been formulated in this document, the official policy makers were not merely aiming at full recovery. Although the policy document explicitly states that the main priority is to reconstruct residential houses and public facilities within a period of three years, it is clear that local authorities are also encouraged to consider the reconstruction process as a development opportunity. I find it interesting to note that the policy makers refer to the ongoing planned development of China's western provinces, and that it is explicitly stated that one of the objectives for recovery and future development in Sichuan is to stay focused on the existing strategies of economic- and rural development. Moreover, that there is a strong focus on rural development, continued economic growth and market reform throughout the policy document.

Participatory planning and public participation

“Putting people first” is placed first on the list of policy objectives, something which implies that the policy makers have made the well being of the earthquake affected people their number one priority. As stated in the policy document, this also means that the opinions and wishes of groups and individuals shall be taken into consideration in the process of planning and organizing reconstruction.

The policy makers emphasize the importance of respecting people's wishes, yet there is little concrete information to be found regarding public participation in decision making. However, The Overall plan for post Wenchuan earthquake recovery and reconstruction is based on findings from the rapid needs assessment that was conducted by CASTED and Fafo immediately after the earthquake. In this way, the policy makers tried to take into consideration both the needs and preferences of the earthquake affected population before deciding on how to move forward with disaster recovery. This is a form of *participatory planning* aimed at involving the public in major policy decisions.(Ying, 2009: 31). Conduction surveys and public consultations is becoming an important way for the Chinese government to learn about the interests of various groups, in order to

take them into consideration when formulating new policies (Leonard, 2008: 67), but this was the first time that a rapid needs assessment of this scale was conducted in China.(CASTED, 2008: 4). It implies that the government has realized the importance of community involvement in disaster recovery and development. This assumption is confirmed by the fact that local involvement in the recovery process is strongly encouraged by the policy makers, and that it is stated in the policy documents that official plans shall be adapted to local conditions, according to the preferences of groups and individuals.

In regard to how recovery and reconstruction is to be organized, the policy makers encourage cooperation between government institutions, private enterprises, social organizations and individuals. It is also clear from the policy document that much of the reconstruction is to be organized locally, but the policy makers have not contributed much information regarding the specific responsibilities of the various actors involved in the process of reconstruction.

Rural development

It is explicitly stated in the policy document that reconstruction of rural areas shall be in accordance with the official strategies of coordinated urban and rural development, and several references are made to the ongoing planned development that was mentioned in the previous chapter. More specifically, the long term goal of increased urbanization, closely related to the objectives of rural development, poverty reduction and the principle of using land more economically, is mentioned several times.

The purpose of accelerating the process of urbanization is two folded: On the one hand, policy makers seek to increase agricultural production. Urbanization will make more land available for agricultural production by concentrating residential houses in designated areas. According to the Overall plan for post Wenchuan earthquake restoration and reconstruction, this is to be done by concentrating both industrial production and residential houses in urban areas, while reserving land in rural areas for agricultural production.(The State Council, 2008).

On the other hand, it is believed that through increased urbanization, a larger proportion of the surplus labor from the countryside can be incorporated into the urban workforce. Urbanization thus help solve the problem of rural unemployment that is caused by a growing disproportion between the amount of land that is available for agricultural production and the supply of labor in rural areas. After the earthquake, the policy makers have aimed at incorporating both people who lost their land in the earthquake and people in rural areas who are unemployed for other reasons into the urban workforce.

Agricultural production

In regard to agricultural production in the earthquake affected area, the overall plan for post Wenchuan earthquake recovery and reconstruction states that priority shall be given to restoration of farmland and production facilities. The policy makers have also noted that through the process of reconstruction, efforts shall be made in order to support the ongoing development towards technological advancement and increased industrialization in the agricultural sector. Furthermore, it is stated that an important objective for further development in the earthquake affected areas is to restructure the agricultural sector in order to achieve a higher degree of specialization and professionalization, and to improve market access for agricultural producers. It is believed that these changes will increase overall agricultural production and improve the farmers' competitiveness. (The State Council, 2008)

The new villages

In regard to land use arrangements within the villages, the policy makers encourage local authorities to adhere to the principle of making more economic use of land by concentrating village layouts compared to their pre disaster condition.(The State Council, 2008). The plans for reconstruction of villages in rural areas are specified in chapter four of the policy document. Here the policy makers promote a model of village reconstruction called *The new village*. In the *new* villages, the village layouts are to be concentrated compared to the pre-disaster condition. Infrastructure is to be improved, and agricultural land will be used more economically. Moreover, residential houses in the new villages should be constructed according to official building regulations in order to improve safety and decrease vulnerability to new disasters.²³ As I will come back to later in this chapter, the model of the new village is promoted by the policy makers behind the overall plan for post Wenchuan earthquake recovery and reconstruction as the best solution for reconstruction of villages. However, it is explicitly stated in the policy document that the farmers own preferences shall be fully respected, and that no household shall be forced to participate in unified reconstruction against their will.

Moreover, it is stated in the policy document that in principle, residential houses shall be rebuilt on their original site, and that large community resettlements are to be avoided if possible. Inhabitants of rural areas that are so damaged that agricultural production can not be continued there are to be resettled in near by areas within the same administrative region. In either case, the policy document

²³ The model of the new village is later also referred to as collective or unified reconstruction.

explicitly states that in regard to resettlement and reconstruction, people's own preferences shall be taken into consideration. (The State Council, 2008).

Employment and social security

Another important policy objective is to encourage self reliance and avoid aid dependence among the earthquake affected people. It is stated in the policy document that efforts shall be made in order to help people who have lost their jobs as a direct consequence of the Wenchuan earthquake regain their livelihood. Training programs are to be initiated, and labor migration is encouraged. The policy conforms well to existing strategies of reducing rural poverty by encouraging rural households to diversify their incomes.

The policy objective of reaching a level of employment where one person in every household is engaged in paid employment is in reality an expression of two separate objectives: Firstly, the urban workers who lost their jobs after the earthquake are to be re-employed. Secondly, farmers who were unable to continue agricultural production after the earthquake because their farmland was destroyed in the disaster, together with other unemployed rural workers, are to be diverted into paid employment in the non-agricultural sector. However, considering that only three out of four rural households in this area reported to having additional income sources to farming before the earthquake, a relatively large number of rural households will need to diversify their incomes if the objective of reaching a level of employment where one person in every household is employed is to be met. (CASTED and Fafo, 2006: 20-23; The State Council, 2008). In other words, it seems that the central policy makers are hoping that a portion of the surplus rural labor that existed even before the disaster can be diverted into the urban/ rural non-agricultural workforce during the process of disaster recovery.

It is also stated in the policy document that various forms of social security will be provided for underprivileged groups. A so called *special relief program* is to be implemented, targeting children who were orphaned in the earthquake, elderly people with no children, and disabled people with no family. However, no mentioning is made of welfare solutions aimed at supporting other underprivileged groups such as people who are not eligible for bank loans, or who are poor for other reasons than those listed above. Moreover, the policy document does not specify who should be responsible for making sure that people who are not physically able to tackle the task of building a new house for themselves get help to resolve the problem of housing. (The State Council, 2008).

Vulnerability reduction

Lastly, official policy makers set out to reduce vulnerability to future disaster by making it a policy objective to enforce the newly formulated national building regulations. The overall plan for post-earthquake recovery and reconstruction explicitly states that by implementing new building standards, the quality of reconstructed public buildings and residential houses shall be guaranteed. It is stated in the policy document that *“The people's government at all levels in the disaster affected area shall organize planning and provide rural habitants with building plans and technical guidance, free of charge.”*²⁴ (The State Council, 2008). However, it is not specified in the policy document who should be responsible for providing people with information about the new building regulations and controlling that they were in fact being followed.

Financial plan

Chapter 13 of the policy document contain a plan of how recovery is to be financed. Most importantly, the policy makers encourage local authorities to accept loans that are granted them by foreign institutions and governments. Moreover, national financial institutions are ordered to extend support to local branches of state owned banks. The purpose of this is to enable the local banks to grant people in earthquake affected areas low interest loans for the purpose of reinforcing or reconstructing their house. The plan explicitly states that the collateral range for rural loans shall be expanded. In other words, people shall be allowed to take up bank loans for the purpose of housebuilding even if they do not have the money to finance parts of the housebuilding themselves. All in all, it is clear from the policy document that the Chinese government plans to finance disaster recovery partially by extensive loaning from foreign financial institutions and state owned banks, and partially by extending government subsidies.

In addition to granting loans to households and individuals, the policy makers guarantee that the government will grant people in the affected areas monetary subsidies to aid them in the process of recovery, but the policy does not say how the monetary subsidies are to be allocated among the affected population. (The State Council, 2008).

The official strategies for resource allocation were specified in a separate policy document that was published three months after the overall plan for post earthquake recovery and reconstruction. This happened at the same time that the central government announced that it would provide an economic stimulus package in order to prevent the 2008 financial crisis to cause an economic recession. In November 2008, the official plans for financing post earthquake recovery in Sichuan

²⁴ 灾区各级人民政府要组织规划设计力量, 为农村居民免费提供多样化的住房设计样式和施工技术指导.

were presented as an integrated part of the government's economic stimulus program. More than a quarter of the total stimulus package of Rmb 4000 billion was to be allocated to post earthquake reconstruction projects. Earlier, it had been guaranteed that government subsidies were to be provided for households in the most seriously earthquake affected areas of Sichuan for the purpose of replacing residential houses that collapsed in the earthquake. However, the largest part of the stimulus package was allocated to large infrastructure projects: 72% of the total stimulus package was used for infrastructure expenditure.(Financial Times, 27.07.2009). Moreover, according to the official plan, even though it would invest heavily in the reconstruction of infrastructure, public facilities and residential areas, the central government would only fund approximately 20% of the total cost of post earthquake reconstruction. The rest of the cost was to be covered by private businesses and state owned banks, who were ordered by the central government to shoulder their part of the cost of reconstruction by extending low interest loans to people who had lost their house in the disaster.(Financial Times, 21.11.2008). These strategies of resource allocation confirm the notions that were put forward in the original policy document regarding post earthquake reconstruction, namely that the government would continue to adhere to the principles of continued economic development by aiming at marketization of reconstruction mechanisms.

How does these policy objectives relate to existing development strategies?

The fact that the policy document in most regards contains little information about the concrete measures that are to be taken is the greatest weakness of the government's plan for recovery and reconstruction. Moreover, the document provides little information about whose responsibility it is to make sure that the policy objectives are met. Consequentially, it becomes difficult to predict what effects the plan is likely to have once it is implemented. However, even though most of the information that is provided in the policy document is very general, it is possible to say something about how the recommendations of the policy makers relate to already existing development strategies.

The main policy objectives of Overall plan for post Wenchuan earthquake recovery and reconstruction conform well to the overreaching goals of the Chinese government in regard to development, modernization and poverty reduction in the western provinces. In the previous chapter, three main strategies to economic development and poverty reduction in rural areas were identified: 1) To increase agricultural production by achieving a higher degree of industrialization and specialization in the agricultural sector; 2) To encourage rural households to diversify their incomes by taking up non-farm employment and/or participate in labor migration, and 3) To make more efficient use of cultivable land.

It is clear from the Overall plan for post Wenchuan earthquake that the policy makers aims to continue the coordinated development of urban and rural areas that includes opening up for restructuring of the agricultural sector, seeking to increase agricultural productivity, accelerating the process of urbanization, making more efficient use of farm land and encouraging rural households to diversify their incomes.

Moreover, the plan for financing and resource allocation has implications for future development. The government's willingness to place massive investments in the reconstruction of traditionally poor rural areas reflects its long term commitment to economic development in the western provinces. That relatively large monetary subsidies are provided for the families who lost their house in the earthquake signifies a commitment to preventing that the earthquake leads to increasing poverty among the rural population. However, as I will come back to in the next chapter, the strategic way in which resources are being allocated among the earthquake affected population seems to be aimed at inspiring self reliance and increasing economic growth rather than at evening out the differential effects that the process of disaster recovery is likely to have on the level of social equality. As previously noted, market based processes of reconstruction have proven particularly liable to reproduce patterns of social inequality. Having shown that the Chinese policy makers did in fact aim at treating post disaster recovery in Sichuan as an integrated part of continued capitalist development, it becomes relevant to ask what the consequences of this will be in terms of development sustainability and social equality.

6. The process of disaster recovery in Yin Chi

The previous chapter has shown that The Overall plan for post Wenchuan earthquake recovery and reconstruction that was formulated by the Central committee was based on findings from the rapid needs assessment that was conducted by CASTED immediately after the earthquake. In this way, the policy makers tried to take into consideration both the needs and preferences of the earthquake affected population before deciding on how to move forward with disaster recovery.

It is also clear from the overall plan for post earthquake recovery and reconstruction that the policy makers have distinct preferences for recovery and future development in the earthquake affected area. The policy adheres to existing strategies of development, and is as focused on continued economic development as it is on resolving the immediate needs of the earthquake affected people.

The Overall plan for post Wenchuan earthquake recovery and reconstruction also allowed for negotiations and adoptions to be made at the local level. In this chapter I will look at how the official strategies of recovery and reconstruction have been implemented locally, and how the official strategies for resource allocation has affected the lives of people in the village.

Local plans for implementation of the official plans for recovery and reconstruction

The local authorities in Shi fang later published a document regarding the implementation of The Overall plan for post Wenchuan earthquake recovery and reconstruction.²⁵ (Shi Fang County, 2008). As large parts of the document contain repetitions of statements that were made in the Overall plan for post Wenchuan earthquake recovery and reconstruction, I will only comment on the specific information regarding how the overreaching policy objectives of official policy document are to be achieved at the local level, that has been added in this document.

In the preface of the policy document, it is stated that disaster recovery and reconstruction in Shi Fang is to be organized according to the guiding principles that have been formulated by the Central committee and the State council in the Overall plan for post Wenchuan earthquake recovery and reconstruction. Moreover, the guiding principles of the plan are repeated in the introductory chapter of the document: To put people first by prioritizing the reconstruction of residential houses and public facilities, and by helping people in the earthquake affected areas regain their livelihood; To respect the environment and make efficient use of land; To integrate the process of disaster recovery with that of re establishing the economy in the earthquake affected area; To adapt disaster recovery to efficacious strategies of long term development; to accelerate the processes of industrialization, urbanization and marketization, and to promote the modernization of rural villages. Moreover, the

²⁵ 什邡市灾后重建总体实施规划 – Shi Fang shi zai hou chong jian zong ti shi shi gui hua

overreaching policy objectives remain largely the same: To achieve complete recovery within a period of three years. By then, the standard of living of people in the earth quake affected area shall reach or surpass the pre disaster condition. (Shi Fang County, 2008).

Centralized control and cooperation with Beijing

This policy document provides more information regarding the administration and organization of disaster recovery at the local level. It is stated that reconstruction is to be carried out according to one of the two following guiding principles: “Beijing will provide the capital for reconstruction, Shi Fang shall organize reconstruction” and “Beijing will provide capital for reconstruction, Beijing shall organize reconstruction”. In other words, reconstruction is to be carried out under varied degrees of centralized control. In small and decentralized areas that have received no more than Rmb 10 million in government remedies, reconstruction is to be carried out under relatively relaxed central control. Here, it is the local authorities who have the main responsibility of planning, administrating, organizing and supervising the reconstruction of residential houses, public facilities and infrastructure. In urban areas that have received over Rmb 10 million in government support, it is the central government who carries these responsibilities, as well as the responsibility of achieving the overreaching policy objectives. (Shi Fang County, 2008). As I will come back to later in this chapter, Yin Chi is classified as *small and decentralized*, something which meant the central government encouraged the villagers to carry out reconstruction according to their own preferences, under the guidance and administration of the village leadership.

Financial plan

Regarding funding of disaster recovery in Shifang, local authorities have estimated that during the course of the three year recovery process, a total of Rmb 60 billion will be invested into the reconstruction of the earthquake affected area: Rmb 14,5 million (24%) will be spent on reconstruction of residential houses, Rmb 3,8 million (6,3%) will be spent on building back public facilities, Rmb 15,4 million (26%) will be spent on repairing and improving the infrastructure, Rmb 21,4 million (36%) will be invested in re-establishing industrial production, and Rmb 4,8 million (7%) will be spent on protecting and restoring the natural environment.

Moreover, the investments are to be spent over a three year period: 20% in 2008, 40% in 2009 and another 40% in 2010.(Shi Fang County, 2008).

Funding will be contributed from the central government (Rmb 8 million, 13,3%), the provincial government (Rmb 1 million, 1,67%), state owned banks (Rmb 6 millions, 10%), private investors Rmb 10 million, 16,6%), mutual assistance partners (Rmb 7,5 million, 12,5%) and private donors

Rmb 1 million, 1,67%). (Shi Fang County, 2008).

Monetary subsidies for the purpose of reconstructing residential houses

In accordance with the overall plan for post Wenchuan earthquake recovery and reconstruction, the government is to provide monetary subsidies for individual households, for the purpose of housebuilding. According to the provincial government of Sichuan, families whose house collapsed during the earthquake will on average receive Rmb 10 000. However, it is stated in the policy that priority will be given to those households who are situated in the most seriously affected disaster areas. (Shi Fang County, 2008).

Tax policy

In addition to providing businesses and individual households with direct monetary subsidies, the government will adapt a new and more relaxed tax policy, intended to release the financial burdens of people in the earthquake affected areas, as well as to help spur industrial and agricultural production. It is stated in the policy document that during the three year reconstruction period, businesses and individuals will be exempt from tax. Moreover, during this period, no tax is to be collected for using land, nor for transferring the usage rights of land. All those who are eligible for other kinds of monetary support are also eligible for tax relief. (Shi Fang County, 2008).

Banking policy

According to the official financial plan, state owned banks were expected to cover 10% (Rmb 6 million) of the total investments in reconstruction projects in Shi Fang. This was to be done mainly by extending low interest loans to businesses and individual households in the earthquake affected area. Providing low interest loans is presented in the policy document as a means to relieving the financial burden of impoverished households, and enabling those who lost their houses during the earthquake to provide new houses for themselves. In the text, a reference is made to the so called three rural issues, (increasing the productivity of the agricultural sector, continue the development of rural areas, and improving the living conditions of farmers), and the policy makers argue that providing loans on favorable terms is a step towards resolving these issues. It is explicitly stated in the policy document that the banks are required to extend subsidized bank loans to impoverished households in the earthquake affected area, and that they are to expand the credit range of these loans. Moreover, the loaning period for already existing loans is to be prolonged.

The national banks are also encouraged to provide micro credit loans for rural households, as well as to increase the liquidity of rural credit cooperatives in order to enhance their ability to extend loans to farmers.

Banks are also encouraged to simplify the application process, increase their capacity to handle and approve loan applications, and improve the quality of service in their local branches. (Shi Fang County, 2008).

Re-establishing the local economy

Integrating disaster recovery and re-establishing the local economy is an important for the reconstruction process. Regarding the employment situation, it is stated in the policy document that local resources shall be put to work in construction and reconstruction. More specifically, people who lost their livelihood because of the earthquake -including both farmers who are unable to continue agricultural production and urban workers who lost their jobs- are encouraged to engage in activities related to the process of reconstruction. (Shi Fang County, 2008).

Unemployment

In regard to the employment situation in Shi Fang, the policy requirements from the Overall plan for post Wenchuan recovery and reconstruction are repeated once again, including the objective of reaching a level of employment where one person in each household is employed in paid labor. It is stated in the document that in order to reach this goal, efforts shall be made to channel those who lost their jobs during the earthquake into new jobs. Professional training and courses in entrepreneurship is to be provided, free of charge, and local banks are once again encouraged to extend micro credit loans to individuals who are motivated to start their own business.

In this policy document, it is also stated in the policy that welfare shall be provided for individuals who remain unemployed for a longer period of time. (Shi Fang County, 2008).

Transfer of rural labor

Another major policy objective is to continue the transfer of surplus rural labor out of the agricultural sector and into paid employment in urban areas. Moreover, the policy makers encourage outward migration to Beijing and the eastern provinces where there is a demand for labor. (Shi Fang County, 2008).

Yin Chi one year after the disaster

As previously mentioned, Yin Chi suffered serious material damages from the Wenchuan earthquake. After the earthquake, the greatest problem that was facing the people in Yin Chi was to provide new houses and reestablishing the village infrastructure. At the time of our visit to the

village a little more than one year after the earthquake, close to 90% of the houses that had collapsed in the disaster were said to either already have been rebuilt, or to be under construction. This meant that many of the villagers had already moved into permanent housing. However, quite a few people were still living in tents or temporary houses, waiting for their permanent houses to be rebuilt.

Since the earthquake, large parts of the village have been restructured. Significant improvements have been made to the infrastructure, and roads have been extended to parts of the village that had previously been inaccessible by car. At the time of our visit there in August 2009, more work needed to be done, but most of the roads had been repaired, and most households had long since regained the supply of water and electricity. As the farmland in the village had not been damaged during the earthquake, the farmers had been able to continue farming activities more or less as before. The only exception was the mushroom farmers, who had suffered great material loss. While some of them had already succeeded in rebuilding the shacks that had collapsed, many had not been able to take up production of mushrooms again after the earthquake.

Compared other villages in the surrounding area, Yin Chi is said to be doing very well, and this has affected the process of recovery and reconstruction. The government subsidies had been promptly received by the villagers, something which had enabled them to start rebuilding their houses without further delay. The process of cleaning up after the earthquake and rebuilding the houses that had collapsed had been undertaken not long after the event, and a little more than one year later, the majority of the villagers were about to move back into permanent houses. Many of my informants commend the village leadership for the efficient way in which they had provided information, organized allocation of resources, and aided them in the actual process of planning for- and carrying out reconstruction. Comparatively, people from some of the less successful near by villages reported to still be living in tents or temporary houses, and explained that neither had they received the government subsidies that had been granted them for the purpose of housebuilding, nor had they been provided with any reliable information about how the process of recovery and reconstruction was to proceed.

Organizing disaster recovery: public participation within the communist system of administration

Except for in the initial phase of disaster relief, when the villagers had received aid, medical care,

direct monetary support²⁶ and food from both the government and several non governmental organizations, no Chinese or foreign NGO had been directly represented in the village. Consequentially, the farmers had reconstructed the village under the administration of the village committee and the various neighbourhood leaders, without direct interference from outside authorities.

The administrative structure of Yin Chi village

Yin Chi was founded in 2006, after two natural villages (Yinshui and Shitang) were merged to become one larger village. Its village committee consists of the village leader (*zhuren*), the village secretary (*wenshu*), the female cadre (*funü zhuren*), as well as one individual who holds three separate leadership positions (*sanzhi ganbu*).²⁷ All representatives of the village leadership were chosen in an open village election that was held after the village was founded. A separate election was held in order to elect the leaders of the local party branch, in which only the villagers who are party members were allowed to vote. The local party leaders now include the Party secretary (*shuji*), and two committeemen.

The village is divided into fourteen neighborhoods (*xiaoqu*). These neighborhoods are identical to the administrative units known as production teams (*shengchan xiaodui*) during the time of collective farming. Since the system of collective agriculture was abolished in favor of the household responsibility system in the early 1980's, the neighborhoods have retained only a few administrative functions related to the allocation of land and the collection of taxes. Each neighborhood have appointed a team leader whose job it is to administer these tasks. The team leaders are selected from within their respective neighborhoods, by way of informal election. Usually, the matter is discussed in a communal meeting, whereupon a decision is made by the attending villagers. A person can either volunteer for the position, or be proposed for it by someone else. In principle, team leadership is a life-long commitment, and the team leaders receive an annual compensation of 1000 Yuan for the job they do in the community.

The most important function of the neighborhood is the allocation of land. Land is still collectively owned by the village and divided between the neighborhoods, although the village does not have a collective economy. Usage rights to individual plots of land is contracted out to the various households in meetings that are held every six years. However, the team leaders have limited authority to influence this process, as land that has been allocated to a household stays in their

²⁶ A sum of 100 Yuan per person per month for the first three months after the earthquake.

²⁷ Who is at once military commander, secretary of the Communist Youth League, and the head of public security.

possession for as long as they are willing to cultivate it. Only when someone dies or gives up the right to use their land can the village redistribute the land to another household. Secondly, team leaders were previously also responsible for collecting taxes, as well as an annual fee from the farmers who have plots of land in the collective fields in addition to the land they have been allocated.²⁸²⁹

Organization process

When a new government policy is to be put into effect, the village leadership will call a meeting to inform the villagers about the details of the policy. This is the traditional way of implementing new agricultural policies, and the same method was used for providing the peasants with information about what course of action that was to be taken after the earthquake.

In the first stages of village reconstruction, the local cadres were responsible for making sure that people had a good understanding of the situation, as well as handling the response from the public. Formally the lowest level of administration, standing between the township and the government, the village committee thus had an important role in the process of community based recovery.

(UNCRD, 2009). However, its role was limited to providing the villagers with information, arranging for meetings to be held, organizing resource allocation, and facilitating re-allocation of land in some of the neighborhoods. Representatives of the village committee did not have the authorization to make decisions regarding the reconstruction process.

As I will come back to later in this chapter, the process of decision making and organization of reconstruction was moved down to the level of individual neighborhoods, the leaders of the various neighborhoods had in fact been more directly involved in the process of organizing reconstruction than had the village leadership.

In an interview with the village leader, I was told that the central government early on had guaranteed that it would look after the interests of the people, by providing them with monetary support for reconstruction of houses. He described the official policy on reconstruction as very flexible³⁰ and said it explicitly stated the importance of respecting peoples wishes by allowing them to organize reconstruction according to their own preferences. Thus it was up to each individual household to decide whether to rebuild their house on the original plot of land or to participate in so called unified reconstruction. Following the lead of the Chinese government, the

²⁸ However, as of 2006, Chinese farmers are no longer required to pay tax for cultivating land.

²⁹ Information obtained in an interview with the village secretary in Yin chi, 10.08.2009

³⁰ 活huo

village leadership had ordered that further decision making regarding the process of reconstruction should be moved down to the level of the individual neighbourhoods, and encouraged people to start building new houses for themselves as soon as possible.

Thereafter, discussion meetings had been held in all fourteen neighbourhoods, where the peasants had discussed possible solutions and voted over important issues regarding matters such as use- and distribution of land, whether or not to reorganize large areas in order to make the process of reconstruction more convenient; whether to cooperate on reconstruction or leave it up to each individual household, and whether or not to hire professional companies to do the actual job. This had all been organized under the leadership of the team leaders in each neighbourhood.

The fact that decision making and the responsibility of organizing reconstruction had been moved down to the level of individual neighbourhoods meant that the villagers had revived the old system of administration that dates back to the time of collective farming, and extends all the way down to the individual households. Before the earthquake this structure of administration had long since been abolished. Nevertheless, the fact that there existed in the village a strong bureaucratic tradition made it possible to effectively organize decision making and reconstruction.

Individual reconstruction VS. collective reconstruction

In the initial phase of disaster recovery, the neighbourhoods were faced with the choice of whether or not to reconstruct their houses according to the model of *The new village*. In Yin Chi, this option was referred to as unified reconstruction. Alternatively, the households could choose to take full responsibility for their own recovery and reconstructing their house on its original site.

Collective reconstruction: advantages and disadvantages

The original idea of collective reconstruction came from the State Council. As has been pointed out in the previous chapter, unified or collective reconstruction, conforms well to the official strategies of rural development that aim at modernizing residential houses in rural areas and making more economic use of land by encouraging more concentrated village layouts. This option would involve restructuring entire neighborhoods, including re-allocating land and changing the infrastructure. The collectively restructured houses were to be rebuilt in the style of terraced houses, neatly arranged along residential streets. Farmland would be rearranged, in order to make more efficient use of land, and in order make the cultivated land more accessible to the farmers. As previously mentioned, cultivable land in the village has remained collectively owned since the introduction of the household responsibility system in the early 1980's. Plots of land are contracted out to the

individual households through the administrative units of the neighbourhoods. As a consequence of this practice, each household have only a relatively small amount of land available for agricultural production. Moreover, many of the farmers have been assigned plots of agricultural land that are situated far from where they live and difficult to access by road. A major advantage of restructuring entire neighbourhoods were said to include that the inhabitants would get access to cultivate plots of land closer to their home, and that new roads would be built between the residential areas and the areas of agricultural land.

The aim of this operation was not only to make more efficient use of land resources in the village. It was also believed to be more convenient for the peasants to coordinate reconstruction in this way, because it would make it easier for them to collaborate and draw on collective resources. It would also be more convenient to finance the housebuilding by taking up paid labor, as the people who participated in unified reconstruction did not have to be as directly involved with the actual building process as those who rebuilt their houses individually. Furthermore, unified reconstruction was believed by many to be the safest option. It would give people in the participating neighborhoods the possibility to share the cost of having professional technical support, or even to leave the entire job of housebuilding to a professional company. In fact, only in the neighborhoods where unified reconstruction was organized were the villagers guaranteed to receive professional support for housebuilding. Although the government's plan for earthquake reconstruction states that *“People's government at all levels in the disaster affected area shall organize planning and provide rural habitants with diversified housing design and technical guidance,”* (The State Council, 2008). I got the distinct impression that the amount of technical support that was provided for the villagers of Yin Chi varied from neighborhood to neighborhood, according to the level of competence and commitment of the various team leaders.

The majority of my informants said that they had not received help from friends or neighbors during the process of housebuilding, nor had they been able to help others. The reason for this was that between struggling to make enough money to finance the construction of their own house and, - for the villagers who did not participate in unified reconstruction,- actually doing most of the construction work themselves, people simply did not have the capacity to assist others with housebuilding. The only exception to this rule was members of extended families who reported to have helped each other build houses. As there did not exist any form of social support that targeted elderly people and others who for some reason had difficulties with resolving the problem of providing housing for themselves, underprivileged households were forced to either rely on family members for help or resolve the problem on their own. One way for them to resolve the problem of housing was to participate in unified reconstruction.

Interestingly, several of my informants also said that one of the reasons why they had chosen to participate in unified reconstruction was that they saw it as likely that the ongoing coordinated development between rural and urban areas would eventually lead the provincial authorities to issue new requirements regarding both use of land in the villages and the standard of residential houses. They worried that if they chose individual reconstruction instead of the solution that was recommended by the central policy makers, their house might not meet the standard of the new building regulations. One woman told me that her family had reasoned that if they chose not to participate in unified reconstruction, implementation of new policies regarding urban/ rural development in the future might require them to replace the house they had built in only a few years. They had therefore decided it was reasonable to invest money in building a house that could meet the requirements of official building regulations.

A welfare solution?

When I first arrived in Yin Chi, I was under the impression that unified reconstruction was something that was organized as a sort of welfare solution for people with limited resources, who would otherwise have found it very difficult to take part in the construction of a new house. I arrived at this conclusion after observing how many of the households who had decided to participate in unified reconstruction consisted of either elderly couples or families where the husband had left the village to find work elsewhere. In other words, people who could not manage to build a house by themselves; either due to lack of physical ability or because they had to go away for work in order to be able to finance the reconstruction. On the other hand, I also noticed how several households consisting of young couples with above average incomes seemed to prefer individual reconstruction, as they believed they could save money on doing the job themselves and still build a house that was as good as houses that were provided for the families who participated in unified reconstruction. However, as I will come back to later in this chapter, it soon became apparent that although unified reconstruction in accordance with the model of “the new village” was the preferred option of the central policy makers, it was not a welfare solution. In fact, unified reconstruction proved to be the most expensive of the two alternatives, something which meant several low income households were excluded from participating.

There were a few households who belonged to neighbourhoods that had organized unified reconstruction but who had made the decision not to participate. These families listed time and money as the most important reasons why they had preferred individual reconstruction. Firstly, they had wanted to start the process of building a new house as soon as possible, and feared that participation in unified reconstruction meant they would have to wait for months before they could

get started. They had expected that a process that included several rounds of discussion meetings, restructuring large areas of agricultural land, reallocating land for residential houses, finding and hiring an external construction company, etc. would be too time consuming. Secondly, and perhaps more importantly, the houses that were built in accordance with the model of *The new village* were comparatively more expensive than other houses. They were sold at the fixed prices of 45 000 Yuan for a house of sixty square meters and around 50 000 for a house of eighty square meters, not including any interior facilities. The price of collectively constructed houses are likely to total on between 10 000 and 20 000 more than the average house in the village, something which had caused several families to reason that they could probably save money by doing most of the actual construction work themselves. Couples who had preferred individual reconstruction seemed to have in common that they were relatively young, and able to do the heavy physical work. The high price of the collectively built houses also meant several low income households in the village were prevented from participating in unified reconstruction simply because they could not afford to. The people who participated in unified reconstruction had been required to make a rather large payment in advance, something which the least privileged families were not in a position to do.

Decision making process

In all neighbourhoods, the matter had been discussed at the first meetings that were held after the earthquake. In these initial meetings, people had been encouraged to voice their personal opinions and discuss the matter openly. Thereafter, eight representatives had been selected from within the team to make the final decision. After these initial meetings, it became clear that only three neighborhoods preferred to arrange for so called unified reconstruction, while the inhabitants of the remaining eleven neighborhoods decided to reconstruct individually.

In the neighbourhoods where unified reconstruction was not to be organized, no additional discussion meetings were held. The inhabitants who were going to collaborate on collective reconstruction, on the other hand, continued to meet regularly to discuss matters such as allocation of land, housing designs, hiring of professional construction companies, etc. They had also evaluated the propositions from four different private construction companies, and decided on the least expensive offer. In all, more than forty discussion meetings had been held in the neighbourhood that had arranged for unified reconstruction to be organized. People from this neighbourhood were eager to participate in these meetings, and expressed that it was important for them to be present when practical matters that would have direct consequences for themselves were discussed.

The village leadership, the team leaders and other people in the village all expressed that they thought it was extremely to respect the wishes of people in the various neighbourhoods. When asked to tell me about how the discussion meetings had been organized, most people described these meetings as an informal forum for people to discuss their preferences for reconstruction of their neighbourhoods. I was told that although anyone could speak at these meetings, trying to persuade others to do something against their will was not tolerated. The most important principle was to respect the opinion of the majority of the people present. However, individual households were free to make individual choices, and participation in unified reconstruction was voluntary in all neighbourhoods.

The village leadership, the team leaders and other people in the village all expressed that they thought it was extremely to respect the wishes of people in the various neighbourhoods. When asked to tell me about how the discussion meetings had been organized, most people described these meetings as an informal forum for people to discuss their preferences for reconstruction of their neighbourhoods. I was told that although anyone could speak at these meetings, trying to persuade others to do something against their will was not tolerated. The most important principle was to respect the opinion of the majority of the people present. However, individual households were free to make individual choices, and participation in unified reconstruction was voluntary in all neighbourhoods.

Influencing factors: Personal preferences, access to land resources and the willingness of the various team leaders to do the job of organizing collective reconstruction.

In order to identify the factors that had influenced the outcome of the decision making process in the various neighbourhoods, I attempted to compare the process as it had taken place in two different neighbourhoods. Unified reconstruction had been organized in only one of the two, whilst the inhabitants of the second neighbourhood had reconstructed their houses individually. I discovered that most importantly, in order for unified reconstruction to be organized, the majority of the people in that neighbourhood had to agree that it was the best options. However, other factors were also influential.

The influential position of the team leaders.

As it would be the responsibility of the team leader to organize the collective reconstruction, the neighbourhoods depended on the team leader's willingness to do this job. During the time of collective farming, team leadership was quite a powerful position. He held more direct power over the peasants than other officials, as it was he who was responsible for making decisions regarding

matters such as allocation of land and assignment of jobs in collective labor and work points.(Oi, 2001). Since the earthquake, the team leaders have regained their power to influence the way things are done in the village. Not because they have any real power in decision making, but because the villagers rely on them to take on the job of organizing reconstruction.

The team leaders were not compensated for doing this time consuming job, even though they were in the same difficult financial situation as most of the other villagers. The leaders of both of the two neighbourhoods where I conducted my study were employed in construction, and both were struggling make enough money to cover the cost of financing housebuilding. The team leader in neighbourhood number one had still accepted the responsibility of organizing collective reconstruction. In an interview he said he felt it was his duty to put the responsibilities to the community before anything else. Consequentially, he has not been able to do as much paid work as he would have liked to, something which influencing his household economy. Conversely, the team leader in neighbourhood number two, where people had reconstructed their houses individually, was working full time as an electrician. According to himself, collective reconstruction was not organized in his neighbourhood because land resources were too scarce and because the neighbours were unable to reach an agreement. According to other people in the neighbourhood, the main reason why they had not reconstructed collectively was that their team leader had been unwilling to do the job or organizing it. Needless to say, the team leader of the first neighbourhood had become very popular among the other villagers since the earthquake, because of his selfless attitude. On the other hand, people in the second neighbourhood who had originally preferred collective reconstruction blamed their leader for prioritizing paid employment before what they argued were his responsibilities as team leader.

Land resources

Lastly, unified reconstruction could not be arranged unless it was practically possible. Whether or not unified reconstruction could be carried out depended on how much land a neighbourhood had available for reallocation. Neighbourhoods that were restructured in accordance with the model of “the new village” were also to be restructured in order to improve infrastructure and make more efficient use of land. As previously mentioned, land is still collectively owned in the village, but usage rights to land is leased out to individual households for periods of up to thirty years at the time, and the land usage rights of individual households were to be respected in the process of reconstruction. Consequentially, teams that currently had more land *not* in use by any individual household could more easily make significant changes to the spatial layout of their neighbourhoods without infringing on the rights of individuals. Conversely, people in neighbourhoods where little or no collectively owned land was available had greater difficulties in agreeing on new land use

arrangements.

It is important to note that even in the neighbourhoods where unified reconstruction was selected as the preferred way restoration, participation was still voluntary. That meant households who preferred individual reconstruction could still choose to rebuild their house by themselves, on its original site. Furthermore, quite a few of the households who were in fact situated in one of the three neighborhoods where the option of unified construction was provided either chose not to participate or were excluded for doing so. Although I got the distinct impression that people who did participate in unified reconstruction believed themselves to be benefiting from the cooperation with others, it soon became clear that this option was not the welfare solution I first believed it to be.

Conclusion

As has been described in previous chapters, the policy objectives that were formulated in the Overall plan for post Wenchuan earthquake recovery and reconstruction show that the central government had distinct preferences regarding how recovery was to be achieved. The plan conforms well to already existing strategies for coordinated urban and rural development in the area, and is aimed not only at attaining full disaster recovery, but also at enabling long term economic development. As Yin Chi was classified as *small and decentralized*, and the village was not appointed a so called *model village*, the villagers had been left to organize reconstruction according to their own preferences, under a relatively relaxed degree of central control.

No changes were suggested made to the traditional way in which farming is done in these villages, but in regard to the use of farmland, the policy makers encouraged all villages to make more efficient use of cultivable land by concentrating village layouts compared to the pre disaster condition. Moreover, the villagers were encouraged to use the recovery process as an opportunity to modernize their residential houses, and thereby also reduce vulnerability to future disasters.

It is stated in the policy that the wills of groups and individuals shall be respected throughout the process of reconstruction, yet it is the central government that sets the premises for public participation and decision making. Not only by providing localities with detailed information about how public participation should be organized within the existing bureaucratic structure of the village, but also by providing the farmers with fixed options for reconstruction.

In this chapter I have described how the process of disaster recovery in Yin Chi has been organized within the formal system or administration, something which has enabled the state to set the premises for reconstruction in the village. It has done so making decisions regarding how public

participation is to be organized, but more importantly by providing the people in Yin Chi with fixed options for village reconstruction. However, within the limitations that were presented to them, the villagers freedom of choice were not directly restricted by any outside authority. In the last instance, it was the farmers themselves who decided whether to reconstruct their neighborhoods according to the model of The new village, or to simply rebuild new houses on their original sites. Participation in unified reconstruction was voluntary, even for the inhabitants of neighborhoods where the majority of people decided to collaborate on collective reconstruction. Moreover, I got the distinct impression that land usage rights of individual households were respected in both neighborhoods, even in cases where doing so was standing in the way of carrying out restructurings that were wanted by the majority of people in a neighborhood.

However, there did not exist any real alternative to unified reconstruction that would also guarantee people the support and assistance they needed during the reconstruction process. This probably made more people inclined towards choosing the option preferred by the central policy makers.

In the next part of this chapter, I will come back to the consequences of the fact that many low income families could not afford to participate in unified reconstruction, including the effect it has had on various group's vulnerability to future disasters. I will also describe how, although the villagers freedom of choice in several matters was not directly restricted by any outside authority during the process of reconstruction, they were subjected to new economic limitations, incentives and requirements that are coming to shape the choices they make.

Financing reconstruction

As was described in chapter three, in the part regarding the relationship between disaster recovery and social inequality, the fact that the Chinese government has promoted market based recovery makes it relevant to examine how the recovery process has in fact affected the level of inequality: The aim of post-disaster reconstruction is to “get back to normal”, yet full recovery is not always achieved by all members of society. Previous research has shown that natural disasters have a tendency to not only reproduce patterns of social inequality, but also to exacerbate existing class differences, and that exclusively *market based* processes of recovery are particularly liable to increase the level of inequity.(Dash, Peacock, and Zhang, 2007: 265). Although post disaster reconstruction might create opportunities to improve the quality of infrastructure, public facilities and residential houses, underprivileged groups do not have access to the resources they need to attain full recovery and reduce their vulnerability to future disasters. In other words, patterns of social inequality are likely to reproduce themselves in the event of a natural disaster unless something is done to even out the effects of market produced inequality and vulnerability. It is

therefore relevant to consider the role of the state in financing post-disaster reconstruction. Of particular importance is the state's willingness to offer help to low-income households who might otherwise not be able to build a new house and regain their livelihood. (Dash, Peacock, and Zhang, 2007: 265).

In addition to formulating a plan for recovery and reconstruction that conformed well with pre-existing strategies of coordinated rural and urban development, the central government shaped the process by strategic resource allocation. In many ways, the financial situation after the earthquake had a more direct influence on the lives of the villagers than the official strategy of treating disaster recovery as a development opportunity itself. Although the villagers' freedom of choice in most matters was not directly restricted by any outside authority, they were subjected to new economic restrictions, incentives and requirements that were influencing the choices they made, and thereby affecting the outcome of the recovery process.

This chapter aims at describing how the Chinese government's strategic way of financing reconstruction in Yin Chi is affecting different groups of the population. It will show that by implementing a growth-oriented strategy of reconstruction, the authorities have brought about significant social and economic changes in the earthquake-affected areas. Most notably, it has created strong economic incentives for the farmers to become more productive by implementing a system of resource allocation that aims at rewarding individual effort and preventing aid dependency. Consequentially, the people in Yin Chi have become productive, yet vulnerable actors in a new economy. This chapter will also show that several factors indicate that the level of social inequality in the village has increased since the earthquake, as many of the people who were already underprivileged seem to have become relatively poorer during the process of reconstruction. There are great variations in the extent to which various groups have been able to attain recovery since the earthquake, and unequal access to resources during the process of reconstruction is affecting the level of vulnerability towards future disasters across different social groups.

For the purpose of illustrating how different groups in the population have been affected by the earthquake, three case studies will be presented in the end of this chapter.

Village economy

Traditionally, Yin chi has been a farming community with a long tradition of out migration. The average farms in the village are small family farms, and no industrial agricultural production takes place in the village. Among my informants, some households only engaged in subsistence farming, others brought their produce to the local markets themselves, and again others sold their agricultural products via intermediary companies or agricultural cooperatives.

In addition to farming, between 400 and 500 of the villagers do manual work in near by towns and villages. Most of these workers are employed in either construction or in the service industry. Yin Chi is also home to about 100 migrant workers.

The village does not have a collective economy, but as previously mentioned, land is still collectively owned by the respective neighbourhoods. Plots of cultivable land are contracted out to individual households for periods of up to thirty years at the time.

Financing housebuilding

To first put into perspective the financial situation of the people in Yin Chi, the average per capita income in the village in 2007 was 3800 Yuan.³¹³² The average per capita income in rural areas in Sichuan was Rmb 3100 in 2004, which means that the economic condition in Yin Chi is around or a little higher than the provincial average.(CASTED and Fafo, 2006: 35). The cost of putting up a house is somewhere between 30 000 and 100 000 Yuan. The price of a new house depends on its size, the quality of the building materials that are used, and on whether or not skilled construction workers are hired to do the job. Among the villagers, the price was believed to reflect on the quality of the house. Based on the reasoning that safety should be the top priority, most of the villagers had made great efforts to raise enough money to build a house they believed to be earthquake proof. In other words, those who were provided with sufficient information and who could afford to follow the advice of official authorities on construction and reconstruction tried to do so. Consequentially, the majority of my informants reported to have spent somewhere between 40 000 and 80 000 Yuan on housebuilding. The question then arises of how, in a village with an average per capita income of 3800 yuan, so many people had been able to raise so much money in such a short period of time. There are five answers to this question.

Firstly, the housing subsidies provided by the government amounted to somewhere between 28 000 and 35 000 Yuan per household, depending on the number of household members. Although this is in fact a rather large sum, it was not enough for the farmers to cover the cost of building a new house; certainly not a house that could meet the requirements of official building regulations.

Secondly, many people have taken up paid labor in addition to agriculture. One of the consequences of this seems to be that the village has gone from being a farming community with only an approximate 500 people employed in wage labor, to a situation where practically “everyone” is

³¹Information obtained in an interview with the village secretary, 10.08.2009.

³² However, this number is expected to be somewhat higher for 2009, due to the boom in building activity and raising salaries for those who have taken up work in construction.

somehow engaged in paid employment.

Thirdly, low interest bank loans have been provided for people as a supplement to the monetary subsidies. The villagers have been granted loans regardless of income, using their new houses as collateral. These loans are to be repaid in full within a period of three years. For many, the size of the mortgage seen in relation to their annual household income implies that they will need to continue to find ways to earn more money than they can make from agriculture alone, if they are going to be able to meet their obligations to the bank.

Many people in the village also reported to having taken up private loans from friends and relatives since the earthquake. People who were not eligible for bank loans seemed to have been particularly liable to take up private loans. My impression was that because the majority of families in the village was in an equally difficult financial situation, people were perhaps more reluctant to ask each other for help than they would otherwise have been. However, less privileged households did not have any other choice than to rely on family and friends for support.

Lastly, people have spent their life savings on building new houses. As savings is an important form of social security for the Chinese peasants, some of my informants said they actually worried more about the fact that they had spent all the money they had been able to save up than the fact that they had taken up a large bank loan. Without money in the bank they felt unprepared for eventualities such as health problems and other unforeseen expenses.

Paid labor

Before the earthquake, between 400 and 500 of the villagers did manual work in near by towns and villages in addition to farming. Most of these workers were employed in either construction or in the service industry. Currently, quite a few people have also taken up work in either the local brickyard or in the newly established tile factory outside of the village. These two companies are the main providers of building materials used in the reconstruction of residential houses in the area. Both the tile factory and the brickyard are owned by national companies and have opened branch offices in Shi Fang only after the earthquake of 2008.

As previously noted, Yin Chi is also home to about 100 migrant workers, many of whom have returned to do construction work in Sichuan since the earthquake. Because the reconstruction after the Wenchuan earthquake to a large degree coincided with the global financial crisis, the migrant workers had been facing a situation where work was no longer readily available in eastern provinces such as Guangdong and Guangxi, where many had been employed in construction, industrial production and in the service industry. At the same time work opportunities in Yin Chi

and the surrounding areas increased. The boom in building activity in Sichuan led to a great need for, and even a lack of, skilled construction workers. Consequentially, the average wage for a construction worker in Yin Chi has nearly doubled during the first year after the earthquake, from approximately Rmb 50 per day in 2008, to approximately Rmb 100 per day in July 2009.

Bank loans

As previously mentioned, the actual housing subsidies provided by the government amounted to somewhere between 28 000 and 35 000 Yuan per household, depending on the number of household members. Although this was indisputably a rather generous sum, it was not enough for the villagers to cover the full cost of putting up a new house.

In addition to providing housing subsidiaries, the government guaranteed that the majority of earthquake victims would be provided low interest bank loans. As was pointed out previously in this chapter, state owned banks were ordered to support their local branches in Sichuan, in order to enable them to extend low interest loans to the people who were affected by the earthquake. Moreover, the banks were encouraged to extend the collateral range of private loans. As a direct result of this policy, it was much easier for the farmers to be granted bank loans in the year following the earthquake than it was before the disaster. Low interest loans are being allocated among eligible applicants not according to their household income, but according to the value of the house that they put up as collateral. However, all of the loans are to be repaid within a period of three years. This practice has resulted in a situation where a many people have taken up loans that, seen in relation to their household income, are disproportionally large. I was told by the village secretary that approximately 90% of the new houses in Yin Chi had been financed at least partially by bank loans. For many of the loan takers, it seems unlikely that they will be able to meet their obligation to repay their mortgage on time.

This assumption is supported by the surveys that were conducted by research institutes CASTED and Fafo in July 2008 and 2009. According to the rapid needs assessment that was carried out immediately after the earthquake in 2008, people in rural areas had rather high expectations for government housing subsidies. 40,7% of the people who were interviewed said that they were hoping to receive more than 80 000 Yuan, while another 53,8% said they were hoping to be granted that at least 50 000 Yuan. Only 9% of the respondents said they thought the provision of low interest loans was a good option for resolving people's housing needs.(CASTED, 2008). The study follow up study shows that approximately 61% of all the houses that have been built since the earthquake have been at least partially financed by bank loans. Interestingly, only half (50,7%) of the people who were interviewed believed they would be able to repay their loans on time; another 41,7% said

they expected to be able to repay the entire amount only if they could extend their payments, while the last 7,4% of the loan takers said they did not think they would be able to repay the loan at all.(CASTED, 2009).

Furthermore, for most of the people I talked to, the size of their mortgage seen in relation to their annual household income implies that they will not be able to go back supporting themselves by farm work alone in the immediate future. While for now, raising enough money for the down payments is not a problem, as jobs in construction are readily available throughout the province and the level of wages is currently high, but it remains to be seen what will happen once houses have been rebuilt and the new infrastructure is in place, and there are no more available construction jobs in near by areas.

According to the above mentioned survey, Sichuan's currently has a low level of unemployment. At the time when the survey was conducted, the overall unemployment rate was 1,9%. More people were recorded to be unemployed in the cities (3,6%) than in rural areas (1,6%). However, even though unemployment is not a serious problem today, the study concluded that it might pose a very real threat in the future. One reason for this is that a rather large percentage of the working population are only engaged in temporary jobs. 20% of the working population are newly employed, many of them only temporarily, in the post-earthquake reconstruction industry. 12% of the respondents said they feared that they would loose their jobs within the next two years, with the completion of reconstruction projects.(CASTED, 2009).

Attitudes towards using bank loans as a means of attaining disaster recovery

In interviews with villagers and members of the village leadership, I asked people to talk about their attitude towards the new practice of loaning money. I soon discovered that different people perceived the situation very differently. While some were taking maximum advantage of the opportunity to loan money and were not afraid to spend them on building modern houses or even to invest in starting small businesses, others talked about the long term implications of having borrowed large sums of money, and were worried that they would not be able to pay it back on time. Yet another group had not been eligible for bank loans at all, and had been forced to find other ways of financing reconstruction. Later in this chapter, case studies of three different households will be presented for the purpose of illustrating how the earthquake has affected different groups of the population.

The village secretary (*shuji*) estimated that 90% of the people of Yin Chi had taken up bank loans since the earthquake, and that most of these people had borrowed somewhere between 10 000 and

20 000 Yuan. He gave voice to what seemed to be a shared feeling among many of the villagers, namely that the most important thing after the earthquake had been to cope with immediate needs and provide housing, and that no one had been in a position to think about the long term consequences of borrowing money. However, he seemed to be quite optimistic: *“The first priority is to finish the construction of new houses. Then.... slowly, people will pay back the money they are spending now.”*³³

It is worth noticing that for a large proportion of the villagers, this was their first time to take up a loan in the bank. Previously, a more common way to cover unforeseen expenses had been to borrow money from family or friends, but because almost everyone in the village were now facing the same challenge of coming up with enough money to build a new house, few people were in a position to lend large amounts of money to others. Consequentially, not many of my informants reported to having financed housebuilding by taking up private loans alone.

According to the village secretary, people's attitudes towards borrowing money had changed since the earthquake. Previously, many had been reluctant to loan money in the bank, as they felt it was more proper to save money and not spend it until they had enough to cover the full cost of what ever it was they wanted to use the money for. This traditional way of thinking, he explained, was considered *poor* and *backward*.³⁴ The following quotation illustrates his perspective quite well:

“There is a saying that goes: Old Chinese women work hard and endure hardships; old American women are happy. (The reason for this is that) the old American woman knows how to enjoy (spending) money, while an old Chinese woman is more interested in saving them,³⁵ ... This view is very old fashioned.”

The forced shift towards less moderation had been welcomed by the village leadership, as they perceived traditional attitudes towards money to be standing in the way of progressiveness, modernization and further economic development. Furthermore, the secretary emphasized that the village had in fact taken the opportunity to *build back better*, by investing in improving the infrastructure and by modernizing residential houses. However, he also expressed some concern to the fact that some of the villagers did not seem fully aware of their responsibility to repay their loans on time, nor of the possible consequences should they fail to do so.

A few of the villagers I spoke to said that they tried to consider the situation as an opportunity to

³³Information obtained in an interview with the village secretary, 10.08.2009: “先把房修好，然后再慢慢来还钱.. 他们已经改变了那种以前的把钱赚够了才来买房子的想法”。

³⁴落后, 穷.

³⁵有的说我们中国的老太太辛苦，美国的老太太幸福。美国的老太太是有钱就懂得享受了。我们中国的老太太是只会有钱就攒起来。

either improve their standard of housing or, in a few cases, start new sideline businesses. One example is a young couple with quite average incomes, who had borrowed as much as 30 000 Yuan from the bank, for the purpose of building a house that was “*both bigger and better*”³⁶ than the house they were living in before the earthquake. Another couple had borrowed more money than they needed for building a new house, and were planning to spend it on the equipment they needed to start producing mu er; a kind of mushroom that is more expensive to grow-, and that demands a much higher buying price than the other kinds of produce. However, the majority of my informants had borrowed money in the bank out of pure necessity.

Private loans

Quite a few of my informants also reported to having taken up private loans from friends and relatives.

My distinct impression was that because the majority of households in the village were struggling to return to their pre disaster condition, people were perhaps more reluctant to ask each other for help than they might otherwise have been. The principle of “ones neighbours can not provide help when they are also under stress” applied to the situation in Yin Chi after the earthquake. Several of my informants reported that nor did they expect anyone else to be in a position to help them out, nor were they themselves in a position to offer help to others. However, less privileged households did not have any other choice than to rely on family and friends for support during the process of reconstruction. This were particularly true of those who had not been eligible for bank loans.

Spending their life savings

Several of the people I spoke to in Yin Chi told me that because they had spent their life savings in the process of building a new house, they could not afford to seek medical advice even though they were suffering from health problems. One example of this was an elderly woman who said she was forced to leave her cataract untreated, as her family could not come up with the 5000 Yuan she needed for an operation.

(Lack of) social security

The only form of social security that is especially targeted at underprivileged groups (other than orphaned children, people who were disabled in the earthquake and elderly people with no family) is the so called minimum living allowance, a monthly monetary subsidy of approximately Rmb 260

³⁶Interview number 5; 16.08.2009.

that is granted the poorest households in the village. Before the earthquake, 109 households qualified for the basic living allowance. Since the earthquake, this number has risen to 160. Although an increased number of people currently receive the minimum living allowance, no additional form of welfare or social security has been provided for underprivileged groups who are struggling to return to their pre disaster condition. As stated in the official financial plan, the bank loans that are extended to people in the earthquake affected areas are intended to provide them with the financial means to build a new house and retain their livelihood. However, this solution is very problematic, as the most vulnerable groups of the population were not eligible for these loans, even under the relaxed regulations that were issued after the earthquake. These groups include people over the age of fifty, households consisting of only one person, and households with incomes far below the village average. In several cases, people who were not fit for physical labor and who were therefore prevented from taking up paid employment were also denied bank loans. These people would have benefited from additional external support, but since no such support has been offered they are struggling to attain full recovery after the disaster.

People over the age of fifty

People over the age of fifty constitute a group that is underprivileged in several ways. Firstly, as most people in the village have been farmers their entire lives, they do not qualify for state pensions when they reach the age of retirement. As they are not entitled to any form of social security, elderly people are still forced to rely heavily on their families for financial support. Since the earthquake, the situation of people over the age of fifty has become considerably more difficult than it was before. The main reason for this is that they are not eligible for bank loans, something which has made it virtually impossible for them to resolve the problem of housing without receiving considerable amounts of help from family members. When asked, people in the village agreed that even in times as difficult as these, adult children were still expected to care for their adult parents. When asked to talk about the current financial situation of her family, one of my informants told me that because her parents were too old to do the job of building a new house for themselves, and because her husband did not have the capacity to do it for them, the family had not had any other choice than to have her parents participate in collective reconstruction. This in spite of the fact that they did not feel that they could afford to cover the cost of building a house that was relatively expensive. In order to resolve this problem, her parents had taken up a bank loan in the name of their son. In addition to this, their children had contributed a total of Rmb 20 000. In order to be able to do so, they had all borrowed money from both the bank, friends and relatives. My informant said that although borrowing large sums of money had put them in a difficult position, they

considered it only natural that the adult children in a family should finance housebuilding for their parents.

However, many families were simply not able to finance the reconstruction of their own house and that of their parents at the same time. Several households consisting of an elderly couple also said they had been forced to build new houses of poor quality, because they did not have the financial means to either participate in unified reconstruction or to pay for the construction of a house that met the requirements of official building regulations.

Case studies

For the purpose of illustrating how the above mentioned strategies of resource allocation are affecting different groups of the population in Yin Chi, three different case studies will be presented. For the purpose of protecting the identity of my informants, their names have been changed.

The first case study is the family of a returned migrant worker, who is currently employed in a local construction company. The second case is a family of farmers, where several family members have a long medical history. The third case study is an elderly couple over the age of fifty who were ineligible for bank loans. The different ability of these three households to attain disaster recovery illustrates the fact that the official strategy of resource allocation has a differentiating effect across social classes.

The first two cases have some common features. Both households consist of a married couple in their mid forties and an adult son. Furthermore, the two have financed the construction of new houses in similar ways: Both families have so far spent somewhere between 40 000 and 50 000 Yuan on their new house; both received 26 000 Yuan in government subsidies; both have spent their life savings in the process of building the house, and both have taken up a loan of exactly 15 000 Yuan from the local bank. However, as the following presentation will show, only one of the two families seem likely to be capable of generating enough money to repay their loan on time, whilst the other is already struggling to return to their pre-disaster condition:

Household number 1: The Huang family.³⁷

This family consists of a married couple in their forties and their adult son.

Mr. Huang is a returned migrant worker, who was previously working for a construction company in Guangzhou. When the earthquake struck in 2008, he had been living and working in Guangzhou for almost ten years. His wife and son had been left in Yin Chi, where they have a small plot of land

³⁷Interview number 15; 26.08.2009.

where they grow wheat and garlic. For the last couple of years, Mr. Huang had only returned home for Chinese new year, but after the earthquake he returned to the village and started to work in a local construction company. In spite of the fact that he had been absent for almost ten years, it was not difficult for him to find work there upon his return. This was partly due to the fact that there is a great need for skilled construction workers, and partly because he has a large family in Yin chi, who were able to help him get in touch with people.

Since Mr. Huang returned to Sichuan, his salary has doubled: While he was working in Guangzhou, he made 50 Yuan per day, or approximately 1000 Yuan per month. Back in Sichuan he is currently making more than 100 Yuan per day or approximately 2000 Yuan per month. He explained that although he is pleased to be making so much money, he feels exhausted from working double shifts every day; building someone else's house during the day and working on his own house at night.

The Huang family have built a house that is approximately 60 square meters. They have done all the work themselves, and spent close to 40 000 Yuan in the process. As I mentioned in the introduction, the family has taken up a bank loan of Rmb 15 000. Before the earthquake, neither the couple in question, nor the woman's parents, nor those of her husband had ever borrowed money from the bank. According to the wife of Mr. Huang, ordinarily, they would have asked someone in the family to give them a loan if they needed one, but since the earthquake everyone has spent all their money on building new houses, and no one is in the position to lend each other money. In her own words: *"Others are not able to help you, and you are not able to help others."*

Although unaccustomed to the new situation, Mr. Huang and his wife were fully aware of their obligations as loan takers. Their loan is to be repaid within a period of three years; however, they are not required to make monthly down payments. For now they are only paying interests on the loan, but they realize that the longer they wait before they start to pay back the money they owe, the more the loan is going to cost them. Furthermore, that if they fail to repay the money in time, the bank has the right to confiscate their new house. When I asked whether or not they thought they would be able to come up with 15 000 Yuan within three years, Mr. Huang answered that *"After the earthquake, we didn't have any other choice but to borrow money from the bank to build a new house; now we don't have a choice but to pay it back. That's just the way it is."*

Mr. Huang could not say for sure when he thought he would be going back to Guangzhou. He explained that as long as he can make more money in Sichuan than he would in Guangzhou, he will keep looking for work in the earthquake area. However, he was well aware that the current situation will not last for ever, and was planning to go back to Guangzhou as soon as there are no more construction jobs available in Sichuan.

As the figures presented in this example show, this is a family who seems likely to be able to repay their loan without great difficulty, as their household income for 2009 alone was expected to be more than 20 000 Yuan. The family members have coped with the strenuous task of building a house at the same time as they were working full time in the fields and doing paid construction work. They have benefited economically from their capacity to do most of the construction work themselves, and from the husband's ability to find work in the post-earthquake reconstruction industry. Although they do not consider themselves to be particularly well off, their household income is well above the village average. However, because of the loan they have taken up in the bank, the Huang family is more economically dependent than they were before the earthquake. The extra income that the husband generated as a migrant worker used to be a supplement to the household economy has become a necessity.

Household 2: The Sun family³⁸

The second household consists of a married couple in their forties. They have an adult son, but he has moved out of the family home.

The Sun family is in an entirely different situation than the Huang family, as the husband and wife both suffer health problems. Since the earthquake, neither of them have been capable of taking part in the construction of their own house, nor taking up paid employment to make money to cover some of their expenses.

The father and husband of household number two, Mr. Sun, used to do seasonal work outside of the village in addition to farming, but since he was diagnosed with Diabetes in 2007, he has not been able to do so. His wife, who has recently been diagnosed with Hepatitis B, has never worked outside of the household. Their only source of income is the money they make from growing rice and garlic, not more than Rmb 1000 per month, or Rmb 12 000 per year.

This household had chosen to participate in collective reconstruction, because they were not capable of doing construction work themselves, and because they believed this to be the safest and most convenient option. Their new house will be 60 square meter, and will cost them about 50 000 Yuan to build.

The Sun family received Rmb 26 000 in government subsidies. In addition, they have borrowed Rmb 15 000 from the bank: As the low interest loans that have been provided for the people in Yin Chi since the earthquake have not been allocated according to income, but rather according to the

³⁸Interview number 3; 16.08.2009.

value of the house that is put up as collateral, Mr. Sun and his wife had been granted the loan they applied for without any difficulty. This in spite of the fact that they make very little money. When we take into account the fact that the household has monthly medical expenses of somewhere between Rmb 300 and 700 every month, it seems highly unlikely that they will be able to repay the loan of Rmb 15 000 within a period of three years:

If we assume that the monthly medical expenses of this family average at around Rmb 500 per month, and totals at Rmb 6000 per year, we see that this amounts to half of the total household income. After medical expenses are paid, they are left with only Rmb 6000 per year. If we also assume that they make annual down payments of Rmb 5000 of their bank loan, that leaves them with only Rmb 1000 per year to cover all other expenses. As previously noted, it seems virtually impossible that family number two should be able to meet their obligation to repay the their loan within the set time limit.

Household 3: The Lu family.³⁹

Another even less privileged group is constituted of people who were not eligible for bank loans and who were therefore forced to find alternative ways to finance the construction of their new house. The majority of people in this group were people over the age of fifty, many of them past the age of retirement. As I have already mentioned, the farmers are not entitled to state pensions. Moreover, since the earthquake no social security has been targeted especially at this group, and little is done by official authorities to support the people who did not meet the banks minimum requirements. The third case study that will be presented is a household who is among the poorest in the village. Their case will illustrate how already underprivileged groups have become poorer – both in terms of relative and absolute poverty – during the process of disaster recovery.

The Lu family is a household consisting of an elderly couple, both over fifty years of age. This household is among the poorest in the village, and they qualify for the government's minimum living allowance. The reason why they consider themselves poor is not only that they make less money than other average households in Yin Chi, but that they have taken up a bank loan of Rmb 50 000 to pay for the education of their only son. Even though the son has completed his education and is currently making more than Rmb 5000 per month, he does not help his parents with the down payments of his student loan. Consequently, Mr. Lu and his wife, who have a total annual household income of approximately Rmb 12 000, are spending a large proportion of their earnings on monthly deposits to their bank.

³⁹Interview number 16, 28.08.2009.

The house of Mr. Lu and his family is situated in one of the three neighbourhoods where unified reconstruction was organized. His wife told me that they had attended the first discussion meetings that were held after the earthquake, and seriously considered to participate in unified reconstruction. However, because they were both over fifty years of age, and because they already had a large bank loan, they were not granted another loan in the bank. As it became apparent that they did not have the financial means to participate in unified reconstruction, they decided instead to reconstruct their own house on its original site.

The economic situation of the Lu family had forced them to spend as little as Rmb 25 000 on the construction of their new house. As previously noted, the price of a house also reflects on its quality. The house of this family had simply been rebuilt on top of the foundation of the house that collapsed from the earthquake, using a combination of new materials and used materials taken from demolished houses. Like the house that collapsed, it was a traditional courtyard house, with the main living quarters and the *houfang*⁴⁰ centred around a brick courtyard. Due to the fact that the sloped tile roofs of these old-fashioned courtyard houses had proven to be extremely fragile when the earthquake struck, only a small minority of villagers had chosen to rebuild their house in this design. The new house of this family (90 square meters) was also considerably smaller than the old house (120 square meter). Moreover, the members of the Lu household had done most of the construction work themselves, including the installation of all electrical and sanitary facilities. While it was not uncommon for the villagers to do at least parts of the construction work either by themselves or with the help of family and relatives, almost all households had hired skilled construction workers to do the ground work. Several of the households who had been forced to do the job on their own reported that they did not feel sure that they had managed to build a house of satisfactory quality.

Mr. Lu's wife told me that the economic situation of the family had deteriorated since the earthquake. Having spent all their money on the construction of a new house, they were finding it hard to make ends meet. Clothes and furniture had been passed on to them by friends and relatives, and they relied on their son to support them with money to buy food. More gravely, they currently did not have the money they needed to seek medical assistance. Mr. Lu's wife was suffering from cataract, but could currently not afford to have it treated. Mr. Lu himself had a bad back, but felt that he could not afford to take days off from work nor seek medical treatment.

⁴⁰ A building that houses the pig pen, the toilet facilities and a shack for general storage.

Conclusion

This chapter has shown that Yin Chi is experiencing both the positive and the negative effects of the booming economy. On the one hand, there is a surplus of jobs, and those who find work in the post-earthquake reconstruction industry are making more money than ever before. On the other hand, commodity prices are raising along with the level of wages, causing those who are not fit for physical labor to become relatively poorer.

Compared to the first household that was presented, households number two and three are economically disadvantaged in several ways. Firstly, they are not benefiting from the currently high level of wages in the construction industry, yet they are still subjected to the high level of commodity prices. One of my informants, who was currently employed in construction work in the village, pointed out that even though he was making more money than before, he did not think he was not becoming any wealthier. The reason for this, he argued, was that the prices of commodities were rising along with the general level of wages in the area. Consequentially, his family was forced to spend just as large a proportion of their total income on food and other necessities as they were doing before: *“It all evens out.”*⁴¹ However, if we compare the financial situation of this family with that of households where none of the household members were employed in paid labor, it becomes apparent that even though they are not becoming more wealthy in terms of increased purchasing power, they are relatively better off than a large proportion of the villagers. While it is true that few people believe themselves to be benefiting from the current situation, some groups experience more difficulty in adapting to the new economic situation than others. Those who have proven to be most vulnerable, and who seem to be becoming relatively poorer than they were before the earthquake, include people over the age of fifty, who were not eligible for bank loans, and all those who -for whatever reason- are not employed in paid labor.

People who do not meet the minimum requirements of the state owned banks might have been prevented from seeing their household economies deteriorate as much as they have had the government instituted a system of social security aimed at targeting underprivileged groups in the process of reconstruction, yet little is being done to even out the differential effects of market based recovery.

What makes this matter even more pressing is that unequal access to resources during the process of reconstruction is also affecting the level of vulnerability towards future disasters. As mentioned in the previous chapter, it remains unclear whether or not the villagers actually had any real knowledge of the official building requirements. Although the government plan for earthquake reconstruction states that *“People's government at all levels in the disaster affected area shall*

⁴¹Interview number 15, 26.08.2009

organize planning and provide rural habitants with diversified housing design and technical guidance”(The State Council, 2008), I got the distinct impression that the amount of technical support provided for the villagers in Yin Chi varied from neighbourhood to neighbourhood, according to the level of competence and commitment of the various team leaders. In other words, the only people who were guaranteed to get qualified technical support were the ones who participated in unified reconstruction. This chapter has shown that several low income households who were excluded from doing so because they did not have the necessary financial means ended up building houses that they feared were unsafe and of poor quality.

7. Conclusion

This study has been based on findings from previous studies of disaster recovery that have shown that underprivileged groups are particularly vulnerable to disaster. They suffer disproportionately more damage from disaster than other groups, and they also tend to recover more slowly. Disasters thus have a differentiating effect on the level of both social inequality and vulnerability across social classes. Consequentially, the perhaps most important factor in regard to the effect that a disaster has on development, social inequality and future vulnerability, is the role of the state in planning, organizing and financing post-disaster reconstruction. Of particular importance is the state's willingness to offer help to low-income households who might otherwise not be able to manage to build a new house and regain their livelihood.

This thesis has shown that after the Wenchuan earthquake, the Chinese government's strategy of disaster recovery has been aimed at both attaining full disaster recovery and facilitating continued rural development and economic growth. The Overall plan for post Wenchuan earthquake recovery and reconstruction that was issued by the Central committee was based on findings from the rapid needs assessment that was conducted by CASTED immediately after the earthquake. In this way, the policy makers tried to take into consideration both the needs and preferences of the earthquake affected population before deciding on how to move forward with disaster recovery. At the same time, the policy adheres to existing strategies of coordinated urban/rural development, and it is clear from the policy document that the central policy makers have distinct preferences for recovery and future development in the earthquake affected area.

The main priority of the policy makers is to complete the process of reconstructing residential houses, infrastructure and public facilities within a period of three years. Other policy objectives include accelerating the process of urbanization, encouraging restructuring of the agricultural sector, increasing agricultural productivity, increasing the overall level of employment, increasing the standard of rural housing, using land more economically and reducing disaster vulnerability.

How has the process of disaster recovery following the Wenchuan earthquake affected the lives of people in Yin Chi?

It has been shown that because Yin Chi is situated in an area that is classified as small and decentralized, disaster recovery was carried out under minimal direct control from the central authorities. However, the state had a rather strong degree of indirect control over the process of disaster recovery, as it was the central policy makers who had set the premises for decision making, organization and execution of reconstruction. This was possible because public participation was

organized within the socialist administrative structure closely linked to government institutions rather than independent of them. On the other hand, the Overall plan for post Wenchuan earthquake recovery and reconstruction allowed for negotiations and adoptions to be made at the local level, as it is specifically stated in the policy document that in regard to reconstruction at the local level, the wills of the earthquake affected population shall be respected. Within the limitations that were presented to them, the villagers' freedom of choice were not directly restricted by any outside authority, and in the last instance, it was the farmers themselves who decided how to organize disaster recovery.

The fact that Yin Chi was classified as *small and decentralized* also meant that not all of the policy objectives that were listed in the Overall plan for post Wenchuan earthquake recovery and reconstruction applied to this village. Most notably, no changes had been made to the way in which farming is done in the village after the earthquake. The village still consists of small and traditional family farms, and the villagers have not switched to more industrialized or specialized forms of agricultural production since the earthquake.

In chapter five, it was pointed out that in regard to use of collectively owned cultivable land and reconstruction of residential houses, The State Council formulated a set of suggestions and guiding principles that were passed down to the villagers by way of oral transmission. These included making more efficient use of land by concentrating village layouts compared to the pre-disaster condition, and modernizing farmers' residential houses. It was then up to the individual neighbourhoods and households to decide whether or not to reconstruct in accordance with the model of *The new village*, or to rebuild their houses on their original sites. In Yin Chi, only three out of fourteen neighbourhoods arranged for this kind of reconstruction to be carried out.

All in all, the villagers in Yin Chi had been only moderately affected by the plans that were formulated by the central policy makers, aimed at integrating disaster recovery into existing strategies of rural development. More directly influential to the life situation of people in Yin Chi were the official strategies of resource allocation. As a consequence of these strategies, new economic restrictions, incentives and requirements were influencing the choices that were made by households and individuals at the local level, and thereby affecting the outcome of the reconstruction process. The way in which resources have been allocated since the disaster reflects the policy objectives of integrating disaster recovery into the process of re-establishing the local economy, increasing marketization, trying to avoid aid dependency and encouraging people to be self reliant.

Important policy objectives of the Overall plan for post Wenchuan earthquake recovery and reconstruction also included reaching a level of employment where at least one person in each

household have a secure source of income, and transferring surplus rural labor out of the agricultural sector. Whether or not it was the intention of the Chinese government to do so, they created strong economic incentives for the farmers to become more productive during the process of disaster recovery. This thesis has shown that both central policy makers and local authorities encouraged people to engage in activities related to disaster management and reconstruction, for example by taking up paid employment in the construction industry. In Yin Chi, the need to finance the construction of new houses has lead many of the farmers to take up paid employment after the earthquake, and because jobs in construction and reconstruction are currently readily available in the area, there is a low level of unemployment in the village.

It has been pointed out in this thesis that official authorities anticipate that unemployment might become a serious problem in the earthquake affected area in the future, when the process of reconstructing infrastructure, public facilities and residential houses has completed. In response to this threat, policy makers encourage rural laborers to continue to seek work outside of the agricultural sector; in rural non farm employment or by participating in long distance labor migration. This strategy of transferring surplus rural laborers out of the agricultural sector conform to existing strategies of rural development.

In Yin Chi, I found that the fact that the majority of households in the village have partially financed their new houses by taking up relatively large bank loans have implications for the ongoing process of rural development. Their obligation to repay these loans seems likely to result in a situation where people who have moved out of the agricultural sector will continue to look for non-farm work after the process of earthquake reconstruction has finished and there are no more construction jobs available in the area, rather than returning to farming alone.

How has the process of reconstruction affected the level of social inequality in the Yin Chi?

This thesis has also aimed at describing how the process of disaster recovery has affected the level of social inequality in Yin Chi. In accordance with Amartya Sen's definition of poverty, social inequality has in this context been conceived of as not merely differences in income, but rather as unequal freedom of agency, and different capacity to attain disaster recovery.

Chapter six has shown that by instituting a system of resource allocation that aims at rewarding individual effort, the state has been very successful at inspiring self-reliance, productivity and economic growth. On the other hand, the absence of social security targeted at underprivileged groups is problematic. An unfavourable consequence of the market driven recovery process is the effect that it has had on the level of social inequality. There are great variations in the extent to which various groups have been able to attain recovery since the earthquake. While some of the

more resourceful groups, such as the returned migrant workers, have gained from their participation in post earth reconstruction, less privileged groups such as elderly over the age of fifty are still struggling to return to their pre disaster condition.

Moreover, unequal access to resources during the process of reconstruction is also affecting the level of vulnerability towards future disasters. Lack of information and lack of financial capital has retained several poor households from taking precautions that might have made them less vulnerable. Moreover, lack of financial resources has lead to low flexibility, inability to make choices that could minimize risk, and inability to cope with unforeseen events.

In Yin Chi, many low income households were excluded from participation in so called unified reconstruction, and did not have the financial means to otherwise provide technical support, hire professional construction workers or buy building materials of good quality. Moreover, low income households are generally less capable of dealing with unforeseen events such as health problems than they were before the earthquake, because they have spent their life savings on trying to recovery from the disaster.

All in all, the process of reconstruction has had a differentiating effect among the villagers in Yin Chi. For some, the earthquake has constituted a development opportunity, but on the other hand, already underprivileged groups have become poorer than they were before, both in terms of relative and absolute poverty.

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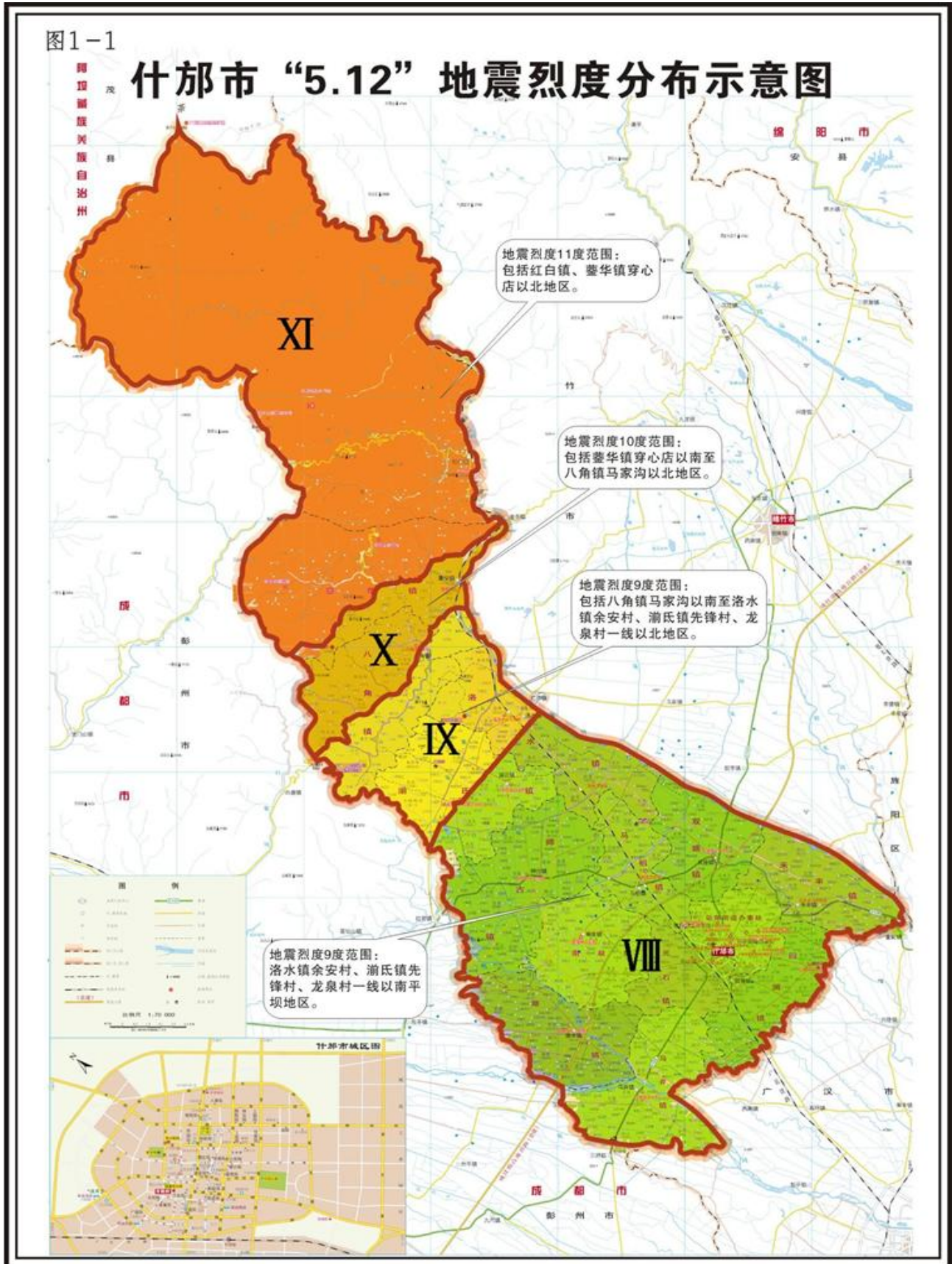
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Appendix 1: Map of Shi Fang county

Yin Chi is situated in the area marked as ix; seriously affected disaster area.



Appendix 2: Time line.

The Chinese government's response to the Wenchuan earthquake. (UNCRD, 2009).

May 12, 2008: The Wenchuan earthquake occurred

May 2008: Through the initial stages of disaster management, the main focus was lifesaving and medical assistance, as well as providing food and basic necessities for those affected by the earthquake and construction temporary houses.

June-August 2008: Rapid needs assessments were carried out in the earthquake affected areas.

June 8, 2008: The Chinese government issued an act regarding Wenchuan earthquake disaster recovery and reconstruction. (State Council Order No. 526)

June 24, 2008: The State Council released its report about earthquake relief, recovery and reconstruction.

August 12, 2008: The national plan for Wenchuan earthquake recovery and reconstruction was published.

September 19, 2008: The State Council released a final draft of the so called Overall plan for recovery and reconstruction after the Wenchuan earthquake. (the Chinese State Council, 2008).

November 09, 2008: The central government announces its economic stimulus program, aimed at preventing the 2008 financial crisis from leading to an economic recession. Financing post earthquake reconstruction in Sichuan was presented as an integrated part of this plan, and a large percentage of the total stimulus package was allocated to large infrastructure reconstruction projects in the province. (Financial Times, 2008).

May 2011: The proposed timeline for completion of recovery and reconstruction. By this date all the policy objectives in The Overall plan for post Wenchuan earthquake recovery and reconstruction shall have been reached.

