

RESETTLEMENT PLAN

SOUTHERN SICHUAN ROADS DEVELOPMENT PROJECT

IN THE

PEOPLE'S REPUBLIC OF CHINA

April 2002

THIS IS NOT A BOARD APPROVED DOCUMENT.

CURRENCY EQUIVALENTS

(as of 31 January 2002)

Currency Unit	–	Yuan (Y)
Y1.00	=	\$0.1208
\$1.00	=	Y8.2768

ABBREVIATIONS

ADB	–	Asian Development Bank
APs	–	Affected persons
AAOV	–	average annual output value
CORO	–	Country Resettlement Office
DMS	–	Detailed Measurement Survey
ECC	–	Expressway Construction Command
EIA	–	environmental impact assessment
LAB	–	Land Administration Bureau
M&E	–	Monitoring and Evaluation
Mu	–	Area of land equal to 1/15 hectare
PRA	–	Participatory Rural Appraisal
PRC	–	People's Republic of China
PRERO	–	Prefecture Resettlement Office
PRO	–	Provincial Resettlement Office
RPO	–	Resettlement Provincial Office
ROW	–	right of way
SPCD	–	Sichuan Provincial Communications Department
SPDI	–	Sichuan Provincial Design Institute
SPECL	–	Sichuan Panxi Expressway Company Limited
SPG	–	Sichuan Provincial Government
TA	–	technical assistance
TRO	–	Township Resettlement Office
TVE	–	Township and Village Enterprise

NOTE

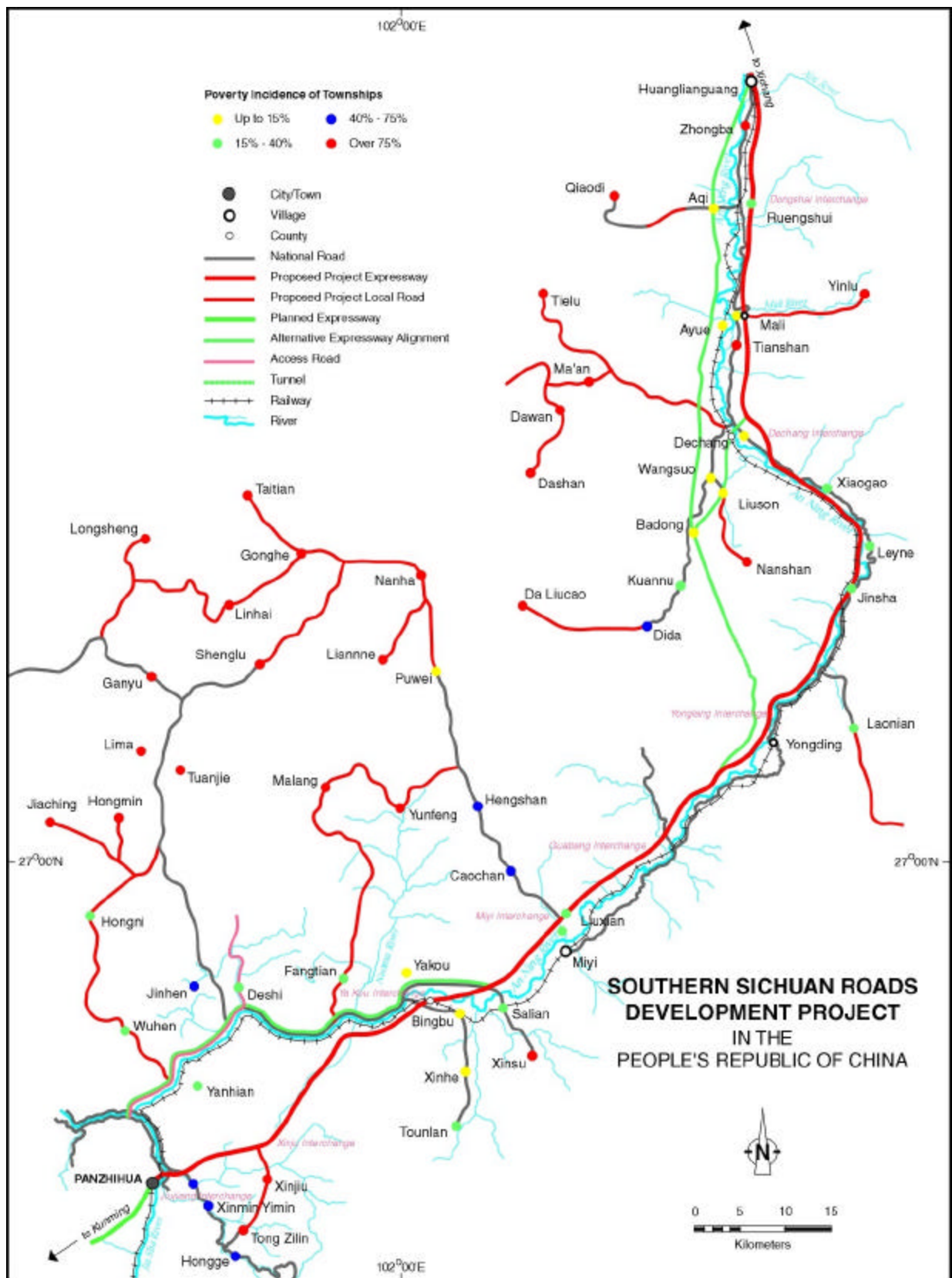
In this report, "\$" refers to US dollars.

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I. INTRODUCTION AND PROJECT BACKGROUND

A. Introduction

1. The Resettlement Plan (RP) was prepared by the Sichuan Provincial Design Institute (SPDI) with assistance provided under the Technical Assistance (TA)¹ and it addresses the land acquisition and resettlement aspects of the Southern Sichuan Roads Development Project. It has been prepared in accordance with the ADB's *Handbook on Involuntary Resettlement: A Guide to Good Practice*, Manila, 1998, the People's Republic of China (PRC's) 1998 Land Administration Law, Sichuan Provincial Regulations relating to land acquisition, other relevant national and provincial laws. Account is also taken of ADB's draft *Guidelines for Resettlement Plans for ADB financed Projects in PRC* (May 2001).

2. For both the PRC and the ADB, the over-riding objective of resettlement planning is to ensure that persons unavoidably losing land or property as a result of a development project attain equal or better livelihoods and living standards than if the project had not occurred. All policies, proposals and compensation measures contained in this RP are designed to meet this objective.

3. The preparation of this RP was based on: (i) relevant Project reports, particularly the Project Feasibility and Preliminary Design Studies, and the Resettlement Action Plan prepared by Sichuan Provincial Design Institute (SPDI) in June 2001; (ii) discussions with the principal authors of the above documents and especially those responsible for the RP; (iii) field visits along the proposed alignment; (iv) consultations with various local governments, village leaders and APs; (v) socio-economic surveys of affected households carried out in July and October 2001; (vi) meetings with representatives from all affected villages to discuss and determine preferred compensation and income restoration strategies and average annual output value (AAOV); and (vii) comments provided by ADB on the draft.

B. Processing Issues

4. The RP is based on data from the Preliminary Design Study, completed in August 2001. This data has a high level of reliability as they have been assessed on the selected right of way (ROW). However detailed designs may require minor modifications to the width of the ROW or alignment may occur. In order to fully assess project impacts prior to their occurrence, RP impact data and cost estimates will be reviewed and amended if necessary following the results of the Detailed Measurement Survey (DMS). As required by Government Regulation, DMS execution will also be accompanied by a review of village compensation rates and options, by a productive improvements plan for each village, and by a plan for the rehabilitation of irrigation schemes affected by the expressway. The results of the DMS and of the compensation rates and options review and the productive improvements/irrigation rehabilitation plans will be detailed in a RP Addendum comparing RP and DMS review data and indicating eventual budget changes. The RP Addendum will be sent to ADB during project preparation.

5. This RP relates almost entirely to the Xichang-Panzhihua expressway component of the project. No RP has been prepared for the local road component as this component exclusively

¹ TA 3546-PRC: *Preparing the Southern Sichuan Roads Development Project*, for \$800,000, approved on 16 November 2000.

involves the upgrading of existing roads. It is not anticipated that this upgrading will have any land acquisition or resettlement impacts. However to guarantee that unforeseen impacts are treated in accordance with the ADB's resettlement policy, the policies, measures and procedures described in this RP will also be applied to the local road component. The procedures to be adopted are described in Chapter XIII. In order that villages along the proposed improvements can be informed as to these provisions, an information booklet has been prepared.

C. Project Background and Description

1. Project Background

6. The Project will involve the construction of a dual 2-lane expressway with hard shoulders from Huanglianguan in Xichang County to Jinjiang on the southwestern side of the Jinsha Jiang tributary of the Yangtze, near the major steel-producing city of Panzhihua. The total length of the expressway will be 160 km. The expressway is an essential section of National Highway No.108 (G108), which is one of the eight Western Region Corridors planned by the Ministry of Communications (MOC) for implementing the Western Region Development Strategy. This Corridor links Lanzhou, the capital city of Gansu Province in the North and Mohan, a border town in southwest Yunnan Province. The Expressway is a vital link in the expressway network of Sichuan Province, as well as an arterial corridor from Sichuan to Kunming, the capital city of Yunnan Province.

7. The proposed expressway will accelerate the highway network upgrading in Sichuan Province, meanwhile supporting the Western Region Development Strategy through improving transport conditions, facilitating the exploitation of rare-metal resources, and strengthening capacity building in local social-economic and environmental development. This will contribute to poverty alleviation and promotion of the welfare of minority nationalities in the project area.

8. Since the reform and opening to the outside world, especially since 1985, Sichuan has witnessed great changes. However, the economic development in the general region of the project is lower than the average level of the province. Underdeveloped communication infrastructure and a poor investment environment are cited as the main causes of this slower pace of development.

9. The Panzhihua-Xichang area has four primary advantages: mineral deposits; agriculture; tourism and hydropower reserves. The weak transport links with the outside world severely constrain these advantages. In terms of the official strategic development plan for Sichuan Province, the Panzhihua-Xichang area has an important role.

10. The project will service many cities and towns along its route, and will provide a substantial boost to the economic development of the project area. During the entire investigation process, consultations have been conducted with concerned departments and local governments at various levels. Sufficient notice has been taken of their comments to ensure this project is in line with the plans of each city and town as much as possible.

11. The Project also includes the upgrading of around 558 km of poor standard rural roads. This component has been designed explicitly to improve accessibility to impoverished townships and villages in the Project Area.

2. Project Description

a. Route Description

12. The proposed expressway is located in Liangshan Yi Minority Autonomous Prefecture and Panzhihua Municipality of Sichuan Province. The project runs through Xichang and Dechang counties of Liangshan Prefecture, Miya and Yanbian counties and Renhe District (county level) of Panzhihua Municipality (see Map). The alignment will cross (i) Huanglianguan and Huangshui, two townships of Xichang County; (ii) Mali, Yilu, Dezhou, Xiaogao, Leyue, Jinsha, Jinchuan and Yonglang eight townships of Dechang County; (iii) Xijie, Guabang, Shaba, Caochang, Panlian, Salian and Yakou seven townships in Miya County; (iv) Xinjiu and Xinmin two townships in Yanbian County; and (v) Jinjiang Township in Renhe District. In all 20 townships will be traversed.

13. The alignment starts at the southern end of the Lugu-Huanglianguan Expressway, and crosses National Highway 108 and Chengdu-Kunming Railway at Huangbazi. It traverses Huanglianguan, Baxikou, Nantun, and connects to G108 through the Huangshui Interchange. Then it passes Wanao Village, Mali township to the Dechang Interchange at Mayuanwan and connects to G108 again. The alignment after the interchange runs south along the Anning River, passing Xiaogao Leyue and Jinsha townships, overpasses the Chengdu-Kunming Railway at Puba Village of Jinchuan Township, and then joins the Yonglang Interchange in Shaba Township, where it links G108 with the expressway. The alignment then passes the Gejiabao Tunnel, traversing Wanqiu, to Guabang Interchange and connects with Provincial Road No.214 (S214). After crossing Shaba, two crossings of the Anning River, and through Caijiashan, and the Xiaoshishan tunnels, the alignment passes by Miya County town in the west, and arrives at the Miya Interchange in Shuitangba Village, where it connects with S214 again. Continuing to the south, after Maomaoshan and Dingzishan tunnels and Salian Township, it crosses the Anning River at Gannian, and reaches the Yakou Interchange (connects with S214). The alignment overpasses the Chengdu-Kunming Railway at Niukengtou, and subsequently it follows the east bank of Anning River, then climbs up the mountainous valley wall. After Huijinggou, Bayan and Suanshuiwan, it then traverses the Xujialiangzi tunnel and descends along Jiudaogou and the Bala River. It then reaches the Xinjiu Interchange, which connects the alignment with the Hongge-Xinjiu local highway. Thereafter it continues descending to Shangbala, Liudaohe and Xinmin, and after the Dashan Tunnel, it spans the Jinsha River and terminates where the Jinsha Interchange connects with Panzhihua City. The majority of the alignment runs through and along the sides of the fertile Anning Valley, regarded as the second largest food production basket in Sichuan Province.

b. Principal Technical Standards and Cost

14. The major standards are listed in Table 1. The total cost is estimated to be in the order of RMB 8.5 billion. It is currently anticipated that contractors will commence civil works in December 2002. The expressway is to be completed by the end of 2007.

Table 1: Major Technical Standards of Xichang-Panzhihua Expressway

No.	Item	Unit	Quantity	Remark
01	Highway class		Expressway	
02	Total length	Km	160.303	
03	Designed driving speed	Km/h	80~60	60km/h after K126
04	Traffic volume	Vehicle/24h	32700	Average in 2026
05	Requisitioning land	Mu	12,984.57	Permanent
06	Removing buildings	M ²	171,264	
07	Removed cable/wire	M	234,850	
08	Subgrade width	M	24.5/23/20	With designed speed 80/80/60 m/h
09	Lane widths	M	4x3.75-3.5m	Lane width reduced after km126
10	Earthwork	M ³	10,148,466	
	Stonework	M ³	6,451,250	
11	Length of bridge & tunnel	%	33.67	
12	Extra large bridge	M/No.	7490.16/13	
13	Large bridge	M/No.	23679.45/103	
14	Medium bridge	M/No.	4121.29/61	
15	Small bridge	M/No.	1091.09/40	
16	Length of tunnels	M/No.	17617/23	
17	Interchange	No.	8	
18	Culvert	M/No.	12499.1/311	
19	Grade separations	No.	100	Crossing with road and railway
	Crossing with pipelines		8	
20	Overpass	No.	53	Including dual purpose ones for
21	Underpass	No.	179	Irrigation aqueduct bridges and drainage tunnels.

c. Socio-Economic Benefits

15. The Project is expected to have the following socio-economic benefits: (i) reduced VOCs and travel times for traffic using the Xichang to Panzhihua corridor; (ii) the removal of constraints to economic growth (especially agricultural production) in the project area resulting from the poor condition of the existing road; (iii) improved environmental conditions and reduced accident risk on the existing road; (iv) increased short-term construction jobs in townships crossed by the Expressway. In addition, the improvements to the local road network are expected to lead to the following benefits to mountainous communities: (i) reduced transport and agricultural input costs; (ii) increased opportunities for cash cropping; (iii) increased non-agricultural employment activity; (iv) improved access to markets, schools and health facilities. All the above will contribute to improving the standard of living of the poor and impact favorably on women and ethnic minorities living in the Project Area.

d. Land Acquisition and Resettlement Impacts

16. Based on the preliminary design, the total expected permanent acquisition of land is around 13,283 mu (885 hectares) and the temporary use of land will amount to 1,812 mu (121 hectares). Around 80% of the land is currently under cultivation. The number of people who will lose land over which they now have a usufruct right will be around 8,900 people. The project will require the demolition of 566 houses occupied by 2,600 people (566 households) that will have to be resettled. In addition to these, another 950 persons (200 households) living in collectively owned premises would also require relocation. Thirteen enterprises, government agencies and schools that will suffer demolition of part or all of their buildings. There is a high

degree of overlap between those who lose land and those who lose houses. Bearing this in mind, it is currently estimated that the total number of persons affected will be around 10,700. A final estimate will only become available once the final design has been completed and the Detailed Measurement Survey (DMS) associated with the formal land acquisition procedures is undertaken. Any changes will be reported in the RP Addendum.

17. As previously mentioned, it is not anticipated that the local road component will involve significant resettlement or land acquisition impacts.

18. The total cost of implementing the Resettlement Plan is estimated at Y474 million. This estimate is subject to revision in the RP Addendum.

19. Land acquisition and resettlement processes are expected to commence in early 2002 once the Government approval has been given on the feasibility study.

II. LAND ACQUISITION AND RESETTLEMENT IMPACTS

A Measures to Reduce Resettlement

20. When aligning the route, a key design principle was to minimize the land acquisition and house demolition per kilometer of the expressway. This was achieved by (i) avoiding cities, towns and densely populated residential areas; (ii) occupying as little farmland as possible by aligning the road along the valley sides rather than through its center; and (iii) placing the alignment close to, rather than through, villages.

21. The resultant rate of arable land acquisition per km is only 5.4 hectares per km. The rate of house demolition is 3.5 per km. It is thus considered that the key objective of minimizing demolition and land acquisition has been achieved.

B. Requirements for Land and Property

22. According to the Guideline for *Design Document Compilation of Highway Engineering Project* issued by the Ministry of Communications of PRC, land and structures in the following categories has been estimated:

- (i) Land: irrigated, non-irrigated (dry), orchard, forest, barren, residential. A distinction is made between land required permanently and temporarily (i.e. during the construction period only).
- (ii) Trees and young crops: fruit trees, economic trees and timber trees.
- (iii) Housing categorized by type of construction: e.g. brick-concrete, brick and tile roof house, clay and tile roof house, clay and grass roof house.
- (iv) Structures and fixtures: e.g. sunning ground, enclosure wall, pigsty, water pond, wells (including pump well), fishpond, biogas digester and tomb.
- (v) Infrastructure: e.g. power lines, telecommunication lines, and pipelines.
- (vi) Non-residential establishments: e.g. schools, government offices, and enterprises.

23. Table 2 summarizes the principal categories of land and property acquisition. More details, including a breakdown by village, are contained in Annex A. Around 80% of the land to be acquired is currently farmed and over 50% of this land is irrigated. Most of the remainder is barren. Around 570 private households will require relocation, as well as around 200 households living in collectively owned premises. Over 70% of the land acquisition and over 80% of the property demolition will occur in Dechang and Miya counties. Temporary land to be rented during construction will amount to 1,800 mu.

Table 2: Land and Property Acquisition

ITEM	COUNTY					TOTAL
	Xichang	Dechang	Miya	Yanbian	Renhe	
Townships^a	2	7	7	2	1	19
Villages^a	8	25	18	4	1	56
Permanent Land Requirements (in mu)						
Irrigated Land	1071	2703	1592	128	16	5510
Dry Land	342	2219	1866	593	134	5154
All Farmland	1413	4922	3458	721	150	10664
% Irrigated	76%	55%	46%	18%	11%	52%
Housing	10	93	118	13	67	301
Other ^b	221	380	1058	660	0	2318
Total	1643	5395	4634	1394	217	13283
% Productive	86%	91%	75%	52%	69%	80%
Temporary Land Requirement (mu)^c	343	573	631	265	0	1812
Trees (no.)	13,463	90,538	71,704	33,178	5,300	214,183
Private Households requiring relocation	41	228	256	35	6	566
Floor space (m ²)	6,730	62,231	70,291	16,815	15,000	171,264
Non-private households requiring relocation	0	20	57	2	125	204
Infrastructure (m)^d	21,800	97,450	97,150	13,550	8,500	238,450

^a Crossed by expressway

^b Forest land (5.5% of total land requirement), orchard land (2%) and barren areas (10%)

^c Mostly dry or barren land

^d Including electricity and telecommunications cables

Source: Preliminary Design Study

24. The impact of land and property acquisition will be widely spread with over 50 villages in 19 townships losing land or property: 53 villages will lose farmland and 47 will lose property (see Appendix 1). 18 villages will lose more than 225 mu (15 hectares), of which 9 will lose more than 20 hectares. On average, villages will lose around 10% of their land; those likely to lose more than 20% of their land are Guanmen and Luomi in Jinchuan township, Yongyue (Yonglang township), Guabang (Guabang), Binghai (Salian), Dianmu (Yakou) and Shuiping (Xinjiu). It is estimated that land will be acquired from around 140 land-owning groups (e.g. collectives or sub-villages) and that these groups will on average lose 25-30% of their land.

25. 13 nonresidential or publicly owned residential establishments will be affected by land acquisition. These are:

(i) Dechang County (5): Huangshui water Company, Pig Raising Farm of Dechang Food Company; Lianmeng Primary School; Dechang Petro Development Company and Dechang Puba Railway Station.

(ii) Miyi County (5): Yangjiacun Primary School of Xijie Township, Wanqiu Farm, Water Management Committee of Panlian Township, Miyi Bone-powder Manufacturing Factory, Puwei Forestry Bureau of Sichuan Province and the Animal Husbandry and Veterinary Station of Panlian Township.

(iii) Yanbian County (1): The Forestry Bureau of Yanbian County.

(iv) Renhe (2): Panzhihua Forestry Corporation and affiliated Changjiang Children's School.

26. The infrastructure that will be affected includes power lines, telecommunication lines and cables, as well as pipelines. In addition, existing roads and irrigation systems will be "cut" by the expressway and will require rehabilitation. In terms of road impacts, 5 km of Class 2 road along G108 and 20 km tractor roads will be relocated. However, except the pipeline system, the restoration of the infrastructure will be included in the civil work of expressway construction. A condition of these contracts will be that the infrastructure is maintained at all times during the construction period.

C. Impacted Population

1. Population requiring Resettlement

27. Based on the preliminary design, around 566 private households will require resettlement. Applying the average household size of 4.6 obtained during the household surveys, the total number of persons affected will be around 2600. 47 villages will lose some property however the impact will be concentrated in 8 villages, which will lose at least 20 households; these villages account for 43% of the total demolition. 4 villages, Puba, Yangiacun, Shuitang and Huijing, will lose more than 30 properties—32% of the total. Around 200 households (950 people) will be affected by the demolition (whole or partial) of residences owned by public establishments (e.g. schools, forestry bureaux). The total number of households affected by demolition is therefore around 770 (around 3,500 people).

2. Population affected by Loss of Land

28. The number of affected people (APs) who will lose land to the XiPan Expressway can only be unambiguously identified during the Detailed Measurement survey (the DMS) undertaken after the ROW has been marked. There are two reasons: (i) the final ROW is not yet known; and (ii) there are no mapped village records of usufruct rights in each village, which can be overlaid onto the engineering drawings.

29. The following estimates are based on the methodology set down in the government procedures whereby the number of affected persons is obtained by dividing the farmland to be acquired by the average holding per capita. The current estimate of farmland required is around 10,700 mu. The social surveys revealed that the average land holding per capita along the alignment varies from over 1.5 mu to 0.6 mu (similar results were obtained from both individual households and land owning groups). The overall average is around 1.2 mu. On this basis the number of affected persons is around 8,900. The number of households affected, assuming 4.6 persons per household, would be around 1,950.

3. Total Population Affected

30. The total population affected by land and/or property acquisition will be less than the total of the estimates obtained in the previous paragraphs due to a substantial overlap between the two categories. Two thirds of respondents likely to lose property also thought that they would lose land. In consequence the total number of persons affected will be in the order of 10,700 in around 2,300 households.

31. The estimated number of APs is equivalent to around 11% of the total population of the villages crossed by the road and around 30% of the population of the land-owning groups who will be affected. In other words, while the overall level of impact will not be significant at the village level, it will be at the level of the land-owning groups.

32. As stated in the introduction, the above estimates, based on the preliminary design, have a high level of reliability. Final estimates will become available following the completion of the DMS. The results of the DMS will be included in a RP Addendum to be prepared and submitted to ADB as soon as possible following completion of the DMS.

III. SOCIO-ECONOMIC CHARACTERISTICS

A The Project Area

33. The XiPan expressway will require land and/or property to be acquired in the following counties: Xichang, Dechang, Miyi, Yanbian and Renhe (adjacent to Panzhihua city limits). Over 80% of the arable land will be acquired in Dechang and Miyi counties. Table 3 presents selected indicators of the socio-economic status in these counties.

Table 3: Economic Status of Project Areas, 1999

County	Population (1,000)	Agriculture Pop. (1,000)	Arable Land (ha)	Per capita arable land (mu)	GDP (Y1,000 current price)	Per capita GDP (Yuan)
Xichang	547	368	25413	1.036	3,777,820	6,906
Dechang	183	163	13858	1.275	661,260	3,613
Miyi	194	167	11627	1.044	781,420	4,028
Yanbian	181	162	10858	1.005	888,920	4,884
Renhe	185	127	8437	0.993	1,405,550	7,614
Panzhihua Urban Area	457	19	na	na	7,754,830	16,969

Source: Liangshan and Panzhihua Statistical Year Book, 1999.

B. Social and Economic Situation of the Project Area

34. Xichang City lies within the valley of the Anning River in the southwest of Sichuan. Located in the central part of Liangshan Prefecture, it is the administrative, economic, cultural and transport center of the prefecture. Xichang is China's important metallurgical experimental site and its leading satellite launching base. With 2655 square kilometers of total area, the city has a population of 546,900 (at the end of 1999) and consists of 23 nationalities such as the Han, Yi, Hui and Tibetan. As compared with developed areas, Xichang is still weak economically. The infrastructure system cannot keep abreast of economic growth and many

local ideas and concepts belong to an older era. On the other hand, with its particularly rich natural resources, plentiful labor and advantageous geographical location, the city has good prospects for further development.

35. Dechang County is located in the valley of the middle reaches of the Anning River. The 2,288 square kilometer county has a population of 182,622 (at the end of 1999) consisting of different nationalities. The minority nationalities account for 25 per cent of the total population. The county does not have a naturally strong economic basis. Nonetheless, through effort over many years, the economy has seen remarkable growth. A comprehensive agricultural system based on the grain production, intensified by the tobacco, silk and sugar production and supplemented by multiple operations has come into being. Raw material production and processing industries have seen simultaneous development, formulating an integrated economic pattern. In addition, taking advantage of plentiful hydropower and mineral reserves, high energy-consuming industries in the metallurgical processing sector have been established. From a macroeconomic viewpoint, light and heavy industry have combined in a rational way and a coordinated industrial structure has taken shape.

36. Miyi County is located in the northeastern part of Panzhihua City, flanking the Anning River. The 2,104 square kilometer county has a total population of 194,200. The economy is dominated by agriculture. The plentiful natural resources, distinctive sunshine and the gradient climate based upon the southern subtropical zone make the hilly terrain in the Anning River Valley a grand greenhouse. The agricultural products are characterized by early maturation, rare species, high yield and fine quality. The county is a production base for grains, sugarcane, vegetables, fruits and silkworm. The county has plentiful mineral resources with 27 types of proven mineral reserves. The reserve of vanadium-titanium magnetite is proven to be 2 billion tones, accounting for 22 per cent of the Panzhihua-Xichang total.

37. Yanbian County covers an area of 3,326 square kilometers. The population was 180,100 at the end of 1999. Well endowed with natural resources, its economic prospects flow from mineral exploitation and the development of grain production, forestry, silkworm, fruits, animal husbandry and the service industry. There are more than 30 types of minerals that have been proven with the reserves. A dozen of these mineral reserves, such as the vanadium-titanium magnetite, manganese, nickel, copper and zinc ores as well as coalmines, are being evaluated as worth tapping. The vanadium-titanium magnetite mines in Hongge and Xinjiu are proven to have 3.8 billion tones and 3.5 billion tones in reserve respectively. Known reserves of manganese ore amount to 1.2 million tones, and of graphite, 50 billion tones.

38. The northern part of Renhe County, which is affected by the expressway, is largely urban although some pockets of agriculture remain.

39. Panzhihua City is home to the Pangang Steel Company, one of the largest in China, with a total employment of over 100,000.

40. Yanbian County is designated as a provincial poor county while both Miyi and Dechang have a number of poor townships. These are almost all located in the mountainous areas away from the main Anning valley; many of these townships are dominated by minority peoples, especially the Yi. The expressway is however primarily located in the Anning Valley where the incidence of both poverty and minorities are low.

C. Socio-Economic Surveys

1. General

41. This section presents information on the socio-economic characteristics of the population likely to lose land or property to the expressway. The information comes from the following sources: (i) SPDI field survey investigations undertaken in parallel to the design survey for the Feasibility Study. These were carried out in 1999. (ii) The socio-economic survey undertaken by the TA consultants in July and October 2001; and (iii) The analysis of local township and village statistics compiled by SPDI and the TA consultants in 2001.

2. The SPDI Survey (1999)

42. The SPDI survey was conducted by collecting information from the Statistical Bureau, the Planning Bureau and the relevant departments, interviewing the local government officials and the village leaders and the people whose land is likely to be purchased. Likely APs were consulting on resettlement, acquisition and compensation of land and houses.

43. The SPDI survey found strong support from government at all levels and villagers along the proposed expressway alignment. SPDI also concluded that, in most cases, land-owning groups would respond to land losses by re-allocating land and that income rehabilitation should be focused on further agricultural development. This survey however did not provide any socio-economic data for either affected villages or individual households

3. The Socioeconomic Survey (2001)

44. This survey was undertaken by the TA consultants in July and October 2001. Its main objectives were: (i) to compile socio-economic information on the APs likely to lose land or property to the expressway; (ii) to obtain information on the extent of APs knowledge of the proposed expressway; and (iii) to identify APs preferences for preferences regarding land re-allocation, house relocation and income restitution measures.

45. The survey involved collecting primary data from selected villages and households on the proposed alignment. Two survey instruments were used: 1) a village questionnaire, administered to village leaders, and 2) a household questionnaire administered to individual households. The survey team included members of the TA consultants' team supplemented by locally recruited staff including a professor of the Southwest Nationalities College. Full cooperation was provided by county and township officials. The survey forms used are included in Appendix 2.

46. A strict purposive sampling frame was designed and applied using data collected in the earlier SPDI survey, information collected by the TA survey team during a preliminary field visit traversing the length of the road, and the 1 to 10,000 alignment map prepared for the feasibility study. Under the frame, the following selection criteria were applied: (i) strong representation of villages with land-owning groups that will suffer high proportionate land loss; (ii) an even geographic along the alignment; (iii) relative inclusion of the least well-off villages; (iv) relative inclusion of villages with significant minority populations; and (v) a spread between rural villages and those nearer the county towns.

47. Within each village individual households were selected on the basis of their proximity to the proposed alignment. Because the alignment has neither been finalized nor clearly marked on the ground, it is not certain that all interviewed households will definitely be affected by the expressway. This should not however affect the identification of the socio-economic characteristics of the APs.

48. The socio-economic survey covered 22 (around 40 per cent) villages destined to be transected by the expressway. A total of 160 individual households were interviewed containing around 740 people.

D. Socioeconomic Characteristics of the Affected Population

1. General

49. The data collected during the socio-economic survey has been analyzed using the Household Livelihood Framework. The framework involves consideration of four different aspects of household socio-economic characteristics: (i) Human Resources: population and demographic characteristics (see Tables 4 and 5); (ii) Natural Resources: essentially land; (iii) Physical Resources: ownership of productive and consumer assets; and (iv) Financial Resources: household incomes and expenditure.

50. The following sections examine each of these in turn. An additional section describes the survey findings in respect of APs attitudes towards the expressway.

2. Human Resources

51. The average household size of the population surveyed was 4.6 persons which is significantly higher than that derived from local statistics, 3.8-4 persons; there is no obvious reason for this disparity. A high proportion of households (77%) have 3 to 5 persons and there are very few small or very large families. Households in the northern part of the project area (Xichang and Dechang) tend to be higher.

52. Around 22% of the population is aged under 15 years and 12% are over 60%. 40% of the population is aged between 20 and 40 years indicating a high birth rate between 1960 and 1980. The current trend is for a leveling off as family sizes continue to stabilize. The proportion of older people will however increase.

53. 80% of the population over 15 years is employed; 12% are students and the remainder is either retired, sick or disabled. The overall dependency ratio is 1.6 (persons per worker); this ratio varies little with household size indicating that larger households reflect extended families under one roof (e.g. two nuclear families with one common elderly parent). The average number of laborers per household is just under 3 reflecting the high female participation rate.

54. Virtually all households are farming households. 73% of the population interviewed are just farmers, 14% are farmers with a second occupation and 13% are wholly engaged in non-agricultural occupations (over half of these are migrants). Men are more likely than women to have a second occupation or work outside agriculture. Women make up the majority of those working exclusively in agriculture. Other occupations are varied with a preponderance of small business, transportation, and industrial jobs (including mining, distilling, paper-making). Overall, half the households have at least one member working full- or part-time in a non-agricultural occupation and one in six has a member working as migrant labor. The incidence of non-

agricultural occupations is higher in the southern part of the project area where there is more mining and industrial activity, greater proximity to the industrial center of Panzhihua, and a more prosperous agriculture due to the cultivation of early season vegetables. Probably for the same reason, more migrants are to be found in Dechang and Xichang villages.

55. Over 80% of the population aged 6 years and over have at least primary education; just under 40% have been to middle school but only 7% have been to high school or college. Around one quarter of households have at least one member with high school or tertiary education. Women are more likely to have no education at all (and would thus be illiterate). The northern part of the project area has a greater proportion of illiterates. School attendance amongst those aged under 15 years is almost total. However less half those aged 15 to 19 years are currently in education. This situation is very different from that found in the remoter mountain areas where many children have only basic (1-3 years) of primary education.

56. Amongst the adult population, illiteracy (no formal education) is concentrated amongst those aged between 40 and 60 years (30%) and over 60 years (70%). In contrast, 65% of those aged from 20 to 39 years have been to middle school or beyond. The household data suggests that for most land-owning groups on the alignment, around 50 per cent of the adult APs have completed middle school education or more. This represents a considerable foundation on which to strengthen the skills-base through vocational and technical training, or simply facilitating off-farm opportunities.

Table 4: Selected Demographic Characteristics**Household Size**

Persons	North*	South*	TOTAL	%
1-2	5	1	6	4%
3-5	59	64	123	77%
6-7	15	11	26	16%
7 +	3	2	5	3%
All	82	78	160	100%
Average	4.9	4.3	4.6	

* North: Xichang, Dechang; South: Miyi, Yanbain, Renhe

Employment Status

Status	Male	Female	Totals	%
Working	234	225	459	80%
Retired	38	44	82	14%
Student	13	13	26	5%
Sick/Disabled	6	2	8	1%
All	291	284	575	100%

Occupation by Sex

Occupation	Male	Female	Totals	%
Farming	152	183	335	73%
Farming + second job	48	17	65	14%
Worker	12	4	16	3%
Business	9	4	13	3%
Migrant	13	17	30	7%
All	234	225	459	100%

OTHER OCCUPATIONS (excl. migrants)

Sectors	No.	Occupations
Trade/business	19	incl. Retail shops, wholesale trade
Transport	12	
Mining	11	incl. Brick-making
Other workers	25	incl. Paper making, distilling
Technical	6	officials, doctors, teachers
Fish-farming	7	
Casual work	10	especially construction
Total	90	

Age Distribution

Age Group	Number	%
0-4yrs	47	6.4%
5-9yrs	48	6.5%
10-14yrs	70	9.5%
15-19yrs	49	6.6%
21-29yrs	130	17.6%
30-39yrs	162	21.9%
40-49yrs	78	10.5%
50-59yrs	66	8.9%
60-69yrs	48	6.5%
70+ yrs	42	5.7%
Total	740	100.0%

Occupation by Location

Occupation	North*	South*	TOTAL
Farming	187	148	335
Farming + second job	25	40	65
Worker	8	8	16
Business	3	10	13
Migrant	20	10	30
All	243	216	459
Farming only	77%	69%	73%

57. Allied to the prevalence of households engaged in non-agricultural activities (50%), and despite the relatively low proportion with high school or tertiary education, the results suggest

that a large proportion of APs have the skills and education to assimilate improved cultivation techniques and to engage in off-farm employment opportunities.

Table 5: Educational Indicators

Education by Sex (excl. under 6 years)					Education by Location		
Attainment	Male	Female	Total	%	North*	South*	TOTAL
None	46	71	117	17%	71	46	117
1-3 yrs primary	30	38	68	10%	36	32	68
4-6yrs primary	99	83	182	27%	91	91	182
1-3yrs middle	135	122	257	38%	130	127	257
high school	14	11	25	4%	10	15	25
Tertiary	14	7	21	3%	15	6	21
All	338	332	670	100%	353	317	670

Education by Age							
Attainment	5-9yrs	10-14yrs	15-19yrs	21-39yrs	40-59yrs	60+ yrs	Total
None	1	1	1	10	43	61	117
1-3 yrs primary	27	6		9	21	5	68
4-6yrs primary	6	33	3	81	45	14	182
1-3yrs middle		30	32	156	34	5	257
High school			10	15			25
Tertiary			3	18			21
All	34	70	49	289	143	85	670

Source: Field Surveys

3. Natural Resources

a. Land Tenure

58. Starting in the mid-1980s, the collective form of agriculture, which had been introduced in the 1950s, has been gradually abandoned and replaced by the household responsibility system. Under this system, land was divided equally amongst households on the basis of their size. Where there were marked variations in the quality of land within the same village, households were allocated plots in each category; many households therefore have fragmented land holdings. Households were given contracts (originally for 15 years but now for 30 years) giving them the sole right to cultivate this land (i.e. usufruct); ownership of the land however remained with the original land owning group - in the project area this is equivalent to the sub- (or natural) village used in other parts of the country. In some villages, not all the land was allocated to individual households but was held in reserve.

59. The original distribution of land was equitable in the extreme. However as time passes, the household situation changes - people die, others are born, some leave to marry out, others marry in. Reserve land can be used to accommodate new arrivals. However, given the fact that population is increasing (albeit slowly), the general trends are: (i) for land per capita to decrease; and (ii) a growing mismatch between household size and the amount of cultivable

land—in the survey barely 30% of households had per capita land holdings within 25% of the average.

60. In some villages (especially in Miya and Yanbian counties), some land re-allocation has taken place, either by allocating land from the deceased to the newborn, or more comprehensive covering the whole land owning group. In Liangshan prefecture, no re-allocations have taken place. Nevertheless, even where re-allocation has taken place, around 20% of the population does not hold any land to cultivate in their own right. The implication is that although some land re-allocation has taken place in the project area, it is not an easy process and does not, generally, provide land for everyone.

b. Cultivated Land

61. The households surveyed cultivated a total of just over 800 mu (see Table 6). All households had irrigated land and 30% had dry land as well. The incidence of dry land is more prevalent in the south where the expressway leaves the valley and crosses a more mountainous area; in these areas the proportion of dry land rises to almost 40% compared to 20% in the north. Similarly, in the south, 85% of households had some dry land compared with 57% in the north. In addition, just under 40% of households had some orchard land, generally around 1 mu.

Table 6: Natural Resources

Land Type (households)

Land type	North	South	Total
Irrigated only	35	12	47
Irrig. and dry	47	66	113
Farmland	82	78	160
% irrig. only	43%	15%	29%

Land Area (of all surveyed households)

Land type	North	South	Total
Irrigated	370	210	580
Dry	100	130	230
Farmland	470	340	810
% irrig.	79%	62%	72%
Orchard	110	60	170

NB. All figures in mu.

Per capita Land

Mu /cap	North	South	Total	%
Under 0.5mu	7	5	12	8%
0.5 to 1mu	25	40	65	41%
1-1.5mu	25	26	51	32%
Over 1.5mu	25	7	32	20%
ALL	82	78	160	100%
Average	1.3	1.1	1.2	

Households Size by Land per cap

Persons	No. Hholds	Mu per cap.
1-2	6	2.8
3-4	72	1.2
5-6	70	1
7 +	12	1.1
All	160	1.2

62. The average farmland per capita amongst the households interviewed is 1.2 mu, which compares well with the average obtained from village level data (1.1 mu). Per capita land areas are slightly higher in the north of the project area compared with the south—1.3 mu as against 1.1mu. The variation in land per household is shown in the table: few households (under 10%) have less than 0.5 mu per capita (in Sichuan, 0.4mu per capita is the minimum holding considered to be adequate for survival). However only just over half the households have more than 1 mu indicating a general land shortage in the project area. Unsurprisingly, the smallest

households have more land per capita; there is however little variation for households with 3 persons or more.

4. Physical Resources

a. Housing and Fixtures

63. The majority of housing in the affected villages is of average quality with mud and wood walls (see Table 7). Infrastructure provision is however good: all houses have electricity and well over 80% have piped water into the house or yard. In contrast few have more than elementary (i.e. wooden structures located adjacent to the pigsty) toilet facilities and only 13% have telephones. Nearly all households have pigsties and over 80% have sunning grounds (often concrete) for drying crops. Over 70% have enclosure walls (almost always earth) and just under half have graves located on their land.

b. Productive Assets

64. The ownership of productive assets is significant within the affected villages. Around one third of households own threshers, grinders, irrigation pumps and pipes. One in eight households has a tractor and one in five have a motorcycle; overall 30% of households have some form of motorized transport. There is however little evidence of capital equipment related to off-farm/ non-agricultural activity.

c. Household Durables

65. Ownership levels of selected household durables are good indicators of relative wealth. TV ownership is virtually total - 2/3rds have color TV (many are connected to the cable network)—and almost 1/3rd have a VCR or similar. Almost half the households have washing machines and 15% have refrigerators (the ownership of these always lags behind that of washing machines). The fact that over 20% of households have a solar heater indicates both a recent increase in affluence and a willingness to embrace new technology.

Table 7: Physical Resources**Housing Characteristics****Construction Material**

Material	No.	%
Concrete/brick	26	16%
Brick/wood	14	9%
Mud/wood	119	74%
Other	1	1%
All	160	100%

Toilet Facilities

Method	No.	%
Lavatory	4	3%
Latrine	5	3%
Elementary	151	94%
All	160	100%

Household Durables

Item	% hholds owning
Electric Fan	43%
Washing machine	45%
Refrigerator	15%
Solar heater	22%
TV- b&w	43%
TV-color	66%
VCD, etc.	32%
Phone	13%

Water supply

Method	No.	%
Tap-house	80	50%
Tap-yard	58	36%
Well-yard	18	11%
Outside	4	3%
All	160	100%

Other

Item	%
Enclosure walls	75%
Graves	44%
Pigsty	96% 20% concrete
Sunning ground	82% Mostly concrete

Productive Assets

Item	% hholds owning
Tractor	13%
Thresher	31%
Grinder	27%
Irrigation pipes	35%
Pump	35%
Cart	19%
Tricycle	2%
Motorcycle	20%
Vehicle	8%
Any motorized transport	30%

5. Financial Resources**a. Household Incomes**

66. Table 8 presents the distribution of household incomes in the surveyed villages and households. The village distributions are based on questions on average incomes and other indicators such as households experiencing food shortages, recipients of the 5-guarantee (wu-bao) program. The overall distributions are shown in Figure 1.

Table 8: Income Distribution in Villages to be Transected by Expressway

Net Annual per capita income (Yuan)			<600	600-1000	1000-1500	1500-2000	>2000	Total
County	Township	Village	Absolute poor	Vulnerable	Low income		Non-poor	
Xichang	Huanglian-guan	Dongping	10%	20%	35%	30%	5%	100%
	Huangshui	Wanao	0	15%	40%	20%	25%	100%
Dechang	Mali	Daba	0	15%	25%	40%	20%	100%
	Dezhou	Daping	0	32%	20%	20%	27%	100%
Miyi	Xiaogao	Lianmeng	7%	30%	25%	25%	13%	100%
	Jinchuan	Luomi	0	0	5%	15%	80%	100%
		Puba	0	0	10%	20%	70%	100%
	Yonglang	Yongyue	6%	17%	30%	25%	22%	100%
	Guabang	Guabang	4%	6%	15%	50%	25%	100%
	Guabang	T/ship data	2%	5%	20%	35%	38%	100%
	Guabang	Tianba	0	0	2%	8%	90%	100%
	Panlian	Shuitang	1%	1%	1%	2%	95%	100%
	Yakou	Yakou	3%	6%	20%	38%	33%	100%
	Yakou	Huijing	0	5%	20%	40%	25%	100%
Yanbian	Yakou	T/ship data	0	5%	25%	30%	40%	100%
	Salian	Binghai	0	0	0	0	100%	100%
		Yuwanggong	0	40%	20%	30%	10%	100%
	Xinjiu	Pinggu	0	5%	10%	30%	55%	100%
	Xinjiu	T/ship data	5%	5%	45%	40%	5%	100%
	Xinmin	Xinmin	0	10%	15%	23%	52%	100%
Renhe	Jinjiang	Jinjiang	0	0	0	3%	97%	100%
	Villages - North		3%	16%	24%	24%	33%	100%
	Villages - South		1%	7%	15%	25%	51%	99%
	Villages - ALL		2%	11%	19%	22%	46%	100%
	Households - North		3%	11%	7%	16%	63%	100%
	Households - South		0%	4%	5%	12%	79%	100%
All Surveyed Households			1%	8%	6%	14%	71%	100%

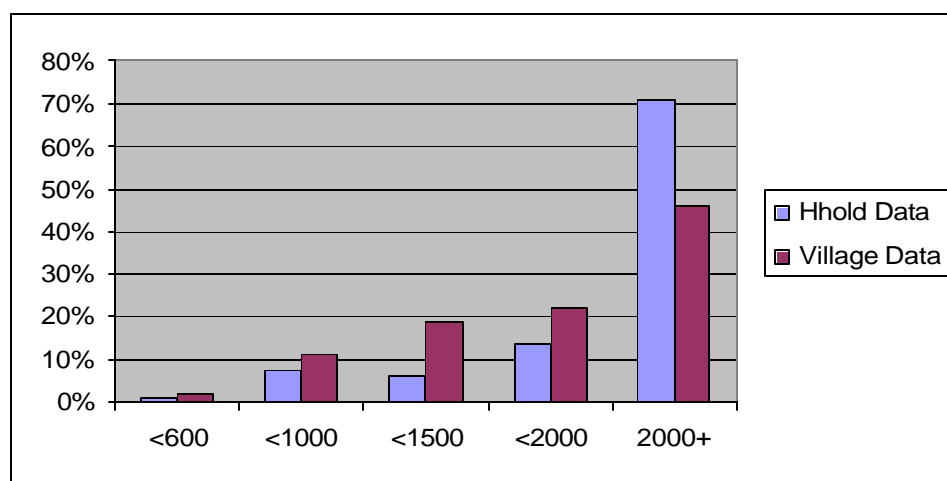
Source: TA Consultants' Field Surveys.

67. Income data from the villages indicates that around half the households have incomes above Y2000 and only around 13% have incomes of less than Y1,000. The median income is around Y1,900. Incomes however tend to be higher in the southern part of the project area where there are increased opportunities for off-farm employment and the climate and soil are more favorable to vegetable cultivation.

68. Incomes obtained from the individual surveys reveal a similar pattern with the majority of households having incomes over Y2,000. Overall however, the results are significantly higher: over 70% have incomes over Y2,000 and under 10% have incomes below Y1,000. The difference between the northern and southern villages however remains.

69. It is difficult to know which of these datasets is more reliable. The village data is based on a combination of village averages, local knowledge and other indicators and is thus prone to some uncertainty. In contrast the household data is based on direct interviews but is subject to the many problems associated with assessing rural incomes: accurately assessing and then excluding production costs, estimating consumption in kind, and faulty recall particularly when dealing with seasonal fluctuations in the farming cycle. Nevertheless, the overall patterns are similar and reveal a generally prosperous rural economy with relatively few poor households. It should be noted that these income distributions are radically different from those obtained in the mountain areas removed from the Anning valley. In these areas, around 30% of households had incomes below Y1,000.

Figure 1: Income Distributions



b. Income Sources

70. Villages along the alignment derive their income from a wide variety of sources. The relative importance of these is shown in Table 9. The importance of cash cropping is clear: it represents the most important income source in the great majority of villages. The cash crops grown vary considerably within the project area. The most common are early ripening vegetables in the south of Dechang and Miya but, in other villages, tobacco, sugar, marigolds, strawberries and other fruits are grown. Grain (rice and corn) is of vital importance to the local economy, it is cultivated by virtually every household, but it is used mainly for domestic consumption (and to help fatten the pigs) rather than as a cash crop in its own right.

71. Non-agricultural income sources (e.g. migration, local factories and business) are also frequently mentioned. Enterprises providing employment included mines, tobacco factories, paper mills, and ferrous alloy plants. Overall the economy of the affected villages is highly diversified and, as has been seen, prosperous.

72. Table 10 shows the frequency of different income sources in the surveyed households. The Table reinforces the variety of economic activity carried out along the proposed alignment: almost 80% of households grow vegetables, over 60% grow fruit, over half raise livestock for sale, one third derive some income from migrant labor and 40% from other off-farm activity. In most respects, there is little difference between the north and south of the project area; the main exceptions are the almost total absence of other crops in the south and a higher incidence of

locally based off-farm activities. Overall, almost 90% of households are involved in cash cropping and over 60% in off-farm activities.

Table 9: Relative Importance of Income Sources

County	Township	Village	INCOME SOURCE				
			Grain	Cash Crops	Livestock/ Fish	Migrant Labor	Off-farm Business
Xichang	Huanglianguan	Dongping	1	3	2		
	Huangshui	Wanao	2	1	3	4	
Dechang	Mali	Daba	3	1	2	4	
	Dezhou	Daping	3	1	2	4	
	Xiaogao	Lianmeng	2	1	3	4	
		Anning	2	1			
	Leyue	Xitang	3	1			2
Miyi	Jinchuan	Puba	2	1	5	4	3
		Luomi	3	1			2
	Yonglang	Yongyue	2	1		3	4
	Xijie	Reshui	3	1	2		
	Guabang	Guabang	1	3	5	4	2
		Tianba	2	1	5	4	3
	Panlian	Shuitang	2	1	3	5	4
	Yakou	Yakou	2	1	2		3
		Huijing	3	1			2
	Salian	Yuwanggong	2	1			
Yanbian	Xinjiu	Binghai	2	1			
		Pinggu	2	1	4	3	
		Jiuchang	2	1			
	Xinmin	Xinmin	3	1	4		2
Renhe	Jinjiang	Jinjiang	4 ^a	1	2	5	3

^a Jinjiang is a designated production base for cultivating vegetables for Panzhihua urban area; the climate also permits year round cultivation. Hence little grain is cultivated.

Source: Interviews with village leaders.

Table 10: Incidence of Income Sources (excluding grain) amongst APs

AREA	Vegetables	Fruit	Other crop ^a	Livestock/ Fish	Migration	Other Off farm ^b	Any Cash cropping	Any Off- farm
North	76%	62%	35%	55%	38%	27%	88%	57%
South	78%	60%	1%	51%	31%	54%	87%	72%
ALL	77%	61%	19%	53%	34%	40%	88%	64%

^a Tobacco, sugar cane, marigolds

^b Factory work, business

Source: household interviews

73. For all surveyed households, around 50% of all income comes from cropping; the proportions from livestock, migration and other business are respectively, 11%, 18% and 21%. These proportions however give no indication of how many households earn how much from different sources; they are also sensitive to some very high values. Table 11 categorizes

households by the principal income sources and shows the relative importance of these income sources.

Table 11: Households by Type of Economic Activity

Household Income Sources	No.	%	% Hholds with inc. per cap > Y2000	% Hholds earning more than given % of income from non-cultivation		
				25%	50%	75%
Cultivation only	27	17%	55%	0%	0%	0%
Cultivation + livestock	31	19%	61%	45%	19%	10%
Cultivation + off-farm activity	102	64%	80%	62%	33%	13%
Cultivation + any other ^a	133	83%	74%	73%	43%	19%
ALL	160	100%	71%	61%	36%	16%

^a i.e. with income from livestock and/or off-farm activities

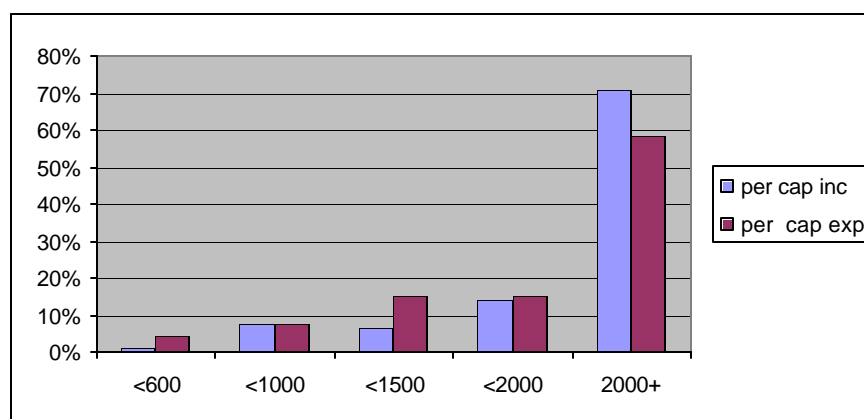
Source: household interviews

74. Overall, over 80% of households derive some income from either livestock or off-farm activities. Over 60% of households derive more than 25% of their income from these sources and over one third derive more than half their income from non-cultivation. These proportions are of importance in assessing the impact of land loss on the affected households. While not all households will lose all their land, the survey findings indicate that around 2/3rds of households depend on cultivation for up to half their income.

c. Expenditure Patterns

75. Figure 2 shows that the distribution of expenditure per capita is very similar to that for incomes. This gives credence to the overall validity of the survey results and the income distributions. Both sets of data include allowances for income and consumption in kind. Expenditure for production, egg fertilizer, chemicals, etc, and taxes have been excluded.

Figure 2: Per capita Expenditure Distribution of sampled households



76. The largest single item in the APs' average consumption pattern is for basic needs, e.g. food, clothing and housing, which represent around 57% of total consumption expenditure (Table 12). This is a lower proportion than is often found in rural areas and may reflect the fact that AP households are predominantly well above poverty levels and can afford to devote higher proportions of their expenditure to other items, e.g. the purchase of reasonably sized items which add comfort and convenience to home living - items such as colored TV, electric fans, sofas, VCD players and solar-powered hot water systems. The proportion spent on basic needs would be lower still if expenditure on consumption were to be excluded.

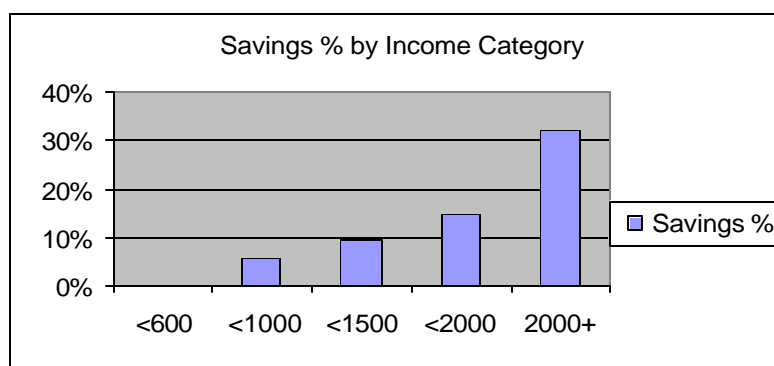
Table 12: Expenditure Pattern of Surveyed AP Households

Expenditure	%
Food and clothing	57%
Other	18%
Education	15%
Cultural and recreation	10%
TOTAL	100%

d. Savings

77. The propensity to save is derived by subtracting expenditure from income. Unsurprisingly, savings increase sharply with income. Figure 3 shows that those with incomes under Y1,000 per capita save little (around 4%) whereas households with incomes above Y2,000 have a median propensity to save of around 20%, which compares well with national statistics. The median propensity to save for all households is around 15%.

Figure 3: Propensity to Save by Income Group



6. Expressway Related Issues

a. Knowledge of the Proposed Expressway

78. By the time the socio-economic survey was undertaken, only a small proportion of households (6%) did not know of the XiPan proposal. The great majority (83%) had known about it for 3-5 years. 80% of the households had learnt about the proposal when the field surveys were carried out by SPDI in 1999; another 14% had learnt about it by word of mouth. Smaller percentages had learnt of the road through village or township meetings called by SPDI and/or county and township officials.

79. The SPDI survey resulted in the pegging of the proposed centerline using bamboo sticks. No marking of the ROW is undertaken at this stage but land and assets were inventoried within 30m of the centerline. Most households therefore know whether or not they are likely to be affected, assuming that the alignment is not changed. Of those surveyed, just under half thought that they would lose land, 17% thought they would lose some part of their property and 20% thought they would lose both land and property. Around one quarter did not think that they would be affected.

b. Information Needs

80. Households were asked to rank their information needs in respect of the land acquisition and house demolition process. They were asked to rank three preferences out of nine options. Table 13 provides the results both in terms of the first preference and in terms of all preferences mentioned.

Table 13: Resettlement Information Needs

Item	FIRST MENTION		ALL MENTIONS	
	No. of mentions	% of Hholds	No. of mentions	% of Hholds
a. Compensation rates	95	62%	125	81%
b. Timing of acquisition	20	13%	64	42%
e. House relocation help	4	3%	39	25%
f. Income restitution help	17	11%	70	45%
d. Timing of compensation payments	8	5%	55	36%
c. Process of acquisition	7	5%	54	35%
g. Irrigation systems rehabilitation	3	2%	31	20%
i. Other	0	0%	3	2%
TOTAL	154^a	100%	441	na

^a Percentage of households who mentioned this topic

81. By far the highest need for APs was knowledge about the compensation rates specifically applicable to them: 62% of households mentioned this as the most important need and only 19% did not mention it at all. The only other items mentioned by more than 10% of the respondents as their most important requirement were information on the timing and assistance for income restitution. These items, along with the timing of compensation payments and the acquisition process were mentioned by 35-45% of all respondents. Assistance with house relocation and the rehabilitation of the irrigation systems were mentioned by 21-25% of respondents.

82. Mention should also be made of the primary school in Lianmeng village, Xiaogou township. This school will almost certainly require demolition and there is little potential for relocation in the immediate vicinity as the site is very constrained by the railway and the Anning River. The school authorities are anxious that appropriate steps are taken to inform them as to what will happen and where they can relocate. Strong concerns were also voiced in Puba Village, however. This was because for some years the residents had been told that the alignment would be placed on the opposite side of the Anning River to their settlement. Township and village officials had instructed Puba residents not to build any new buildings on the other side of the river. Thus the people built their new structures in the narrow stretch of land between NR 108 and the north-south railway line. Just recently they had been informed that for their particular segment of the expressway, the only practical engineering solution was to bring the expressway through the same narrow stretch of settled land.

c. Attitudes towards the Expressway

83. Around 60% of households felt that the expressway would bring advantages in terms of reducing travel times to Chengdu and would make it much easier to sell their fruit and vegetable produce. 20% did not consider that there would be significant benefits and the remainder (20%) did not respond.

84. Table 14 tabulates the perceived disadvantages of the expressway given by respondents to the household surveys. 21% did not consider that there would be significant disbenefits from the expressway and the remainder (22%) did not respond. Of those stating a disadvantage, around 60% were concerned about the loss of land and/or property (mostly the former) and around 30% by severance issues; the remainder were concerned about the noise impact and safety issues.

Table 14: Perceived Disadvantages of the Expressway

Disadvantage	No. Mentions	%
Loss of Land	34	37% ^a
Loss of House	10	11% ^a
Loss of land and house	11	11% ^a
Severance Issues ^b	24	29% ^a
Environmental Issues ^c	13	12% ^a
All Respondents	92	100%^a / 57%
No disadvantage	33	21%
No response	35	22%
TOTAL	160	100%

^a % of those mentioning a disadvantage

^b Separation of land from houses, disrupted irrigation and local roads

^c Noise and safety

Source: household surveys

85. Table 15 sets out the views of the village committees in the sampled villages on the positive and negative impacts of the expressway. While village leaders saw positive impacts as strongly outweighing negative impacts, they were prepared openly to identify the negative impacts they foresaw.

Table 15: Anticipated Impacts of Expressway on Village - Village Survey

County	Township	Village	Anticipated Impacts of Expressway on Village		Preferred Strategy re reduced farm land for APs
			Positive Impacts	Negative impacts	
Xichang	Huanglian-guan.	Dongping	Easy transport, particularly for fish transportation	Nil given	No problem for land redistribution in this group
De-chang	Xiaogao	Lianmeng	Easy access, easy transport, save time, tourism development.	inconvenient for cropping, and more garbage strewn along railway	Rely on government support, the financial compensation will not be sustainable
	Jinchuan	Puba	Easy marketing of agricultural products marketing	large amount of land will be occupied. The situation for this village will be worse if it is decided to locate Puba section of the expressway between NR108 and the Cheng-Kun railway	According to local policy
	Yonglang	Yongyue	1. Easy transportation of veg. 2. facilitate local economic devt. 3. Easy access across the river.	1. Land occupation will definitely affect farmers' living standards.	Hope government can deal with the problems properly.
	Gua-bang	Gua-bang	convenient for vegetable transportation, in this village, 70-80% of farmer households growing early vegetables.		-
Miyi	Gua-bang	Tianba	easy access, people can open their eyes towards outside. Placing an interchange at Tianba can accelerate local economic devt. Travel from Tianba to Chengdu will be reduced from 24 to 10 hrs, if expressway, it would be ten hrs. Although capital land will be occupied, it is worth supporting this national project		Either land redistribution or money compensation directly to APs. Up to farmers' choice.
	Panlian	Shuitang	facilitate transportation, information, industry and vegetable development. Farmers' income will increase	More land occupation, food production will decrease, and occurrence of infectious diseases will tend to be high	
	Yakou	Yakou	easy access to outside, safe. widen information collection channels and product trading scope, more outside traders will come to village buying farm produce.	Will affect farmers' houses and income, but in the better-off areas there will be no problem.	1. Pay compensation directly to the APs; 2. Reallocate land to those APs who lose usufruct rights over land.
Yanbian	Xinjiu	Pinggu	agricultural produces can be traded directly without middlemen; learn more information from outside, which is good for poverty alleviation.		Land owning group will coordinate the needs for land redistribution of new land and house relocation to ensure basic subsistence. In short, maintaining macro stability while micro modifying land entitlements
Renhe	Jinjiang	Jinjiang	facilitate local economic development, 80% of farmer households appreciate the proposed expressway especially since there is an interchange at Jinjiang.	On the contrary, if there was to be no interchange at Jinjiang, local people may shake their head.	Nobody here likes "rural to urban conversion". Best to pay compensation directly to farmers who lose land.

d. Preferences regarding Compensation, Relocation and Income Restoration Measures

86. Individual households were also asked about their preferences for action that would mitigate the effects of losing productive land and or housing. Table 16 summarizes the responses of those households. In short, their responses were:

(i) 60% of sampled households preferred that the land compensation fee be distributed directly to those households who lose land that they are now farming under usufructory rights. This was preferred over general land redistribution among all members of the land owning group so that the loss is equitably shared. It was also strongly preferred over the land owning group using the land compensation fees to support new income earning opportunities for the APs. Around 10% of respondents would like to be granted urban status.

(ii) If compensation funds were to the land owning group as a whole, the preference was for these funds to be used to further develop agricultural production.

(iii) On the other hand, if compensation were to be paid directly to those losing land or property, only 20% said that they would invest in agriculture with most of the remainder preferring to invest in small businesses, egg retail trade, transportation. A small proportion (7%) said that they would use the money to pay for their children's education. These responses exclude those who would necessarily use at least part of the funds for building/ rebuilding their house following its demolition.

(iv) Sampled households had a strong preference against the land compensation fee being used by the land owning group to reclaim land.

(v) If their houses are demolished then almost 90% of respondents would like to build a new house close to their existing home ((that is "moving back just a little") or within the same sub-village. Most (60 per cent) of households preferred to be allocated a site for a new house within the their land owning group's land. A small proportion wanted to move to an urban area. Almost no APs expressed a preference for moving house to sites still within their village or township, but not within the land owned by their own land owning group.

87. Through the village survey, village leaders were asked about the redistribution of remaining land as the primary response by the land owning group to land acquisition for the expressway. Village leaders gave a mixed response, which varied between favoring land distribution and direct payment of the compensation fee to the APs who lose farming land (Table 16). Compared to the farmers themselves, there tends to be a greater preference for land re-distribution. This was reinforced in discussions with county officials. Further meetings were held in December 2001 to discuss these topics; the results are reported in section VII.

Table 16: Sampled AP Preferences for Mitigation Measures

Item	North	South	TOTAL	%
AP preferred Strategy to mitigate loss of usufruct right				
d. Land compensation fee to be distributed direct to APs	55	57	112	60%
a. Land redistribution within Group	24	20	44	23%
c. Group to use compensation funds to support new income earning opportunities for APs	3	9	12	6%
b. Grant AP urban status	11	9	20	11%
Preferred Use of Compensation funds paid to village				
Improve agriculture	na	Na	61	76%
Develop non-agricultural activities			16	20%
Develop livestock raising			3	4%
Preferred Use of Compensation paid directly APs^a				
a. Establish off-farm business, e.g. shops	Na	Na	51	46%
b. Expand agricultural production			23	21%
Enter transportation business			12	11%
Pay for children's education			8	7%
Livestock raising			7	6%
Other			9	8%
AP preference for Group use compensation fees to reclaim land to replace lost land				
b. Don't want Group to reclaim	65	44	109	68%
a. Want Group to reclaim land	17	34	51	32%
AP preferred Site for house relocation				
b. Other area within Group's land	57	43	100	69%
a. Very close to old house	14	16	30	21%
e. On urban site	5	7	12	8%
d. Suitable site within AP's township but outside AP's village		2	2	1%
c. Suitable site outside group but within AP's village land	1		1	1%

^a Excluding those who would spend the money on a new house - necessary if their old house is demolished

Source: Household Surveys

7. Other findings

a. Development Priorities

88. In the course of the village and household surveys, informants were questioned about their development preferences using a simple self-completion questionnaire. The results are shown in Table 17. This Table says at least two important things. First, the perception of development needs by local leaders and by the APs themselves is not that different. Second while leader and led place almost the same importance on more agricultural advice and farm credit, APs gave a higher priority to promoting more opportunities for non-agricultural employment locally.

Table 17: Development Preferences of AP Farmers and their Village of Township Leaders

DEVELOPMENT PRIORITY	Village or Township Leaders	AP Farmers	% Village or Township Leaders	% AP Farmers
Improve the road to the village	5	13	15%	19%
Improved education	5	7	15%	10%
More advice on cultivation and crop marketing/ better access to credit	9	17	27%	25%
Better health care	1	0	3%	0%
More opportunities for non-agricultural employment locally	7	20	21%	29%
Improved water supply/ electricity	5	1	15%	1%
Other	1	10	3%	15%
Total	33	68	100%	100%

89. In the affected village survey, village leaders were asked to identify the one or two top priorities for development support to their village from Government agencies. The results, shown in Table 18 validate the concern for agricultural development shown in the previous Table. It also shows the leaders' concern for bigger infrastructure projects than have been articulated by individual APs in the household survey.

Table 18: Recent Government Support Programs and Priority Needs of AP Villages

County	Township or Town	Village	Government development support to Village in last year	What support is most needed from Government now
Xichang	Huanglian-guan T.	Dongping	Paddy seedling broadcasting, cropping techniques	
Dechang	Xiaogao TS	Lianmeng	Micro-credit, integrated agricultural development	Micro-credit, training
	Jinchuan TS	Puba	Post landslide relief ('96), agricultural techniques	Applied agricultural techniques
Miyi	Yonglang T	Yongyue	Integrated agricultural development	Various
	Guabang T	Guabang	Households taking responsibility	Flood control along the Anning River
	Panlian T	Shuitang	Integrated agricultural development, infrastructure improvement	Irrigation canal, road, electricity line
Yanbian	Yakou T	Yakou	Industrial structural adjustment	New techniques.
	Xinjiu TS	Pinggu	Integrated agricultural development in Western Panzhihua	Build highway
Renhe	Jinjiang T	Jinjiang	Negligible	Small town development.

b. Land Availability

90. Any land for land compensation strategy depends on the availability of more land for cultivation and the feasibility of redistributing the existing land amongst all members of the land-owning group. Discussions and field observations clearly indicate that, in most cases, there is little available, cultivable land that has not already been distributed to individual households. 2 villages surveyed had reserve land (30-100 mu) and another, Reshui, had plans to reclaim 1000mu by building a dyke along the river bank. The majority of villages however did not have any land reserves. The current Anning Valley Development Project will also increase the amount of cultivable and irrigated land in the project area but it is uncertain whether this land could be made available to APs.

E. Vulnerable Groups

1. The Poor

a. Poverty in the Anning Valley

91. Yanbian County is a 'provincial' poor county by the Sichuan. However the segment of this county traversed by the expressway is its most southeast corner. Here the population is largely Han and, while the land is hilly, there is considerable, generally small-scale mining activity. Additionally the area around Xinjiu is one of the most fertile in the county with flourishing early season vegetable cultivation. These activities have both direct and accelerator beneficiary effects on this local area. The result is that per capita incomes in the alignment section of Yanbian county are considerably higher than in the county's vast northwest.

92. The other counties all have a number of poor townships. These are almost always located in the hilly areas away from the Anning valley (see Appendix 19. Social and Poverty Assessment). Only two are located in the Anning valley proper, Jinsha and Xinlu, and only the latter, is affected, and then only marginally, by the proposed expressway.

93. Most of the townships in the Anning Valley do have poor villages - just under 30% of the villages in these townships, 18% of the population are classed as poor (using a poverty line of Y1000 per capita per annum, approximately equivalent to \$1 a day). These villages are almost always located in the hillier parts of the township and up the side-valleys. They are not located in the main valley. The one exception found during the survey was Tianba but the income distribution obtained revealed no households with incomes below Y1,000.

94. The proposed expressway does not therefore pass through any areas of concentrated poverty - a conclusion borne out by the findings of both village and household surveys (see subsection 5 above). In fact, the 14 poor households interviewed were distributed between 8 of the 22 villages visited during the survey. Poverty amongst affected APs is thus related primarily to the characteristics of individual households rather than to factors like a poor productive environment, lack of infrastructure, etc.

95. The incidence of poverty is likely to be around 11% (see Table 21-8). This level is far below the 30% estimated for the Project Area as a whole (see Appendix 19). On this basis, the number of affected households who are poor is likely to be around 230 (based on 2,100 private affected households). The level of absolute poverty, i.e. households unable to cater for their basic needs is almost zero.

b. Characteristics of Poor Households

96. Table 19 summarizes selected socio-economic indicators by income group. While the analysis is restricted by the low sample of poor households, certain characteristics do emerge. Poor households are not significantly bigger than non-poor households, nor do they have significantly higher dependency ratios. On the other hand, poor households own less land, are more likely to be found in the north of the project area, and are less likely to derive income from cash cropping, livestock or off-farm activities.

Table 19: Indicators of Poor Households

INDICATOR	Unit	Household Category			
		Poor	Low Income	Non-Poor	ALL
Income	Yuan per annum per capita	Under Y1,000	Y1,000 -2,000	Over Y2,000	
Sample	No.	14	32	114	160
Location	% in Xichang/ Dechang	79%	59%	46%	51%
Household size	No.	4.7	4.6	4.6	4.6
Dependency ratio	hhold members per worker	1.9	2	1.7	1.8
% hholds with non land holders	% with member not holding land	93%	72%	56%	63%
Cultivated land	Mu per capita	0.8	1.4	1.5	1.2
Irrigation technology	% owning irrigation pipes	8%	42%	35%	35%
Income from cash crops	% hholds	71%	81%	91%	88%
Income from livestock	% hholds	36%	69%	51%	53%
Income from off-farm activity	% hholds	29%	56%	70%	64%

97. The poor households also had the following characteristics: none were minority, 2 had a disabled person, 1 was headed by a young widow, 4 had no adults with middle school education and only 2 had members with high school or tertiary education.

98. Around 1/3rd of the poor households fall into the category of 'indigent poor', meaning that they or key income-earning members of their household suffer from some permanent disability (be it physical, mental or social). Indeed, when asking officials what characterizes poor families, the response most often given is that they are 'weak' and cannot, for whatever reason, provide the labor to effectively cultivate their land. The other reason given for poverty is the lack of technical know-how: 4 of the 14 poor households had no adult who had attended middle school.

99. Indigent households are the responsibility of the township Office of Civil Affairs who ensures that they receive the '5 guarantees' of livelihood (wu bao) - food, housing, clothing, heating and funeral expenses.

100. As one would expect, the poor families have substantially lower ownership rates of durable assets than non-poor households (Table 20). Conversely, there is little evidence that the poor suffer unduly from inadequate physical infrastructure: all households have electricity, most have piped water and virtually no houses are built of worse materials than mud which is the predominant construction material in the area.

Table 20: Characteristics of Poor Households

INDICATOR	Unit	Household Category			
		Poor	Low Income	Non-Poor	ALL
Water Supply	% hholds with tap water	93%	91%	84%	86%
Telephone	% hholds	0%	8%	15%	12%
Color TV	% hholds	71%	81%	91%	88%
Washing Machine	% hholds	9%	31%	58%	42%
Refrigerator	% hholds	0%	8%	19%	15%
Motor Vehicle	% hholds with motorized vehicle	9%	23%	46%	38%

2. Minorities

101. The wider project area contains a high proportion of people belonging to ethnic minorities, principally Yi but also Hui, Bai and Lisu. These populations are concentrated in the remoter, hillier parts of the project area and not along the Anning valley. The overall incidence of minorities in the townships affected by the expressway is 13% compared with over 20% in the wider project area. In the Anning valley, minority villages are to be found in the hillier parts of these townships and not along the valley floor.

102. The expressway will affect one minority township, Yinlu, but the required land take is not large, c. 140 mu, and will affect no more than 20 or so households, of which only 3 belong to minorities. In all, it is estimated that the number of minority households affected is likely to be between 70 and 80 (population, 300-350), spread between many villages. Of these minority households 42-48 will be affected by land acquisition and 14-16 will be affected by house relocation and/or loss of fixed assets.

103. The Social Assessment carried out for this project demonstrates a correlation between poverty and minority nationality. However, this is so only in the wider project area. On the Anning valley floor and along the expressway alignment this pattern is not recognizable. None of the minority households interviewed were poor and some involved inter-marriage with the Han majority. In recent times there has been a trickling back of some minority people to the Han settlements on the valley floor. In one village, some marginal land is assigned to the Yi. While remaining minorities in name, many of the minority population in the valley floor are becoming increasingly "Hananized". Because of this the RP will not follow any specific strategy in favor of minority nationalities. However, in order to further insure that affected ethnic minority households will be treated on an equal ground with the Han households additional consultation with them will be carried out and registered at the time of the final definition of compensation entitlements and at the time of compensation delivery. The rehabilitation of ethnic minority households will be included in the monitoring plan for the project.

F. Implications of Socioeconomic Survey Findings to RP Strategy

104. The population who will be affected loss of land and property from the construction of the XiPan expressway are relatively prosperous due to a combination of cash cropping and off-farm activities. The majority of households have incomes above Y2,000 per capita, significantly above the Sichuan average. Almost two thirds of households are engaged in off-farm activities. Nevertheless, the economy is still primarily rural - two thirds of households derive up to half their income from agriculture. Grain is the most important crop but it only makes a small contribution to cash incomes. Far more important is the wide variety of cash crops, early season vegetables, fruit, sugar cane and tobacco.

105. The importance of the rural economy means that most households losing a significant part of their land will lose a substantial portion of their income. Adequate compensation and income restitution measures will thus be essential.

106. Local officials, especially at county level but also in the townships and villages are confident that a compensation strategy consisting of redistributing land among individual land-owning groups or even villages is both feasible and desirable. This approach would be allied to measures such as improving irrigation (only a third of households currently possess irrigation pipes and pumps), reclaiming marginal land, and developing off-farm enterprises. Deletion Land reallocation would also spread the adverse impact of the road, and the financial compensation,

amongst a wider population while enabling the majority of affected households to continue in their traditional occupation, which, for many, has been highly remunerative in recent years. At present, the authorities do not consider that a policy of urban transfers will be necessary as land redistribution will enable all households to remain above the minimum standard of 0.4 mu per capita, even if land has to be found elsewhere in the township.

107. Many respondents however stated a preference for a strategy based on full cash compensation giving them the freedom to spend the money as they wish; one third preferred land redistribution. Many expressed a willingness to invest in new income generating activities on and off the farm activities thereby continuing the efforts, which have seen the rapid development of cash cropping and small-scale trade and transportation activities in recent years. In the future more opportunities are likely to become available as the XiPan expressway gives an additional impetus to economic growth. Respondents also expressed a degree of skepticism about allowing others to manage issues related to the restitution of their welfare. In general, respondents placed greater emphasis on developing non-agricultural activities than officials. Some expressed a preference to transfer to urban status (an attitude more prevalent among the young and better educated) but others were concerned that current employment prospects in urban areas are not good.

108. Overall, it is apparent that compensation and income restitution options must be highly flexible, allowing for considerable variability from village to village: between land reallocation and cash payments on the one hand, and between community-based and individually organized income restoration activities on the other. The key is to ensure that, as provided in the legislation, the affected households and land-owning groups decide whether to redistribute land, how compensation payments should be distributed between the community and individuals and what income restoration measures are most appropriate to their particular circumstances. Given the fundamental importance of income restoration to any resettlement strategy, further meetings with representatives from all affected villages were held in December 2001. The results of these meetings are presented in Section VII - Income Restoration.

109. The incidence of poverty is low and absolute poverty is almost non-existent. The majority of poor households are either poor through indigence or lack of technical knowledge rather than poor productive conditions or infrastructure. There are few minority households along the proposed alignment and those that are there are more integrated and better off than their brethren in the remoter, hillier, areas. In consequence, there is no need to adopt a different compensation/ income restitution strategy for these groups. Some preferential assistance to the poorest families will however be justified.

IV. LEGAL FRAMEWORK AND RESETTLEMENT POLICY

A General

110. The legal framework and resettlement policies for the XiPan expressway, which form the basis for this RP, are based on two sets of sources: PRC's Laws and Regulations, and ADB policy requirements. The most relevant provisions of these are summarized in the following sections.

B. Laws and Regulations

1. National Laws and Regulations

a. The Land Administration Law

111. Main concerns: This Law stipulates the ownership and the land use rights, utilization and protection of land and the compensation costs, resettlement subsidies, and the proper measures of resettlement for those affected. The most relevant articles are: No. 8, 14, 31, 34, 47, 48, and 49).

112. Article 8 states that land in urban districts are state-owned. Land in rural and suburban areas shall be owned by collectives, except for those portions, which belong to the State in accordance with the law; house plots, private plots of farmland and hills are collectively owned by peasantry.

113. Article 14 states that agreement from two thirds of villagers or two thirds of the villagers' representatives must be obtained before land in a village can be redistributed or reallocated making adjustments to the land, and be verified by the agricultural administration department of county or town government.

114. Article 31 states that any unit using cultivable (arable) land should either reclaim a similar amount of land or pay an arable land reclamation fee the covering the cost of such reclamation. Article 34 furthermore defines 'capital' farmland as consisting of arable land which is either highly productive or being improved through irrigation and water/ soil conservation activities.

115. Article 47 stipulates that in case land acquisition shall take place, compensation shall be made in accordance with the original usage of the acquired land, which shall include land compensation fee,² resettlement subsidies³ and compensation fee for the attachment of the land and standing crops. The compensation fee for the acquired cultivated land is 6-10 times of the average annual output value (AAOV) of the land in the previous 3 years before land acquisition. The compensation fee for resettlement for each of the agricultural population is 4-6 times of the AAOV of the land in the previous three years. However, in special cases a highest relocation allowance may be allowed as long as it does not exceed 15 times the AAOV over the last three years. The standards of compensation for the attachment of the land and standing crops shall be determined by the provinces or municipalities directly under the central authority.

116. Articles 48 and 49 relate to consultation and publicization processes regarding compensation rates and the flow of funds to the land-owning collectives. Essentially all compensation monies are paid to the land owning unit.

b. Implementation Regulations for the 1998 Land Administration Law

117. Main concerns: Based on the Land Administration Law, these regulations stipulate the implementing procedures. The most relevant articles are 25 and 26. Article No. 25 specifies the publicizing process of the approved land acquisition plan, and compensation cut-off date. Within

² Essentially the compensation for the land itself

³ Compensation for disturbance and loss of income

three months after the approval of action plan for land acquisition and resettlement, all the compensation fees have to be paid in full to affected people or units. Article No. 26 describes the compensation eligibility and resettlement channels.

c. “The Forest Law of the People’s Republic of China” (revised in 1998).

118. This law states that where forestland is being requisitioned, the land using unit shall pay the recovery fee of re-forestation⁴.

d. Protection Regulation for Capital Farmland (effective January 1, 1999)

119. Main concerns: Based on the foregoing laws, it stipulates the protection regulations for capital farmland, including responsibilities on assignment, protection, supervision and management, and legal duties. Article 16 stipulates that an arable land reclamation fee is payable for capital land occupation.

e. Interim Regulations for Arable Land Occupation Tax of the Peoples Republic of China” (Document: Guo Fa (1987) No.27, April 1987)

120. Main concerns: the standards and coverage for paying the tax on using arable land for construction. However, according to the “State Council Notification on Several Policies and Measures regarding Implementation of the Great Western Development” (Promulgated on December 27, 2000 and effective as of January 1, 2001), the arable land occupation tax will be waived for this project.

121. Paralleling the food tax exemption, the expressway project can apply for the lower compensation rate. If approved, the land reclamation fee can be set at **one** times the sum of arable land compensation fee and the resettlement subsidies due to land losers.

f. Measures of Information Publicizing for Land Acquisition (draft) (under discussion, promulgation likely within 2002)

122. Main Concern: these regulations will prescribe the detailed content, timing and procedures of information dissemination, as well as the requirement for social monitoring. Publicity should cover information on land acquisition and the resettlement action plan including the compensation standards for land acquisition and resettlement. The objectives are to protect the entitlement of those who will lose their landholdings and assets, particularly the farmers, to standardize the land acquisition implementation, and to strengthen the transparency of land acquisition operations thus avoid corruption.

⁴ Often referred to as the forest land reclamation fee; it is payable whenever forestry land is acquired/ used for any development project

2. Sichuan Province Regulations

a. Sichuan Guidelines on the Implementation of the Land Administration Law (effective December 1999)

123. Main concern: this document specifies the implementation procedures for the national Land Law in Sichuan Province. The most relevant provisions are summarized below.

124. Article No.21: the arable land reclamation fees are defined as 1~2 times of the sum of land compensation fee and resettlement subsidies, and the reclamation fees will be included in the total investment of a construction project.

125. Article No.40: the land compensation fee and resettlement subsidy for non-arable land will be half of those for arable land.

126. Article No.41: once the land-requisitioning plan is approved, it will be publicized by local city/county government in the townships and villages where land requisitioning will occur. Starting from the day of information publicizing, except the legal newborn and married-in, new comers will not be resettled; no compensation will be paid for the rush sown/planted crops, economic forest and rush built structures.

127. Article No.42: The compensations and subsidies for land acquisition will be paid in full amount within three months after the approval of the Land Compensation and Resettlement Action Plan, and shall be managed according to the following prescriptions:

- (i) Land compensation fee will be paid to the land loss unit⁵ for their production, employment of land loss labor and living subsidies of non-labor members. The utilization of the compensation fee will be determined by villagers' assembly or villager representatives' meeting, and after the approval of township government, it will be implemented.
- (ii) Compensation fee for the fixtures and young crops attached to the requisitioned land will be paid to the individual if it belongs to individual; and paid to collective economic organization if it is collective-owned.
- (iii) Resettlement subsidies will be used for the members of rural collective economic organization for their resettlement of living and production. If the members who need resettling are resettled by the rural collective organization, the resettlement subsidies will be paid to, and will be managed and utilized by that organization. If they are resettled by other organization, the resettlement subsidies will be paid to other organization. If some of them do not need to be resettled by organizations, the subsidies will be paid directly to the individuals, or agreed by them to buy insurance.

128. Article No.44 states that, after land acquisition, land can be readjusted subject to the approval of two-thirds members of villagers' assembly (or their representatives) and after approval of township government and county level Agricultural Bureau. If land cannot be

⁵ Defined as land-holding (or land-owning) group in this report, equivalent to sub-village/ natural village, i.e. the level below the administrative village.

readjusted, the following prescriptions are prioritized for the living and production resettlement of land loss households:

- (i) Encourage farmers operating business, enterprises.
- (ii) According to the population-land ratio prescribed by provincial government, after approval based on stipulated procedures, convert land-loss farmers' agricultural status (*Nongye Hukou*) to non-agricultural status (*Fei Nongye Hukou*). If the land of a rural collective economic organization is totally requisitioned, the organization will be legally annulled, and all the agricultural status will be converted to non-agricultural status.
- (iii) Farmers of male over 60 (including 60) and female over 50 (including 50) who need resettling can be resettled through life insurance according to stipulations.
- (iv) For farmers up to 18 years old who need resettling, living subsidies can be paid once or by installment to them. The rate of living subsidies will be formulated by prefectural government.
- (v) For those farmers of male between 18 and 60, and female between 18 and 50, can implement resettlement by organizations, or self-employment.

b. Sichuan Government Notification on Accelerating Highway Development" (May 22, 2001)

129. For key communications infrastructure establishment, the land acquisition, resettlement, land compensation fee, resettlement subsidies and cultivated land reclamation fee will be charged according to the low standards which have been regulated in relevant law and regulations, *i.e. the multipliers to be used will be 6 and 4 for the land compensation and resettlement subsidies respectively.*

c. Other

130. Responding to the provincial Notification on Accelerating Highway Development (a. above), both Liangshan Prefecture and Panzhihua Municipality have formulated specific guidelines on land acquisition and resettlement with respect to the XiPan Expressway construction, which prescribe the compensation standards of different assets and information disclosure as well as fund management requirements.

C. ADB's Involuntary Resettlement Policy

131. The Asian Development Bank has formally set out its requirements in the Involuntary Resettlement Policy in 1995. The policy requires that people displaced by development projects should have their former living standards and income earning capacity improved or at least restored.

132. Other key aspects of the ADB's policy on involuntary resettlement are:

- (i) Involuntary resettlement should be avoided where feasible.

- (ii) Where population displacement is unavoidable, it should be minimized by exploring all viable project options.
- (iii) People unavoidably displaced should be compensated and assisted, so that their economic and social future would be generally as favorable as it would have been in the absence of the project.
- (iv) Existing social and cultural institutions of resettlers and their hosts should be supported and used to the greatest extent possible, and resettlers should be integrated economically and socially into host communities.
- (v) The absence of a formal legal title to land by some affected groups should not be a bar to compensation; particular attention should be paid to households headed by women and other vulnerable groups, such as indigenous peoples and ethnic minorities, and appropriate assistance provided to help them improve their status.
- (vi) As far as possible, involuntary resettlement should be conceived and executed as a part of the project.
- (vii) The full costs of resettlement and compensation should be included in the presentation of project costs and benefits.
- (viii) Costs of resettlement and compensation may be considered for inclusion in Bank loan financing for the project.

D. Project Resettlement Policy

1. General Approach

133. Policies to compensate those losing land or property to the proposed XiPan expressway are based on a combination of the above-mentioned Chinese laws and regulations and the ADB's policy and requirements relating to involuntary resettlement. The primary objective of the land acquisition and resettlement plan (RP) is to restore the income and living standards of the affected persons within a short period of time after resettlement and with as little disruptions as possible in their own economic and social environment. Particular attention will be given to the needs of the poorest and vulnerable groups to be resettled. The RP for this project has been prepared with this as the guiding principle. The requirement for involuntary resettlement has already been minimized in the selection of the preferred route and during the feasibility and preliminary design studies. Table 21 presents the main elements of this approach, which meets the ADB requirements as outlined in the Involuntary Resettlement Policy and ADB Handbook on Resettlement - a Guide to Good Practice).

2. Principles of Compensation

134. According to the legal and policy requirements of the Chinese Government and the Asian Development Bank, the principles of the compensation and entitlements established for the project are as follows:

- (i) That compensation and entitlements provided to APs are adequate to at least maintain their pre-project standard of living, with the prospect of improvement;

- (ii) Land temporarily occupied an period of disruption are kept to a minimum;
- (iii) All APs, legal and illegal, are taken into consideration and accounted for;
- (iv) Per capita land holding after land acquisition is sufficient to maintain livelihood standards;
- (v) Where land allocation per capita is not sufficient to maintain livelihood, other income generating activities are provided for;
- (vi) All APs are adequately informed on eligibility, compensation rates and standards, livelihood and income restoration plans, and project timing; and
- (vii) No land acquisition will take place prior to satisfactory compensation and resettlement of the APs.

Table 21: Land Acquisition and Resettlement Principles and Approaches

Principles	Approaches
1. Involuntary resettlement should be minimized where feasible from economic, engineering, social and environmental aspects.	Resettlement issues have been considered for project alternatives during project design stage, which could minimize land acquisition and resettlement.
2. Plans should be prepared for those displaced.	APs identified and their land, buildings and other assets enumerated during project design; socio-economic survey conducted to assess impact and propose mitigation measures.
3. APs should receive compensation for all losses, including assets and livelihoods regardless of land tenure status.	Replacement land will be provided; cash compensation for land, houses and auxiliaries, crops, etc. in accordance with existing procedures; RAP includes provisions for other assistance.
4. APs should be informed of and consulted on resettlement and compensation options.	Meetings with APs, village leaders, local governments and host communities were held; household interview and socio-economic survey of APs were conducted. Information campaigns through the local media and meetings to inform the APs and host communities will be made available through township governments, village committees and public institutions and companies. This process will continue throughout the planning and implementation stages.
5. Resettlement should be an integral part of project design. No land acquisition will take place prior to the satisfactory compensation and resettlement of APs.	Environment and resettlement aspects were considered as major factors for the selection of the project scheme, including the minimization of land acquisition and house demolition and avoidance of good-quality farmland, major infrastructure facilities, industrial enterprises, township and residential areas, and mining, forestry, tourist areas. Project schedule will take into account land acquisition and resettlement timetables.
6. Resettlement program to be monitored by the Government and ADB	An independent agency will be engaged, under terms of reference acceptable to ADB, to monitor the land acquisition and resettlement plan and to report on it to the Government and ADB.

3. Compensation Eligibility

135. All APs and organizations (whether public or private) losing land, buildings/houses, crops or sources of income will be compensated or rehabilitated according to the types and amount of their losses (permanent and temporary) as long as they are included in the final Detailed Measurement Survey (DMS) to be concluded on or around May 15, 2002, or are identified as affected by temporary impacts during construction.

136. The cut-off date for compensation eligibility will be set as May 15, 2002 or whenever the DMS is concluded. APs' cultivating land, constructing buildings or settling in project affected areas after the cut-off date will not be eligible to compensation or subsidies. Compensation will also not be paid for any structures erected, or crops and trees planted purely for the purposes of gaining additional compensation.

4. Specific Village Eligibility Options and Rates

137. According to the 1998 Land Administration Law the basic principle is that compensation funds are disbursed to local organizations that in turn will take responsibility for the rehabilitation of affected people and for the reinstatement of affected facilities. In accordance with the compensation policies and rates given above, SPECL will sign compensation agreements with the local Land Acquisition Bureaus/Resettlement Offices, supporting units, enterprises and public infrastructure agencies detailing the compensation payments, which will be made. Payment of funds will be made in accordance with: (i) these agreements and (ii) the time schedule specified in these agreements. There is however substantial variation in the way that different elements of the overall compensation are disbursed.

138. Agencies responsible for reinstating public utilities will receive the compensation directly as will householders, businesses and public organizations losing property. Compensation for crops is payable to the farmer and forest bureaux will receive the compensation for designated forestland. All transitional and moving allowances and compensation for temporary land loss will be directly paid to those affected. Land reclamation fees for cultivated land are payable to the government agency responsible for land development.

139. Land compensation fees and resettlement subsidies for cultivated land are initially paid to the land owning groups. The 1998 Land Administration Law provides substantial flexibility in the ways that the land-owning groups can use the compensation monies. Essentially, they can either use the compensation to generate additional economic activity (agricultural or non-agricultural) in the village, improve public facilities or infrastructure, institute training courses, or transfer payments directly to those affected. The legislation defines the village meeting as the organization responsible for making these decisions, which are, then subject to approval of the township authorities.

140. Disbursement of Land Compensation Fees: where land redistribution occurs, these fees will be used by the land-owning group/ village committee for the purpose of developing productive capacity and rehabilitating the economic level of affected persons, *including those farmers losing land as a result of the reallocation procedure*. Where there is no land redistribution, the land compensation fee is paid to the farmers losing land to the project.

141. Disbursement of Resettlement Subsidies: these are paid to the agency that is responsible for resettling the affected agricultural population, almost always the Village Committees and land owning groups. The onus is then on these organizations to provide appropriate income restoration measures for the AP households. If no such measures are provided, or the AP household prefers to look after themselves, the resettlement subsidy will be paid directly to that household, and there will be no requirement for an income restoration strategy as such.

142. The RP reinforces this approach by re-affirming the right of land-owning groups to determine how they use the compensation funds, which will be at their disposal. In order to satisfy the requirements of the ADB policy compensation rates and compensation eligibility options have been preliminarily fixed during the preparation of this RP through the implementation of a specific consultation program involving the leaders and key production group members in each village affected by the expressway. The results of this consultation program are summarized on Table 22. To equally satisfy Chinese procedures and regulation the preliminary compensation alternatives and rates will be reviewed and formally fixed once detailed design is available. This will be done on the basis of further consultation with all villages

and production groups affected and on the basis of specific economic surveys that will decide on the following matters: (i) whether land reallocation should be undertaken and the extent of this re-allocation; (ii) the proportion of compensation which should be payable directly to the APs; (iii) the uses to which compensation funds retained by the land-owning group will be put; and (iv) whether and where replacement sites are provided for displaced households and establishments.

143. The results of the final consultation process will be included together with the DMS in to a RP addendum. Figure 4 provides a simplified description of the overall process described above.

Table 22: Preliminary Village AAOV and Compensation Entitlements Options

County	Township	Village Code	Village Name	Preferred Strategy	County	Township	Village Code	Village Name	Preferred Strategy
Xichang	Huanglianguan	1	Dongping	C	Miyi	Xijie	31	Yangjiacun	B
		2	Dade	C			32	Reshui	B
	Huangshui	3	Luhe	C		Guabang	33	Qinggang	B
		4	Shuanglong	A			34	Guabang	C
		5	Wanao	B			35	Tianba	B
Dechang	Mali	6	Sanhe	B	Yanbian	Shaba	36	Shaba	B
		7	Minzhu	C			37	Yaqi	B
		8	Daba	C		Caochang	38	Kelang	B
		9	Dianma	C		Panlian	39	Shuitang	B
	Yinlu	10	Xintang	B		Salian	40	Binghai	B
	Dezhou	11	Daping	C			41	Yuwanggong	B
		12	Fenghuang	C			42	Pingyang	B
		13	A-Rong	C			43	Wanlai	C
	Xiaogao	14	An'ning	E		Yakou	44	Xintian	B
		15	Lianfeng	E			45	Yakou	B
		16	Lianmeng	E			46	Huiqing	B
		17	Qunying	E	Renhe	Xinjiu	47	Jiuchang	C
		18	Gaofeng	E			48	Mengliang	B
		19	Huangcao	E			49	Pinggu	C
	Leyao	20	Banzhanying	E		Xinmin	50	Shuiping	C
		21	Xintang	E			51	Xinmin	C
		22	Hongxing	C		Jinjiang	52	Jinjiang	A
		23	La-E	C					
		24	Dafu	C					
	Jinsha	25	Guanyintang	C					
	Jinchuan	26	Puba	C					
		27	Guanmen	C					
		28	Xinma	C					
		29	Luomi	C					
	Yonglang	30	Yongyao	C					

KEY:

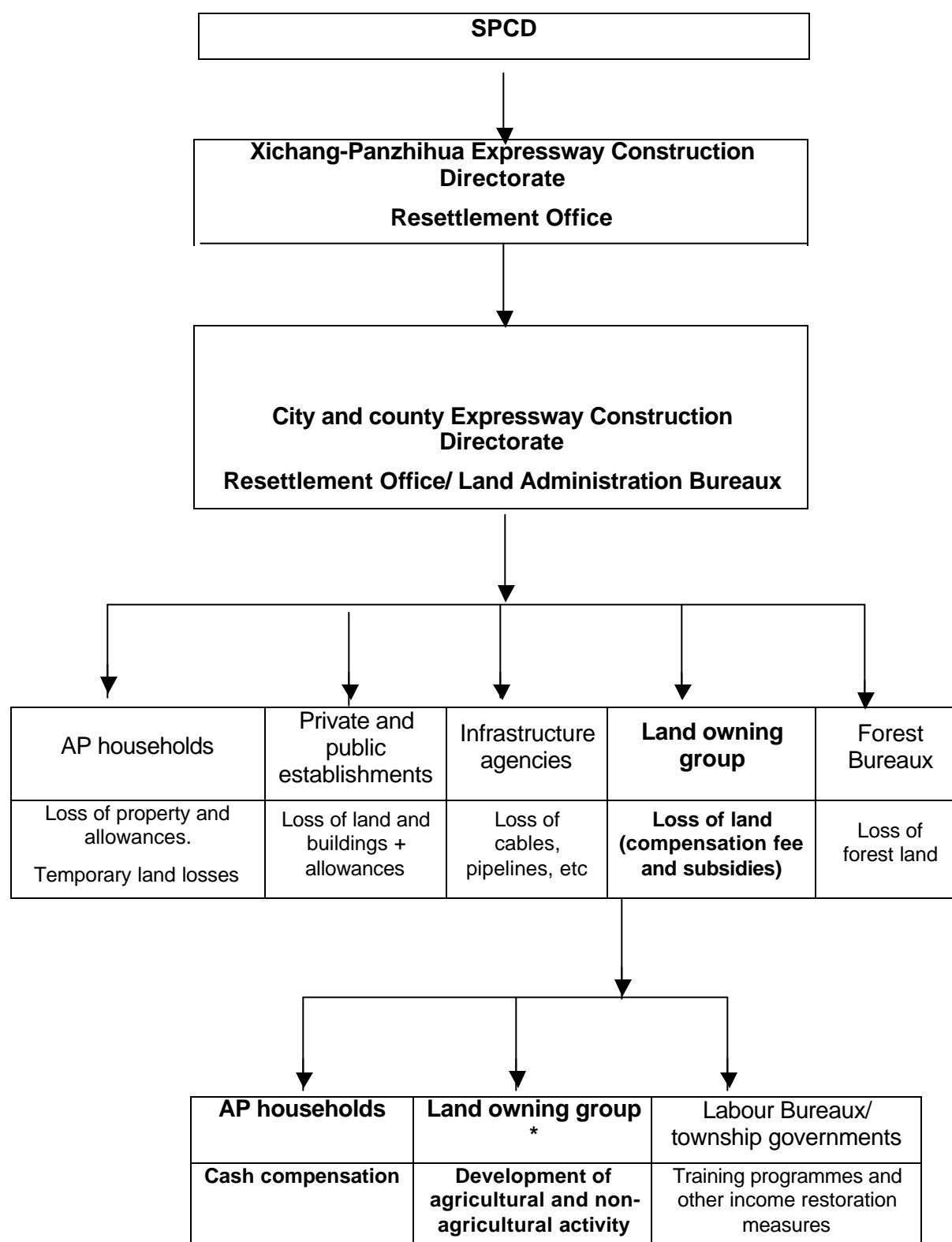
Strategy	Land Redistribution	Disbursement of Compensation
A	YES	LC ^a and RS ^b to land-holding group/ village
B	YES	LC to village; RS to APs ^c
C	YES	Part LC to village, part to APs; RS to APs
D	NO	APs transferred to urban status
E	NO	LC and RS to APs

^a LC: Land Compensation Fee

^b RS: Resettlement Subsidy

^c AP: Affected Person who loses land.

Figure 4: Flow of Funds for Compensation



NB. Items in bold indicate most important flows. * Indicates that they will use the funds themselves

5. Compensation Standards

144. The following paragraphs describe the compensation standards to be adopted for this RP. Detailed compensation rates are presented in section V that also contains the budget estimate.

a. Compensation for Loss of Cultivated Land

145. Land compensation fee: permanent cultivated land loss will be compensated in cash to the affected villages at a rate equivalent to 6 times of Average Annual Output Value (AAOV) of previous three years. Individuals or entities legally using affected plots will be compensated in terms of "land for land" mechanisms through redistribution of land within the village territory.

146. Resettlement subsidy: these will be paid on the basis of 4 times the AAOV calculated as above.

147. Arable land reclamation fee: Permanent cultivated land loss will be subject to a reclamation fee equivalent to double the total land and resettlement compensation described above, i.e. 20 times the AAOV for irrigated land and one times the total for dry land.

148. Temporary cultivated land losses will be directly compensated in cash to the APs equivalent one times the AAOV per mu for each year that the land is not available for cultivation.

b. Forestry Land

149. Permanent forestry land losses will be compensated in cash to the affected Forest Bureaus based on the area taken.

c. Residential Land, Houses/buildings and Fixtures

150. Residential land, houses/buildings and fixtures losses will be directly and fully compensated at replacement cost free of demolition expenses and salvaged materials. Compensation for residential land will be paid to local village that will then, in consultation with the village committee and the APs make available replacement plots within the community. If this is not feasible, the responsibility will be assumed by the township government. Houses, other buildings and apartments and related fixtures will be compensated in cash at replacement cost with monies paid directly to the APs.

151. Renters of affected houses/buildings will be guaranteed of a rent contract at the same terms of the rent before.

d. Crops Losses

152. All APs including tenants and APs without legal title will directly receive full compensation in cash for the crops loss at 1 times the AAOV. Crops compensation will be not be included in the calculation of the cultivated land reclamation fee or land recovery fee.

e. Resettlement allowances for home-owners

153. In addition to the compensation for houses and land, relocation allowances will be paid. These relocation allowances cover resettlement/ relocation costs, including rent in temporary

accommodation, between old house demolition and new house construction (transition allowance), and the cost of moving all household items and any salvageable materials to the new house, or from the rented house to new house (moving allowance). These allowances will be payable as a lump sum to AP households.

f. Compensation for Loss of Business/ Employment

154. The transition allowance for a commercial business moving from its old buildings to new ones will be calculated on the basis of total post-tax profit during the six months prior to relocation as declared by the business to the tax-collection agencies.

155. The transitional allowance for employees' loss of income will be equal to the total sum of earnings (including basic salaries and national subsidies) of all registered employees (including those retired) for 6 months prior to relocation.

156. These allowances will be paid on a monthly basis for up to 6 months from the date of removal from the original premises.

157. Moving Allowance: The allowance for transport and re-installation of the equipment of enterprises will be determined based on the regulations stipulated by the State and the Province in calculating such transport and installation costs. An allowance equal to the actual expenditure on renting storage space will be paid for temporary storage (if any) of equipment and materials.

g. Relocation of Public Buildings

158. All the public buildings affected will be replaced or paid in cash directly to its owners. Schools will be re-constructed before the old one is demolished.

h. Training Programmes

159. Training Programmes will be available to all APs. Allowances will be payable to those attending to cover the cost of transportation, food and lodging necessary to reach and stay for 2 weeks in the county or township centre where training course are to be run.

i. Vulnerable Households

160. Special attention will be paid to the vulnerable groups, defined as those already experiencing hardship (e.g. through sickness, lack of labour, age, etc) or whose loss of land/ property could lead to such hardship. In order to ensure that resettlement is no more difficult or inconvenient for these vulnerable groups as it is for the rest of the AP community, the land and resettlement multipliers may be increased up to a maximum of 30 times AAOV as provided for in the legislation.

6. The Entitlement Matrix

161. The entitlement matrix for this project is set out in Table 23. The matrix covers eligibility and compensation for *all* kinds of losses (e.g., land, housing, businesses, other. income sources, temporary loss of income, displacement, and moving cost). It provides a summary of the measures, provisions and standards described in the earlier part of this section.

Table 23: Entitlement Matrix of Compensation and Resettlement Policy

Type of loss	Application	Entitled person/ group	Compensation policy	Implementation issues
Permanent loss of arable land	Arable land located in the right-of-way (ROW) of the expressway	a) Land-owning groups b) Farmers who use the land c. 8900 APs c. 2130 hhholds	Land compensation and resettlement subsidies at 6 and 4 times the AAOV respectively; ^a Replacement land and/or cash payments and/or income restoration measures sufficient to ensure maintenance of existing economic and social conditions Cash compensation for any trees (based on type, age, and diameter) and standing crops (average production value of last 3 years) Cash compensation based on AAOV for each year land is not available + reinstatement to pre-construction condition	Village meetings to be responsible for deciding on funds allocation, land redistribution and investment in income generating activities. Higher level authorities to approve and monitor village level proposals and, if required to facilitate urban transfers and training programs
Temporary loss of arable land		Farmers who use the land		
Forest land	Forest land in ROW	Local forest bureaus	Cash compensation	According to Sichuan provincial stipulations
Loss of residential land/ property	Residential land located in or affected by ROW	a) Land-owning group b) Owner of the building or houses (c.566hhs)	Cash compensation for land if AP requires new plot Cash compensation for land (if rebuilding on existing site possible) or replacement plot or same sized apartment in urban area Cash compensation at replacement rates for all buildings Transition and moving allowances (in rural area); Cash compensation at half the rate for cultivated land	Land owning groups and APs to decide on location of new residential plots. Townships and counties to allocate new apartments for urban transfers.
Non-cultivated land loss	ROW uncultivated land	Land owning groups		
Loss of non-residential establishments	Establishments sited in or affected by ROW	a) Legal owner of the establishment b) Employees c) Residents (c. 204 hhholds)	Cash compensation for land (unless replacement site provided) Cash compensation for buildings Transitional allowances for lost income; Moving allowance for transport of building materials to new families who are relocated (not payable in cash). Transitional allowances for lost income for up to 6 months (if owner is not responsible for paying wages during the transitional period).	Assistance with finding new site if relocation of establishment is unavoidable.
Business/salary losses		Affected people	Business /salary losses will be compensated through specific allowances to be paid on a monthly basis for up to 6 months after relocation. The business losses allowance will be based on the total post-tax profit during the six months prior to relocation as declared in the tax receipts. The Salary loss allowances will be equal to the basic salaries + national subsidies of all registered employees and retired persons losing their salaries.	
Crops losses		Affected people	Crops losses will be compensated at a rate equal to 1 time the AAOV	

^a Arable land reclamation fee is also payable but this does not affect APs. Likewise compensation for public utilities is not shown on this matrix.

Source: derived from preceding text.

V. COMPENSATION COST ESTIMATES AND BUDGET

A. General

162. The compensation rates presented in this section have been derived from an extensive series of discussions with SPCD, SPECL, SPDI and local officials at prefecture, county and township levels as well as local farmers. They also take account of both national and provincial regulations concerning compensation, and rates established for other projects. They are therefore considered to be final. Any changes will be documented in the RP Addendum.

163. The costs for the land acquisition and resettlement include the following categories: (i) Compensation for land acquisition including crops and trees; (ii) Compensation for building/houses and structures; (iii) Costs for the rehabilitation of infrastructure affected; and (iv) Other costs related.

B. Compensation Rates and Costs for Land acquisition

1. Compensation for Arable Land

164. Compensation for arable (cultivated) land consists of the following components: (i) Land compensation fee; (ii) Resettlement subsidies for requisitioned cultivated land; (iii) Standing crop compensation; and (iv) Reclamation costs for cultivated land occupation.

165. In all cases, the Average Annual Output Value (AAOV), averaged over the previous three years, is fundamental to the calculation of compensation. AAOVs for different types of land (irrigated, non-irrigated/ dry and vegetable land in defined production bases) have been finalized following discussions with local officials in the affected counties and a comprehensive series of meetings with farmers and leaders in the affected villages (see Annex B).

166. After these discussions, AAOVs have been obtained for each county by averaging the AAOVs estimated for all affected villages in that county. This approach facilitates implementation, conforms to current practice and reflects the difficulty of accurately estimating small differences in AAOVs from one village to another, particularly in situations where village boundaries are ill defined and enclaves exists.

167. Compensation is then calculated by applying the following multipliers, in accordance with the Sichuan Province Regulations on the application of the National Land Administration Act:

- (i) Land compensation fee: 6 times the AAOV
- (ii) Resettlement subsidy: 4 times AAOV
- (iii) Standing (young) crop compensation: 1 times AAOV.

168. Total compensation payable to the affected land-owning groups or individuals is equivalent to 11 times the AAOV.

169. The land reclamation fees are calculated as follows:

- (i) Irrigated land: twice the total of land compensation fee plus land relocation subsidies, i.e., 20 times of AAOV.

(ii) Dry land: one times of land compensation fee plus land relocation subsidies, i.e., 10 times of AAOV for requisitioned arable land.

170. Table 24 presents the calculation of arable land compensation rates for each county while Table 25 presents the total RP cost for arable land compensation associated with the XiPan expressway. The reclamation fees represent an intra-governmental transfer payment while the remainder is payable to affected land-holding groups.

Table 24: Compensation Rate for Permanent Arable Land Acquisition

Land Types	County (City)	AAOV (Yuan) ^a	Multipliers x AAOV				Total (Yuan/mu)
			Land compensation	Resttlement subsidy	Young Crops	Land Reclamation	
IRRIGATED	Xichang	1200	6	4	1	20	37,200
	Dechang	1260	6	4	1	20	39,060
	Miyi	1370	6	4	1	20	42,470
	Yanbian	1200	6	4	1	20	37,200
DRY	Xichang	750	6	4	1	10	15,750
	Dechang	750	6	4	1	10	15,750
	Miyi	800	6	4	1	10	16,800
	Yanbian	650	6	4	1	10	13,650
	Renhe	800	6	4	1	10	16,800
VEGETABL	Renhe ^b	3000	6	4	1	20	93,000

^a Derived from village data in Annex B

^b Assigned by government as vegetable production base

Table 25: Costs for permanent arable land acquisition

Land Types	County (city)	Amount	Unit	Rate	Cost (Yuan)
IRRIGATED	Xichang	1,071	Mu	37,200	39,841,200
	Dechang	2,703	Mu	39,060	105,579,180
	Miyi	1,592	Mu	42,470	67,612,240
	Yanbian	128	Mu	37,200	4,761,600
	Sub-total	5,494			217,794,220
DRY	Xichang	342	Mu	15,750	5,386,500
	Dechang	2,219	Mu	15,750	34,949,250
	Miyi	1,866	Mu	16,800	31,348,800
	Yanbian	593	Mu	13,650	8,094,450
	Renhe	134	Mu	16,800	2,251,200
	Sub-total	5,154			82,030,200
VEGETABLE	Rehe	16	Mu	93,000	1,488,000
Total		10,664			301,312,420

2. Compensation for Other Land Types

171. The overall compensation rates (including land compensation and resettlement subsidies) for other types of land are:

(i) barren: Y3,000 per mu

(ii) other types (e.g. housing, ponds, orchard and forest): Y6,000 mu.

172. Compensation for trees will be payable according to the following schedule based on Liangshan and Panzhihua compensation standards:

- (i) Fruit trees: Productive trees - Y80; others - Y5-20 (depending on age)
- (ii) Mulberries: Y1.5 - 4 (depending on size)
- (iii) Bamboo: Y1
- (iv) Timber trees: Small/ medium - Y6-26; Large/ very large: Y100- Y300.

3. Compensation for Temporary Loss of Land

173. These are calculated at a fixed rate of 1000 Yuan per mu per year, with a four-year occupation period. With land recovery fee of Y1,000, the total cost per mu of land is Y5,000. This rate is based on that used for the Chengdu-Nanchong expressway which is now under construction.

C. Compensation for Houses and Structures

174. Following discussions with local officials in the two prefectures affected by the expressway, compensation for affected houses and buildings, owned by enterprises or individuals, will be paid at replacement rates as given in Table 26. No deduction in compensation will be made for depreciation or the cost of salvaged materials.

Table 26: Compensation Rates for Houses and Buildings

Prefectures	Unit: Yuan/m ²					
	Brick & Concrete	Brick & wood (tile)	Clay & Wood (tile)	Clay & Grass Roof	Simple Houses	Tent-like Houses
Liangshan	400	200	150	100	50	30
Panzhihua	450	200	150	100	50	30

175. Compensation rates for other types of structure are shown in the overall cost estimate presented in Table 27.

176. Compensation and rehabilitation costs for non-residential establishments and publicly owned residences have been estimated on a case by case basis in discussion with the owners. These are shown in Table 28.

177. Compensation rates for infrastructure networks were obtained after negotiation between SPD and affected institutions. These are shown in the final cost estimate (Table 21-26). Costs associated with the rehabilitation of irrigation networks and local access roads are included in the main civil engineering contracts.

D. Other Compensation Rates and RP Cost Items

1. Transition and Moving Allowances

178. All APs affected by house/apartment loss will receive the following allowances:

(i)	Transport expenses	300 Yuan/hh.
(ii)	Work losses	200 Yuan/hh.
(iii)	Transfer cost	150 Yuan/hh.
(iv)	Medical expenses	200 Yuan/hh.
(v)	Temporary housing	150 Yuan/hh.
<hr/> TOTAL per household		1,000 Yuan

2. Training Programmes

179. The cost for training programmes has been established on the basis that two persons from all households affected by land loss, whether directly or indirectly through land redistribution will be receive a training course costing Y200 per head. Around 1,950 households will lose land directly; assuming that land redistribution affects the same number again, around 3,900 households (7,800 people) will qualify for training courses. The total cost is therefore Y1.56 million.

3. Additional Assistance for Vulnerable Groups

180. No fixed compensation rates have been set for vulnerable households although provision has been made for increased multipliers to be used for these households by the inclusion of an additional cost item of Y500,000. The plight of the, relatively few, indigent poor APs is recognized by the SPECL, and township and village leaders who will take responsibility for ensuring that these households are properly identified and that appropriate compensation and supportive measures are determined in a pragmatic way on a case by case basis.

4. External Monitoring and Evaluation

181. External monitoring cost is calculated based on the following:

- (i) baseline survey: 2 professional staff for a period of 1 month at Y600 per day and 10 interviewers for 2 weeks each at Y250 per day. This gives a cost of Y73,500
- (ii) full annual monitoring surveys: as above for 5 years giving a cost of Y367,500
- (iii) reduced annual monitoring surveys (PRA only): 1 professional staff at Y600 per day for 1 month and 5 interviewers for 2 weeks each at Y250 per day which produces an annual cost of Y36,750. For 5 years, the cost would be Y183,750.

182. The total cost for external monitoring and evaluation is therefore Y624,750.

5. Other Items

183. Administrative Cost: Respective organizations responsible for implementation of resettlement and rehabilitation will be paid administrative expenses at the rate of 3 per cent of

the total amount of compensation payable in their jurisdictions. No other level of government will be paid administrative expenses.

184. Physical Contingencies: these have been included to provide for any local changes in design or alignment and for any unforeseen circumstance during RP implementation. Physical contingencies are budgeted at 10 per cent of the total cost of land acquisition and resettlement.

185. Price Contingencies: the cost estimates in the RP are based on current prices. Annual adjustment in the cost estimates will be made based on the inflation rate for the past year. The rates of compensation payable to the APs and enterprises will accordingly be adjusted annually, based on the actual inflation during the year. The inflation allowance and the need to adjust compensation rates annually will be stated in the resettlement compensation agreements with various agencies. Currently the State Development and Planning Commission have reported that inflation is zero, so the estimated costs do not allow for inflation.

E. Total Cost Estimate

186. Table 21-26 presents a detailed breakdown of the total cost of resettlement related activities including compensation categories, quantities, unit rates and overall cost. Table 21-27 contains a summarized estimate by main category only.

187. The total cost of land acquisition and resettlement is estimated to be around Yuan 474.4 million at current prices. Around 70% of this cost relates to compensation for the acquisition of land, including crops and trees. Just over 10% relates to the costs for acquiring property, other structures and transition/ moving allowances for those affected. No cost item is included for the rehabilitation of irrigation networks and local access roads as these elements are included in the main civil engineering contracts.

188. During the implementation of the RP, the PMO will include the annual requirement of funds in the annual investment plan of the Project. SPECL is responsible for provision of adequate funds to carry out the implementation of the RP in a timely fashion. Cost over-runs for resettlement, if any, will be incurred by SPECL. The General Manager of SPECL is authorized to grant any non-budgeted expenditure with regard to the implementation of land acquisition and resettlement related activities.

Table 27: Resettlement Plan Budget

Category	Losses	Types	Amount	Unit	Price	Cost (Yuan)
1. Land acquisition						321,033,440
1.1 Permanent acquisition	Arable land	Irrigated	5,494	Mu	39,796	217,794,220
		Dry	5,154	Mu	17,219	82,030,220
		Vegetable	16	Mu	93,000	1,488,000
	Non-arable land	Barren	1,311	Mu	3,000	3,933,000
		Forest	725	Mu	6,000	4,350,000
		Orchard	233	Mu	6,000	1,398,000
		Water pond	49	Mu	6,000	294,000
		House plots	301	Mu	6,000	1,806,000
	Sub-total		13,283			313,093,440

Category	Losses	Types	Amount	Unit	Price	Cost (Yuan)
1.2 Temporary land occupation	Arable	Irrigated	189	Mu	5,000	945,000
		Dry	1,399	Mu	5,000	6,995,000
	Non-arable	Barren	204	Mu	0	0
	Sub-total		1,792		4,431	7,940,000
2. Buildings/houses and attachment						53,850,940
2.1 Private Residences	Brick+Concrete (Liangshan)		1,712	m ²	400	684,800
	Brick+Concrete (Panzhihua)		6,441	m ²	450	2,898,450
	Brick+Tile		7,592	m ²	200	1,518,400
	Clay+Tile		125,678	m ²	150	18,851,700
	Clay wall + Grass roof		228	m ²	100	22,800
	Simple house		79	m ²	50	3,950
	Tent-like house		197	m ²	30	5,910
	Sub-total		141,927			23,986,010
2.2. Buildings/houses of Public Organization (for breakdown see section VI)						18,021,000
2.3 Other Structures	Sunning ground		33,189	m ²	50	1,659,450
	Enclosure wall		14,789	m ³	50	739,450
	Manure pits		1,942	m ³	30	58,260
	Water tanks		864	m ³	200	172,820
	Wells		54	m ³	250	13,500
	Pump wells		24	Unit	300	7,200
	Fish pond		160,905	m ³	50	8,045,250
	Tomb		487	Unit	600	292,200
	Bio-gas digester		66	Unit	1,300	85,800
	Sub-total					11,073,9304
2.3 Relocation allowance	(i) Transfer/ transport expenses		770	H.H.	300	231,000
	(ii) Work losses		770	H.H.	200	154,000
	(iii) transfer losses		770	H.H.	150	115,500
	(iv) medical costs		770	H.H.	200	154,000
	(v) temporary housing		770	H.H.	150	115,500
	Sub-total					770,000
3. Compensation for trees						13,487,117
3.1 Fruit trees	Young trees		8,430	tree	5	42,150
	Grafted trees		630	tree	5	3,150
	Non-fruit bearing		6,080	tree	10	60,800
	Initial fruit-bearing		2,134	tree	20	42,680
	Productive trees		36,155	tree	80	2,892,400
	Sub-total					3,041,180
3.2 Economic trees	Mulberry tree	Small size	0	tree	1.5	0
		Medium size	1,200	tree	3	3,600
		Big size	825	tree	5	4,125

[illegible]

Table 28: Summary Cost for Land Acquisition and Resettlement

Budget Item	Unit	Quantity	Unit Price	Cost (Yuan)
1 Permanent land acquisition	mu	13,283	23,570	313,093,440
Temporary land	mu	1,792	4,430	7,940,000
2 Private Houses	m2	141,927	170	23,986,010
Non-private establishments	-	-	-	18,021,000
Other fixture items	-	-	-	11,073,924
Resettlement Allowances	Hholds	770	1,000	770,000
3 Trees	no	214,183	63	13,487,117
4 Power/tele-com. lines	m	238,450	121	28,771,950
5 Other costs: training, vulnerable groups, monitoring			-	2,684,750
Total basic cost				419,828,197
6 Physical contingencies		<i>10% of total basic cost</i>		41,982,820
7 Office administration fee		<i>3% of total basic cost</i>		12,594,846
GRAND TOTAL				474,405,863

VI. RELOCATION AND RECONSTRUCTION OF PROPERTY AND INFRASTRUCTURE

A Relocation and Resettlement of Private Households

189. Around 566 households living in their own premises are expected to require relocation as a result of the project. These households are located in 47 villages along the 160km of the expressway alignment. Investigations undertaken during RP preparation revealed that around 90% of these households wish to be relocated in close proximity to their existing property (see Table 16). These two factors mean that there is no requirement to develop relocation sites in host communities. Furthermore, evidence from other projects reveals that new houses are almost always built to a standard, which is superior to the current residence.

190. In many cases, it is anticipated that many households will be able, and will prefer, to reconstruct their houses on their current plot thereby precluding the need for new sites. In these cases, households will receive cash compensation for both the land they lose and the replacement cost of the buildings and structures.

191. Where relocation sites are required, the following procedure will be adopted:

- (i) in the early stages of the resettlement process, the SPECL, working with local leaders and officials, will identify possible relocation sites. Where possible, these sites should be within the land owned by the affected land-owning group (sub-village). Where this is not feasible, sites will be found within the village as a whole
- (ii) discussions with affected households will be held to identify their relocation preferences
- (iii) new sites will be allocated to affected households with maximum effort given to ensuring that individual preferences are satisfied.

192. In cases, where relocation sites are provided by the village authorities, these authorities will receive the compensation fee for the land with householders receiving compensation for the

house and buildings lost. Additionally, these households will receive the moving allowances stated in the preceding section.

193. Compensation to affected householders will be paid following signature of individual compensation contracts in order that the construction of new houses can be completed prior to the clearance of the ROW. The need for a suitable time period to elapse implementation schedule (Figure 7) incorporates a suitable delay between payment of compensation and property demolition.

194. The SPECL will provide the overall supervision for these tasks but the direct responsibility for ensuring the timely availability of suitable relocation sites and the allocation of these to affected householders will lie with village and land-owning group officials. Householders will be responsible for the construction of their new houses.

195. Village and township authorities will provide special assistance to assist vulnerable households in the reconstruction of their houses. They will be assisted in this task by the Civil Affairs Department, which can also provide additional assistance using finance from the Social Assistance Fund (see section VII.H).

B. Relocation and Resettlement for Non-residential and Communally-owned Residential Establishments

196. The overall policy is that the amount of compensation and the timing of its disbursement should be adequate to enable the relocation and reconstruction of all non-residential establishments and residential premises owned by organizations to take place prior to their demolition to the clearance of the ROW. This is particularly important where schools are affected. Proposals for the 13 establishments owned by organizations have been formulated following discussions between SPCD and the owners or responsible agencies. These proposals are summarized in Table 29.

197. The following should be noted:

- (i) three schools will require relocation. New sites have been selected for all three
- (ii) two small office buildings will be rebuilt within their respective villages
- (iii) two establishments are moribund and will not be relocated
- (iv) the remaining establishments will be reconstructed elsewhere within the same original site
- (v) in total around 204 households residing in these establishments will be affected and will be provided with new housing.

198. The total compensation (Y18.7 million) for relocating and reconstructing these establishments is included in the overall resettlement budget (section V). In all cases, compensation will be payable to the owner/ operator of the establishment.

199. Moving and transition allowances will also be payable on behalf of residents of these establishments. This compensation will be payable to the owner who will be responsible for its distribution to affected persons. Costs associated with these allowances have been estimated

along with all other such payments and are included as a separate item in the budget (see Table 27)

200. The construction of new facilities, especially for the schools, will result in an improvement in conditions relative to the current situation. No disruption to businesses is likely.

Table 29: Reconstruction Proposals – Establishments

Establishment/ location	Basic information	Proposal	Replacement plan	Estimated Costs (Yuan)
Lianmen Primary School, Xiaogao Township, Dechang	Total area: 7.5mu (0.5ha) No. of students: 215 (7 grades) No. of teachers: 18	Reconstruction on new site by SPECL	- New Location: move back from the expressway and railway; it is 800 m far from National Road 108, with total campus area 7.5mu. - Follow national “Hope School” standard, build a standardized 7 grade school.	- Land leveling, power and water, satellite TV facilities: 300,000. - Land acquisition cost: 120,800. - School re-construction and decoration: 515,700. Total: Yuan <u>936,500</u>
Yangjiacun Primary School Xijie Township, Miyi	Total area: 3.27mu (0.22ha) No. of students: 260 (6 grades) No. of teachers: 12	Reconstruction on new site (by township)	- New location: between Xijie Middle School and National Road 108 (1.2 km south from old school), with total campus area 4.2 mu.	Well-chosen area neighbouring Middle School, no land levelling cost. - Land acquisition cost: 101,010. - Reconstruction cost: 460,800. Total: <u>Yuan 561,800</u>
Changjiang Forestry Children’s School, Jinjiang Township, Panzihua	Total area: 30mu (2ha) No. of students: 117 (5 grades) No. of teachers: 20	Reconstruction on new site by SPECL	- New Location: In Jinjiang Village of Jinjiang Township, with total campus area 30 mu. - Build a new school with well functioning facilities.	- Land levelling, power and water, satellite TV facilities: 600,000. - Land acquisition cost: 293,000. - Re-construction: 2,700,000. Total: <u>Yuan 3,593,000</u>
Dechang Seedling Nursery (K21+560)	Former Dechang Pig Farm, bankrupted and taken over by Dechang Finance Bureau. -One clay-tile house	Reconstruction on same site	To be arranged by Dechang Finance Bureau, move backward within the same farm.	- Land acquisition for house site: 3,140Yuan - Replacement rate: 43,650Yuan Total: <u>Yuan 46,790</u>
Puba Railway Station	A depot and affiliated houses will be affected	Reconstruction on same site	Puba Railway Station will receive double the normal compensation rate for buildings, demolition, and will replace all the facilities by themselves according to Railway Station Design.	No land acquisition fee asked Total cost: Yuan <u>4,512,500</u>
Puba Gasoline Station	Paid to Laonian Township for debt by Dechang Petro Company	Use discontinued	Not economic to continue operation	Total cost: Yuan <u>250,000</u>

Establishment/ location	Basic information	Proposal	Replacement plan	Estimated Costs (Yuan)
Wanqiu Farm (K86+680)	A farm affiliated to Panzhihua Steel Company Five houses will be affected.	Reconstruction on same site	Wanqiu Farm will relocate the houses according to their planning within the same farm.	- House site: Y11,500 - Compensation for houses: Y206,500 Total: <u>Yuan 208,000</u>
Panlian Water Management Association (K107+040)	Small office in Shuitang Village in occasional use by water guard.	Reconstruction on new site	Panlian Township will identify suitable relocation site and in Shuitang Village and rebuild	- Cost of house site: 800 Yuan - Compensation of houses: 14,400 Yuan. Total: <u>Yuan 15,200</u>
Miyi Bone Powder Making Factory	Owned by a local teacher, bankrupted early in 1991.	Use discontinued	Not currently in operation	Compensation for - Land: 15,000 Yuan - Houses: 257,200 Yuan Total: <u>Yuan 272,200</u>
Puwei Forestry Bureau, Panzhihua Municipality	- 40 hh. in apartment building affected.	Reconstruction on same site	Puwei Forestry Bureau will rebuild a building with equal area (move forward)	- Land levelling, services etc.: Y300,000. - Land acquisition cost: 90,600. - Re-construction: 2,400,000. Total: <u>Yuan 2,790,600</u>
Lianhua Vet Station	Small office building	Reconstruction on new site	Panlian Township will identify suitable relocation site and in Panlian town and rebuild	- Land acquisition cost: 20,000. - Re-construction: 22,400. Total: <u>Yuan 44,400</u>
Yanbian Forestry Bureau	Two houses affected	Reconstruction on same site	Yanbian Forestry Bureau will rebuild on same site (near their seedling nursery).	- Land acquisition cost: 15,000. - Re-construction: 66,000. Total: <u>Yuan 75,000</u>
Panzhihua Changjiang Forestry Corporation	Residential apartment block and houses accommodating around 105 households.	Reconstruction on new site	Site to be identified within township centre	- Land levelling, services, etc.: Y300,000. - Land acquisition cost: 317,000. - Re-construction: 4,100,000. Total: <u>Yuan 4,717,000</u>
TOTAL				Total Cost: <u>Yuan 18,021,000</u>

C. Reconstruction of Physical Infrastructure

201. Wells, power and communication lines affected by the project will be re-constructed prior to the demolition of the existing facilities in order to ensure continuous service.

202. In total, the reinstatement of around 87km of high voltage and 50km of low voltage power lines will be required along with 98km of telephone and fiber optic cables, 3.6km of water pipes and 78 wells. More details, including compensation rates, are provided in section V, which details the overall RP, cost estimate.

203. Responsibilities for re-constructing the water, power and telecommunications lines and cables will lie with the respective agencies while villages will receive the compensation for wells and be responsible for their re-establishment.

D. Reinstatement of Irrigation Systems

1. General

204. Irrigation systems are of critical importance to the project area as they provide the basis for much of the Anning Valley's economic activity. These systems will inevitably experience some disruption as a result of the construction of the XiPan expressway; although this will be reduced by the fact that one third of the expressway consists of bridges and tunnels.

205. The overall objective is to ensure that irrigation systems remain functional at all times when they are needed during the construction and operation of the expressway. This objective, which essentially involves the smooth flow of water from one side of the expressway to the other, is as important for the correct functioning of the expressway design as it is for the irrigation systems themselves.

206. The reinstatement of irrigation systems is a major source of concern to residents living along the alignment and their local leaders. The maintenance of irrigation channels in working order has been recognized by SPECL and SPDI. The preliminary design study took account of the location of the major irrigation canals and the detailed design stage will include the design and location of culverts and aqueducts to enable the continuous operation of the secondary and tertiary irrigation channels.

207. Due to the complexity of the irrigation systems, some problems may only come to light during construction activities. In these cases, resolution will be achieved through contract variations following discussions between the SPECL, the contractors and local farmers. Contractors will also be under an obligation to ensure that irrigation systems are operational at all times when they are needed and that they are fully operational when the contract is completed.

208. The following section identifies the principal activities, which have been, and will be, undertaken.

2. Irrigation Rehabilitation Action Plan

a. Consultations

209. Consultations were held with local irrigation authorities regarding the characteristics of the big irrigation canals (e.g. Qianjin, Hongqi and Fubing) traversed by the expressway in order to develop suitable design solutions to eliminate both permanent and temporary disruption. The results have been recorded in Meeting Minutes and have, where appropriate, been incorporated into preliminary scheme design.

210. Secondary and tertiary irrigation channels will be surveyed by members of the design team and the county Expressway Construction Command (SPECL) by means of transect walks undertaken simultaneously with the DMS. These will involve detailed discussions with local farmers regarding the local hydrology and water/flood flow orientation. After technical assessment all reasonable suggestions raised by local farmers will be incorporated into the detailed design.

211. Problems during construction activities may be identified by the contractors, the supervising engineers from SPECL or local farmers. Where they are discovered by the former, they will be resolved directly by means of contract variations, as occurred during the construction of the Lugu expressway. Where they are identified by farmers, they will be subject to the grievance procedures outlined in section Xi.

b. Technical Tasks

212. Based on the consultations and the design assessments, SPDI and the SPECL will prepare designs, to be incorporated into the final design or contract variations. These will most often involve new or redesigned culverts, aqueducts (where the road is in cutting), and irrigation/drainage channels paralleling the road.

213. Where the irrigation cannot be recovered for small, isolated pockets of land, small irrigation pump engines will, by agreement, be purchased for the affected farmers. If this proves impractical, irrigated land will be converted into dry land with cash compensation.

214. Conditions will be inserted into construction contracts to minimize the temporary disturbance to irrigation systems, e.g. by installing protective covers to prevent earth rolling into the canals, or by installing pumps to maintain adequate drainage and irrigation while the expressway base is under constructed.

c. Timing of Activities

215. The canals permanently affected will be rebuilt before the construction of the expressway base and the demolition of the old ones. In order to minimize the adverse impact, this re-construction will coincide with the "yearly maintenance" of the big canals. (November-March). Specifically, re-routing of the Hongqi, Qianjin and Fubing Canals will occur before May 2003.

216. Irrigation/drainage channels will re-route according to project design during the expressway base construction through bridges or culverts. This process depends on the progress of engineering tasks.

217. Monitoring of drainage and irrigation following completion of the sub-grade will be undertaken with remedial works being designed and implemented where necessary.

d. Costs

218. The reinstatement of irrigation systems will be part of the main civil engineering contracts and the associated costs have been incorporated into the overall schedules for sub-grade, bridges and culverts. These costs include both the permanent changes to the irrigation systems and temporary engineering works relating to works away from the expressway alignment. A similar approach is used to ensure that local access roads and paths are maintained throughout the construction period]. In consequence, no costs related to irrigation system rehabilitation are included in the RP budget.

VII. INCOME RESTORATION

A Context

219. The overall objective of income restoration is to ensure that all APs losing their means of livelihood (in this case their land) to the project are able to at least maintain their pre-project levels of income and living standards.

220. The construction of the XiPan Expressway will result in around 1,950 households losing at least some of their land, and hence part of their income. The results of the socio-economic survey indicate that, although over 60% of households derive some of their income from off-farm activities, around 2/3rds of households depend on cultivation for at least half their income. The loss of land will thus seriously affect the livelihood of many households.

221. The compensation rates agreed for this project provide that the compensation payable direct to the land-holding groups owning the land to be acquired will be equivalent to 11 times the AAOV (averaged over the last 3 years). In monetary terms, payments will be around Y13,000 and Y8,000 per mu of irrigated and non-irrigated land respectively. Compensation for standing crops and trees equivalent to their market value is paid directly to the affected farmers.

222. Current laws and regulations provide a substantial amount of flexibility as to how land-holding groups use this money, with the condition that, directly or indirectly, it benefits the affected farmers. Subject to ratification by the township governments, properly constituted meetings of the members or representatives of the land-holding groups can either decide to re-allocate land amongst their members to enable land-losing households to provide a new holding to APs and use the compensation for the good of the community, or can decide to pay the money directly to the APs or do a combination of both of these.

B. Formulation of Income Restoration Strategy

223. Any income restoration strategy should respect, as far as possible, the preferences of APs as to how this should be achieved. Formulation of an income restoration strategy is also dependent on the way the compensation moneys are divided between the community and the individuals. In this context, the results of the socio-economic survey (including both individual households and village leaders) revealed (Tables 15 and 16) revealed preferences for both land redistribution and direct cash compensation - individuals tended to prefer the latter while officials and leaders tended to prefer the former. There was little support for a transfer from rural to urban status.

224. In order to provide a more robust basis for the formulation of an income restoration strategy, a series of 7 meetings was held with representatives from the affected land-holding groups and villages at township offices during December 2001. These meetings were attended by representatives of the SPECL, the TA consultants, and local officials (including the Land Administration Bureaux). In total, over 220 farmers and village leaders from 52 villages attended the meetings. The attendance of county and township officials ensured that they understood the purpose of these meetings and would be supportive of the eventual outcomes.

225. The primary topics discussed were each village's attitudes towards land redistribution and the split of compensation between the community and the affected farmers. The summarized results are presented in Table 30.

Table 30: Preferred Income Restoration Strategy

Preferred Strategy	Land redistribution	No. of Villages	Percent
All compensation to the village	YES	2	4%
Land compensation fee (LC) ^a to village; resettlement subsidy (RS) to APs	YES	18	35%
As above but part of LC to APs as well as RS	YES	24	46%
LC and RS to APs	NO	8	15%
Transfer from rural to non-rural status	NO	0	0%
TOTAL	-	52	100%

^a The LC comprises 60% of the compensation payable and the RS 40%.

226. The principal findings are:

- (i) over 80% of villages would prefer to redistribute land to enable all APs to continue farming
- (ii) over 95% of villages wish to see at least the resettlement subsidy paid directly to the APs
- (iii) there was little support for either transfer to urban status or all compensation being used by the village.

227. Based on the above findings, the income restoration strategy will be flexible, democratically based, and self-administered in accordance with the decisions of individual villages. The preferences arising from the meetings already held will be ratified or amended by properly constituted meetings in the affected villages. The income restoration strategy will result in the great majority of APs continuing in agriculture, even though they may lose some or all of their current holding. The strategy will have the following main elements: (i) land redistribution (implemented with assistance from local LABs); (ii) investment by the community, primarily for the benefit of all those involved in the land redistribution; (iii) investment by individual APs; (iv) training; and (v) employment on project-related activities.

228. Specific proposals are presented below.

C. Income Restoration: Use of Compensation Funds

1. Community Based Income Restoration Measures

229. Irrespective of land redistribution, agricultural production in the affected land-holding groups will decrease in the short-term. Compensation funds accruing to the villages will therefore be based primarily around improving agricultural productivity and, in particular, on the following:

- (i) the improvement of irrigation facilities and their extension to currently non-irrigated areas
- (ii) the creation of new cultivable land, either through terracing or reclamation along the Anning River (as is now proposed in Reshui village, Miyi county)
- (iii) the development of orchards and other crops
- (iv) improving animal husbandry
- (v) the development of agro-processing.

230. Villages may also decide to allocate some of the funds to social and physical infrastructure projects such as improved schools, access roads or water supply networks.

231. Detailed proposals will be developed by each village/ land-holding group following disbursement of the compensation.

2. Use of Compensation Funds by Individuals

232. The payment of a substantial portion of compensation funds to individuals will place a considerable responsibility for income restoration on APs themselves. The agricultural and service sectors in the project area have expanded rapidly in recent years due largely to the initiatives of private individuals and there is every likelihood that funds will be devoted to productive activities as well as house improvements.

233. Individuals questioned during the socio-economic survey (Table 16) showed a marked preference for investing in off-farm activities, e.g. small businesses, trading, transportation. However over a quarter said that they would expand agricultural and livestock production, e.g. by purchasing young animals or electric pumps as well as improving the irrigation to their fields. Additionally, some households are likely to use funds to provide their offspring with a better education indicating a more far-sighted view of the future well being of their household.

234. APs will develop a wide range of approaches to the use of the compensation funds that they receive. These approaches will become clear in the months following their receipt of the funds.

D. Training Programmes

235. Notwithstanding the fact that affected communities and APs will be primarily responsible for income restoration, an extensive series of training programmes will be implemented. These programmes, for which a separate budget item has been allocated, will be available to all APs and will include some or all of the following subjects: (i) Animal husbandry; (ii) Economic crop

planting in courtyard; (iii) training program to women on sewing and knitting skills; (iv) skills on motorcycle, vehicle, tractor and farm machinery repair; (v) repair and maintenance of electrical goods; (vi) product marketing; and (vii) small business registration and operation.

236. Courses will be offered both in situ and by the training centers in County and township centers. Payments will be made directly disbursed to the training institution, e.g. the agricultural extension department and the women's federation. Allowances will be paid for trainees attending courses away from their own villages.

E. Employment in the Project Activities

237. The construction of the XiPan expressway will create a large number of temporary construction jobs and a small number of permanent employment opportunities. Farmers welcome the construction-related job opportunities as providing an additional source of cash income that will assist them in restoring their livelihood.

238. Based on discussions with SPECL, priority will be given to the APs when recruiting Project personnel and construction workers. Company managers will liaise with local leaders to facilitate this process. Priority will be given to APs losing all or a large proportion of their land. Training will be provided, where appropriate, for longer-term positions.

F. Gender Issues

239. The project recognizes the major role played by women in the project area economy and in the households. The future welfare of women affected by loss of land and property is implicit in the compensation and other measures adopted in this RP. Women will be eligible, on an equal basis, for all compensation payments, training programmes and other assistance being proposed. They will also qualify, again on an equal basis as men, for temporary and permanent employment associated with expressway construction and operation.

G. Transfers from Rural to Urban Status

240. It is not expected that significant numbers of APs will transfer to urban status (*Fei Nongye Hukou*) as most villages will redistribute land and no major enterprise will cease operations. Where able-bodied APs are transferred to urban status, they will be given the option to receive their due compensation and finding self-employment, or to receive a job; in such a case the work unit employing them will receive the compensation.

H. Vulnerable households

241. The vulnerable households belong to two main categories: a) poor households with "welfare poor" (*Wu bao Hu*) status prior to the construction of the expressway (few in number), and b) households losing a large proportion of their land but without the labor resources or technical expertise necessary to re-establish themselves.

242. In order to ensure that the living standards of these households are maintained after resettlement, the EA and local governments have taken the following measures:

- (i) Provide vulnerable households with higher compensation multipliers as allowable under the 1999 Land law as recommended by village authorities;

- (ii) give vulnerable households priority in gaining expressway-related employment;
- (iii) ensure that following relocation (*wu bao hu*) households continue to receive their assistance entitlements timely and as needed;
- (iv) establish a Social Assistance Fund (SAF) for households that may encounter specific rehabilitation difficulties. The SAF will be administered by the civil affairs departments of the county governments. Disbursement will be on an 'as needed' basis following representations by the individual households and village leaders.
- (v) provide labor and technical assistance for the relocation and house-reconstruction activities of households composed by persons with physical difficulties such as the elders, the disabled or the mentally ill.
- (vi) land compensation funds may be used to assist vulnerable households in cultivating their plots and in obtaining micro-credit.
- (vii) Give vulnerable households with priority access to training programs.

VIII. PARTICIPATION AND CONSULTATION

A The Public Consultation Process

243. The public consultation process for the Project began in 1998 with a series of surveys by SPCD. These included the first transect survey by the Design Team and an initial socio-economic survey. The transect survey served principally to alert villages along the proposed alignment (and possible alternatives) that the XiPan expressway was being planned. This survey also served to make the design team aware of local conditions and of farmers' concerns including the need to adequate crossing points and the importance attached to ensuring that irrigation systems were maintained. The majority of the affected population were become aware of the project at this time.

244. The initial socio-economic survey revealed a high degree of support for the scheme although this was based on a small sample of mainly officials rather than farmers. Concerns were also raised relating to: (i) Receiving fair compensation based on the relevant laws and regulations; (ii) minimizing land acquisition; and (iii) ensuring adequate land allocation and livelihood restoration.

245. Public consultation was a major focus of the TA feasibility study, undertaken between June and September 2001 with follow-up work lasting until early January 2002. The main activities were:

- (i) socio-economic surveys of affected households and discussions with village leaders in July and October 2001 - the results are reported in Section III. These surveys were undertaken in 18 villages along the proposed alignment
- (ii) a series of meetings with representatives from all affected villages (leaders and farmers) in December 2001 to discuss and obtain preferences on the preferred methods of compensation and income restoration (see Appendix 2), and to ascertain current AAOVs These meetings were also attended by many local officials from prefecture, county and township governments (including the Land Administration bureaux) and the TA consultants

(iii) numerous meetings with government officials and representatives from SPCD, SPDI and SPECL between June and December 2001 at which all aspects of the RP were discussed.

246. A summary of the key consultations and meetings is contained in Table 31.

247. The policies and proposals contained in this RP have been heavily influenced by the results of these meetings and surveys. This applies particularly to the derivation of the AAOVs (which provide the basis for the calculation of compensation) and the formulation of an income restoration strategy based heavily around land redistribution with compensation funds being paid, in approximately equal measure, to the land-holding groups and individual APs. The land-holding groups and the APs will then be largely responsible for the ways in which the compensation is put to use.

B. Public Participation and Consultation Plan

248. Notwithstanding the amount of public consultation already carried out, the SPECL fully accepts that additional measures will activities in this regard will be required during the implementation of the resettlement and land acquisition process.

249. The programmed activities are shown in Table 32. The principal activities to be undertaken are:

- (i) publication and dissemination of an Information Booklet (Appendix 3) summarizing the policies, entitlements, compensation standards and rates, grievance procedures and resettlement/ land acquisition programme;
- (ii) formal village meetings to ratify, with or without amendment, the proposals relating to land re-distribution and compensation disbursement; and
- (iii) the Detailed Measurement Survey conducted, face to face, to measure and agree the final requirements for land, property and other acquisition, from each affected household.

C. Disclosure of the RP

250. The Information Booklet was released to the affected persons on 6 February 2002. The RP in Chinese language will be made available to the public in each village and at local land administration and SPECL offices. The Summary Resettlement Plan was disclosed to the public through ADB's web site on 3 March 2002. The full RP will also be disclosed through ADB's web site.

Table 31: Public Participation/ Consultation Activities during RP Preparation

AGENCIES	PURPOSE(S)	DATE	MAIN ISSUES DISCUSSED/ COMMENTS
SPCD, SPD, county and township officials	Requests for Project information and survey preparation	April 1998	<ul style="list-style-type: none"> • Requests for socio-economic information • Arrangement for field visit for initial socio-economic survey.
SPDI, village committees, APs	Initial Socio-economic survey	April-June 1998	<ul style="list-style-type: none"> • Discussion of local attitudes to project • Completion of multiple-choice questionnaires on local perceptions and concerns regarding XiPan expressway • Group interviews at 12 locations along the alignment • Findings indicated overwhelming support for project • Concerns mainly related to water/ soil conservation issues, need to address compensation and relocation issues as quickly as possible, and tree-planting
SPDI	Design and measurement surveys along proposed alignment	1998/1999	<ul style="list-style-type: none"> • Survey inputs for feasibility and preliminary design studies • Identification and quantification of impacts - categories of land, structures, etc. • Discussion of design issues • Surveys involved engineers staying in the affected villages thereby raising local awareness of proposed expressway and its likely impacts
TA consultants	Socio-economic survey of 10 affected villages	July 2001	<ul style="list-style-type: none"> • Consultations with APs involving a combination of individual household interviews and PRA type surveys of village and township leaders • Socio-economic information of affected communities • Locally-perceived attitudes towards the expressway including awareness, benefits/ disbenefits, main concerns relating to compensation resettlement, and preferences for methods of compensation and income restoration.
TA consultants	Socio-economic survey of another 12 affected villages	October 2001	As Above

AGENCIES	PURPOSE(S)	DATE	MAIN ISSUES DISCUSSED/ COMMENTS
SPDI, SPECL, TA consultants, county (inc. LABs) and township officials	<p>Identification of preferred options for allocation of compensation payments on a village by village basis to enable RP preparation.</p> <p>Following meetings were held:</p> <ul style="list-style-type: none"> - Huanglianguan village for all Xichang villages - Dezhou for villages in north of Dechang county - Jinchuan village for townships in south of county - Guabang t'ship for villages in north of Miyi county - Salian t'ship for villages in north of Miyi county - Xinmin t'ship for villages in Yanbian county - Jinjiang t'ship for Jinjiang village. 	Nov. 30 to Dec. 8 2001	<ul style="list-style-type: none"> • These meetings were attended by over 200 representatives from villages and land-holding groups affected by the expressway. All villages were represented • The meetings were chaired by the deputy magistrate of each county. Technical advice and assistance was provided by the LAB, SPDI and TA consultant • Presentation of expressway alignment, proposed time frame, basic resettlement and compensation options • Discussion of implications, advantages and disadvantages of alternative compensation / land redistribution options using flip-charts • Meetings were highly participatory and transparent with representatives of each village invited to present their preferred method of compensation and attitude towards land re-distribution by means • Discussion and finalisation of village AAOVs.
SPDI, SPECL, TA consultants, county (inc. LABs) and township officials	Compensation and rehabilitation proposals for non-residential establishments and publicly owned residences.	Dec. 3/6/7 2001	<ul style="list-style-type: none"> • Meetings with representatives of all non-residential and publicly owned establishments affected by the expressway • Discussion of compensation and rehabilitation options • Agreed amounts of compensation • Agreed rehabilitation strategy including location of new site where reconstruction on the same site was not possible.
SPDI, SPECL, TA consultants, county (inc. LABs)	AAOVs	Dec. 2001, January 2002	<ul style="list-style-type: none"> • Finalisation of county level AAOVs for different types of land.

NB. In addition to the above, numerous meetings were held (between June and August 2001) between SPCD, SPDI, SPECL, the TA consultants, and local officials to discuss details of the RP including ADB policy and requirements, information needs, relocation and income restoration policies and the implementation programme.

Table 32: Public Participation Plan

Purpose of Event	Form of Event	Timing	Implementing Agencies	Target Participants	Remarks
1. Publicising of Resettlement Plan and programme.	Resettlement Booklet	Feb/ March 2002	SPECL, COROs, TROs	All APs	<ul style="list-style-type: none"> To be distributed to all APs.
2. Disclosure of final RP	Distribution of Chinese version of RP	Feb/ March 2002	SPECL, county/ township governments	All APs	<ul style="list-style-type: none"> distribution of final RP to all affected villages
3. Conduct Detailed Measurement Survey (DMS)	Face to face meetings with APs	April-May 2002	SPDI, COROs ^a , TROs and township officials	All APs	<ul style="list-style-type: none"> inventory of all assets and land holdings creation of definitive list of APs prepare basis for household compensation contracts
4. Village level RP implementation	Village meetings	May 2002 onward (likely to involve several meetings as topic changes from compensation strategy to details of how to use compensation accruing to land-holding group as a whole)	COROs, TROs and village leaders	All APs	<ul style="list-style-type: none"> identification and allocation of new housing sites finalisation of land redistribution and compensation disbursement options in each village discussion of, and decisions on how to invest/ use compensation funds not distributed to individual APs
5. Establishment of mechanisms for addressing grievances and publicise	Posters and leaflets	May 2002	SPECL, COROs, TROs, local officials	All APs	<ul style="list-style-type: none"> provide procedure for APs to air their grievances provide system for grievance resolution publicise in affected villages
6. All above tasks (1-5) will include ethnic minorities whose specific opinions will be recorded and reported to ADB.	see above	see above	see above	All APs particularly ethnic minorities	<ul style="list-style-type: none"> To ensure the equal treatment of minority and majority population

^a CORO: county resettlement office; TRO: township resettlement office. The CORO will include representatives from the County Land Administration Bureau. See also section X - Institutional Organization.

IX. GRIEVANCES AND APPEAL

251. Since the entire Resettlement and Rehabilitation program is being carried out with the participation of the APs, it is not anticipated that any major grievance issues will arise. However, to ensure that the APs have avenues for redressing grievances related to any aspect of land acquisition and resettlement, detailed procedures for the redress of grievances have been established for the project. The objective is to respond to the complaints of the APs speedily and in a transparent manner. The mechanism is designed to be easy, accessible, transparent and fair. As far as possible, the objective will be to avoid the need to resort to complicated formal channels to redress grievances. It is considered that by resolving grievances within the project's administrative structures, not only will the process be more effective and efficient, but also progress of the project is less likely to be affected.

252. In order to ensure that the interests and assets of the affected enterprises and individuals are not invaded or damaged, grievances and appeals should be reported according to the following procedures:

253. Stage 1: If any person is aggrieved by any aspect of the resettlement and rehabilitation program, he / she can lodge an oral or written grievance with the Village Administration Committee or the local TRO. In case an oral complaint is made, it should be written on paper by the village unit and processed. The Village Administration Committee or the TRO must resolve the issue within two weeks.

254. Stage 2: If the aggrieved person is not satisfied with the decision taken in Stage 1, he/she can bring the complaint to the attention of the CORO within one month from the date of the receipt of the Stage 1 decision. CORO will reach a decision on the complaint within two weeks.

255. Stage 3: If the aggrieved person is not satisfied with the decision of the CORO, he / she can bring the complaint to the attention of the PRO within one month from the date of the receipt of the Stage 2 decision. The PRO will reach a decision on the complaint within three weeks.

256. Stage 4: If the AP is still dissatisfied by the decision, he/she can appeal to the Peoples Court, at the appropriate level, in accordance with the "Civil Procedures Act", within 15 days of receiving the decision of the PRO.

257. APs can make and appeal on any aspect of the resettlement and rehabilitation program, including compensation rates offered. Detailed procedures for redress of grievances and the appeal process will be publicized among the APs in the Resettlement Handbook and in the consultation and publicity steps outlined in the Time bound Resettlement Action Schedule. This information is also to be distributed to the APs through public meetings prior to the implementation of land acquisition.

258. The grievance procedures will be operative throughout the entire construction period so that they can be used by villagers to deal with problems relating to infrastructure rehabilitation, such as the reconstruction of irrigation networks, the positioning and design of drainage culverts and pedestrian underpasses, local road access, the use of temporary land, etc. In this way villagers will have an effective procedure to bring these matters to the attention of SPCD and the contractors, as well as a forum, for their timely resolution. As an additional measure, village leaders will be provided with a name and contact point (e.g. telephone number), to whom they can raise matters relating to the expressway's construction as and when they arise.

X. INSTITUTIONAL ORGANISATION

A Organizations to be involved in the RP Implementation

259. The Project Management Office (PMO) has been vested with the overall responsibility for the coordination, planning and implementation of land acquisition and resettlement activities under the project. The Provincial Resettlement Office (PRO) is responsible for coordinating all resettlement activities under the project. The actual implementation of land acquisition and resettlement work will be carried out by the respective Land Acquisition Bureaus at the county and township level and by county and township ROs (see Figure at the end of this chapter).

260. The main departments, bureaus or agencies responsible for planning, implementing, coordinating and monitoring of resettlement activities under the project are: (i) Leading groups for resettlement at the province, prefecture, county and township levels; (ii) Provincial Resettlement Office (PRO); (iii) Sichuan Provincial Highway Survey and Design Institute (SPDI); (iv) Prefecture, county and Township Resettlement Offices (PREROs, COROs, TROs); (v) Prefecture, county and township land bureaus; (vi) Village administrations in charge of resettlement; (vii) Independent Monitoring Organization for the project; (viii) Consultants responsible for providing technical advice for the design and implementation of the baseline survey to be undertaken by the independent monitoring organization in association with SPDI.

B. Responsibilities

261. Provincial Resettlement Office (PRO): The PRO has the following responsibilities:

- (i) Entrust the survey design institute to measure the resettlement impact, to conduct the population census, maintain data and train the lower level Resettlement Offices (ROs) in the use of the data;
- (ii) Apply to the relevant authorities for the Planning License for Land use and for Permits to use Land for Construction;
- (iii) Develop the policy of the RP;
- (iv) Supervise and coordinate the compilation of the RP;
- (v) Provide training for the PREROs and COROs;
- (vi) Coordinate the implementation of the RP and the construction schedule;
- (vii) Sign resettlement contracts with PREROs and COROs.
- (viii) Monitor the disbursement of funds;
- (ix) Guide and monitor the implementation of resettlement;
- (x) Coordinate activities between the various organizations involved in resettlement;
- (xi) Monitor resettlement activities;
- (xii) Review monitoring reports;
- (xiii) Prepare progress reports and submit them to the PMO; and
- (xiv) Provide the resettlement budget.

262. Prefecture Resettlement Offices (PREROs) have the following responsibilities: (i) Receive prefecture census data from the SPDI, maintain it and use it as the basis of the monitoring framework; (ii) Update the data by incorporating the information provided by County ROs; (iii) Train the County ROs and Township RO staff; (iv) Sign Resettlement Contracts with the PRO and County ROs for RP implementation; (v) Allocate the coordination of resettlement work in the counties; (vi) Guide and coordinate resettlement work in the counties; and (vii) Report to the PRO on work progress and provide suggestions.

263. County Resettlement Offices (COROs): The County Resettlement Offices (COROs) are the central units in the implementation of resettlement. They supervise actual implementation, and has staff qualified to make implementation decisions as well as the technical capacity to manage census data as a monitoring tool. During peak periods of implementation they receive support from associated departments in the form of additional personnel, to help carry out their workload. They are equipped with computers to handle the census data and have been trained to update and enter the data on resettlement implementation. The information they organize and supply to the Prefecture Land Administration Bureaus and to the Provincial Resettlement Office provide the basis for the internal monitoring of resettlement. Their responsibilities are: (i) Prepare county RPs according to census data supplied by the SPDI and according to the resettlement policies of the project; (ii) Implement the RP; (iii) Guide and monitor Township Resettlement Offices (TROs); (iv) Receive resettlement funds on behalf of collectives, enterprises and individuals; (v) Allocate resettlement funds for collectives, enterprises and individuals and monitor their use; (vi) Train the staff of TROs; and (vii) Report to the Prefecture Land Administration Bureau and Provincial Resettlement Office.

264. Township Resettlement Offices (TROs): The Township Resettlement Offices (TROs) have the following responsibilities: (i) Survey, monitor and record all resettlement activity within its jurisdiction; (ii) Supervise acquisition of land, houses, other buildings and structures, public utility infrastructure and enterprises as well as the relocation and reconstruction of houses and non-residential buildings; and (iii) Supervise the employment and training of the APs in township enterprises.

265. Village Administration Committee and Land-holding Groups have the following responsibilities:

- (i) To report on: (i) quantity of land acquired; (ii) ownership and use rights of land and property; and (iii) the Land-Labor ratio;
- (ii) Participate in surveys;
- (iii) Hold properly constituted meetings to decide on land redistribution and the allocation of compensation between the community and individual APs and how to use compensation not handed directly to APs;
- (iv) Select resettlement sites and undertake land redistribution;
- (v) Address grievance issues; and
- (vi) Report on the progress of resettlement.

266. Sichuan Provincial Design Institute (SPDI) has the following responsibilities: (i) Survey and map resettlement area; (ii) Calculate the detailed impact of land acquisition; (iii) In conjunction with TRO and village administration committee establish and record ownership and rights over land and assets; (iv) Analyze data; (v) Assist Provincial Resettlement Office in the preparation of the RP; (vi) Train PRERO and CRO staff in the use and maintenance of census data; (vii) Develop a monitoring system based on the census data and disseminate relevant census data to counties and prefectures; and (viii) Provide technical assistance on data management and measurement issues to the Provincial Resettlement Office, CROs, PREROs and the independent monitors.

267. Independent Monitoring Organization: An independent monitoring organization will observe all aspects of resettlement planning and implementation and provide reports to the Project Resettlement Office on the progress of resettlement. The responsibilities of this organization are presented in detail in section XII.

268. Leading Groups: The leading groups serve as steering committees as will as provide information to the administrative bodies at higher levels.

C. Staffing

269. There are twenty three staff responsible for resettlement within the organizations and agencies involved in the project. The breakdown by organization is shown in Table 33.

Table 33: Staffing for Organizations and Agencies Involved in Resettlement

Resettlement Institutions	Total Staff	Levels and Nos. of Staff
1 PRO	6	Division Level 2 Section Level 4
2 Each Prefecture Resettlement Office	4	Section Level 2 Staff 2
3 Each County Resettlement Office	3	Section Level 1 Staff 2
4 Each Township Resettlement Office	1	Deputy Section Level
5 Each Village Committee Land owning groups	1	Chief Depends on No. of affected groups
6 Survey Design Institute	2	Researcher
7 Independent Monitoring Organization	2	Section Level
8 Consultants	2	Researcher 2
9 Labor Bureaus	2	Section Level

D. Training

270. The PRO will train 13 people under the project to assist with resettlement administration. Details are shown in Table 34.

Table 34: Training Plan for People Involved in Resettlement

Resettlement Institutions	Total Staff	No. of People Trained by PRO	Training and Accommodation Required	Materials & Accommodation	Equipment. Needed for the Training
1 PRO	6	6	Teaching Materials		
2 Each Prefecture RO	4	4	Teaching Materials & Accommodation		
3 Each County RO	3	3	Teaching Materials & Accommodation		
4 Each Township PRO	1				
5 Each Village Administration	1				
6 Survey and Design Institute	2				
7 Independent Monitoring Org.	2				
8 Consultants	2				
9 Labor Bureaus	2				

Note: The resettlement personnel of the villages and townships will be trained by the County Leading Group.

E. Measures To Strengthen Organizations

271. A variety of measures will be taken to support capacity building and ensure effective implementation and control of the RP. These include:

- (i) Vertical linking agencies will set up reporting system, to report once a month;
- (ii) Horizontal linking agencies will hold coordinating meetings once a season to enhance information exchange;
- (iii) Issues put forward by the APs will be reported and disseminated through the resettlement offices at each level;
- (iv) Issues, which occur during construction, will be reported by the resident engineer, first to his/her organizational level and then, if necessary, upwards through each of the hierarchical levels;
- (v) Issues of the APs and contractors will be forwarded to the Village Committee, local construction coordination groups at township and county levels, and, if serious, also to the SPDC and to the Provincial Construction Leading Group; and
- (vi) Disciplinary measures will be introduced to constrain individuals from shifting responsibilities onto others and from delaying the resettlement process. People responsible for causing trouble will be punished.

Figure 5: Land Acquisition and Resettlement Organization Chart

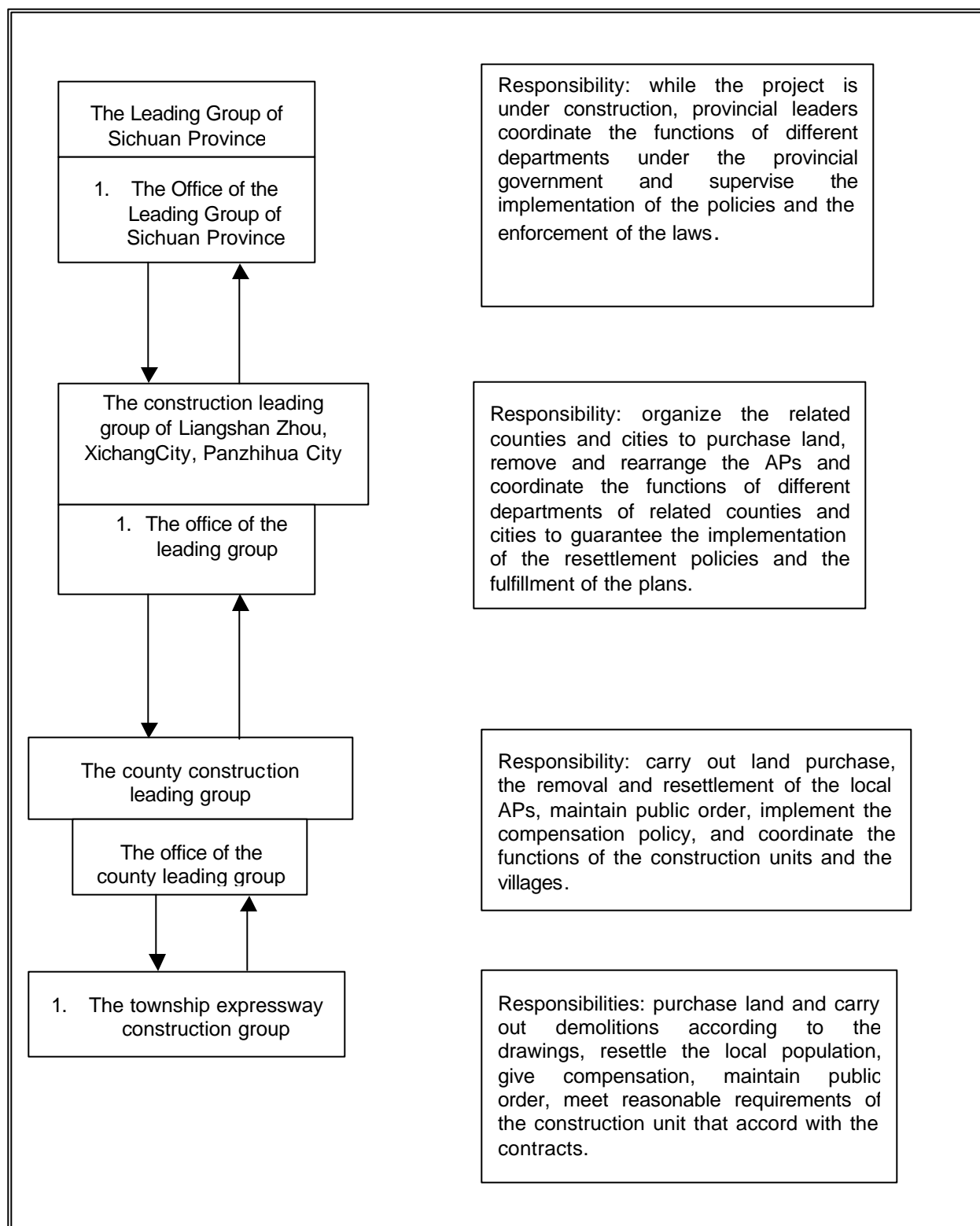
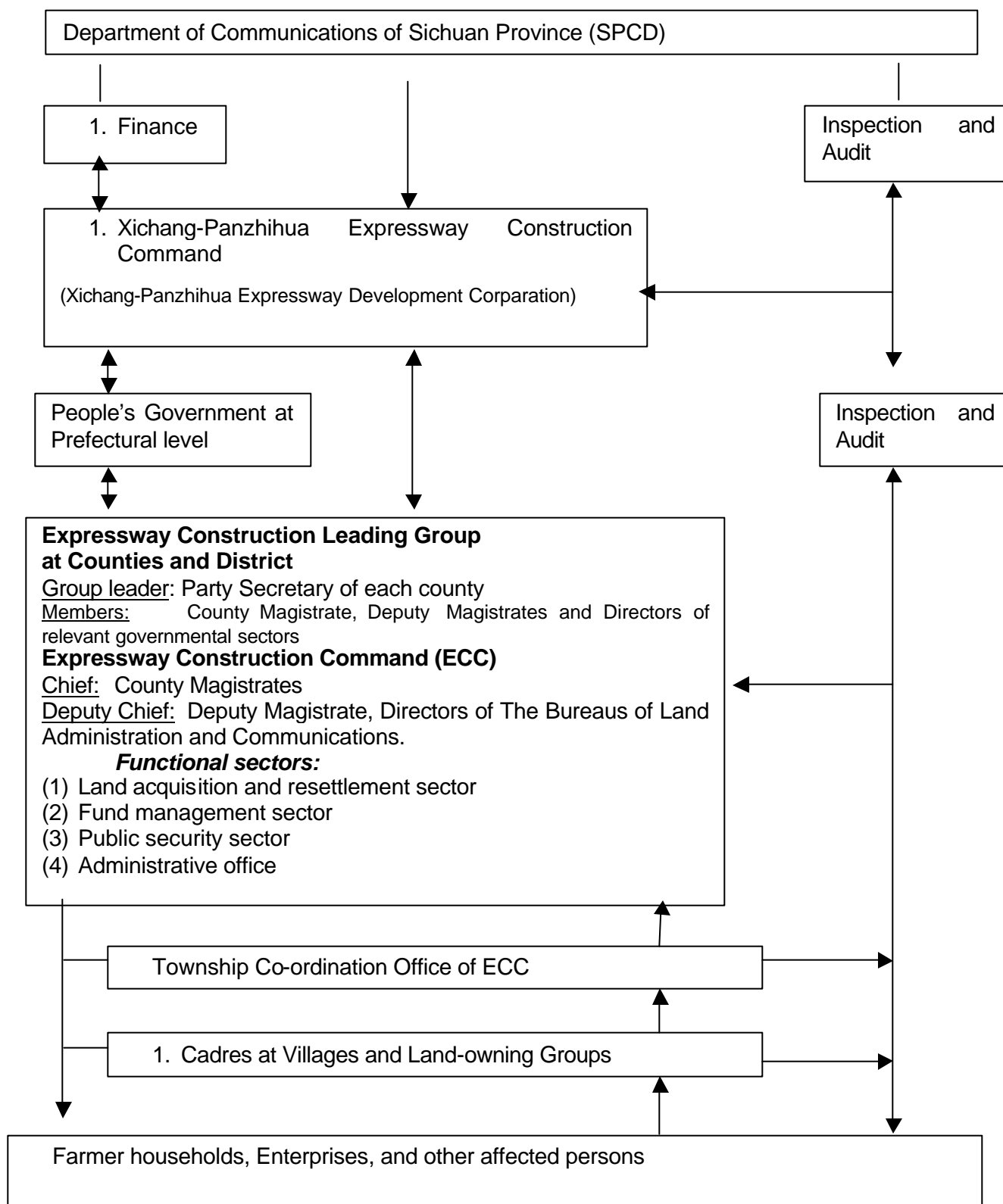


Figure 6: Summary Organization Chart Related to Land Acquisition and Resettlement

XI. IMPLEMENTATION SCHEDULE

272. The time-bound implementation programme for resettlement and land acquisition resulting from the construction of the XiPan Expressway is shown in Figure 21-8. The programme takes account of milestones in the project approval, ADB procedures (including the submission of the RP Addendum), the completion of final designs and a projected start of construction in January 2003. The schedule has been based on the MOU from the Fact Finding Mission and discussions with SPCD in January 2002. The prime objective in formulating this programme was to ensure that compensation for house acquisition is disbursed in time to enable affected households to construct a habitable dwelling before demolition commences - a minimum of 3 months and a maximum of 5 months will be available. Discussions with village leaders and SPCD indicate that a new house in a rural area can be built within 2 months if all the materials have been assembled. This time span is therefore adequate.

273. The programme also makes provision for a series of activities before construction to ensure AP participation and consultation, namely:

- (i) the distribution of the resettlement handbook;
- (ii) the publicisation, via leaflets, of the detailed timetable for resettlement and land acquisition activities;
- (iii) the DMS provides an opportunity for negotiation between APs and the resettlement officers in terms of detailed acquisition boundaries and the type and measurement of structures and land parcels; and
- (iv) the holding of village meetings to decide upon the location of new house sites, compensation arrangements and income restoration measures. These meetings will also be used to discuss and resolve farmers' concerns relating to design details such as the location of bridges and culverts.

274. The timing of these activities is such as to allow the executing agency time to respond to practical and useful suggestions made by APs and to respond to, and resolve, grievances.

275. The baseline socio-economic survey will be undertaken as soon as possible after the completion of the DMS using the census of APs as the sampling base. The first monitoring survey will be carried out some 6 months later and should be timed to take place when the Row has been cleared.

Figure 7: Time bound Resettlement and Land Acquisition Schedule and Critical Path

TASKS		2002												2003
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan >>
Project Processing														
	Project Approval (SPC)													
	Appraisal													
	Prepare Addendum RP													
	Loan Negotiations													
	Board Consideration								X					
Design Activities														
	Detailed Design - ROW													
	Detailed Design - Other													
Land Acquisition and Resettlement: Preparation														
	Distribution of resettlement handbook													
	Establish and train local resettlement teams													
	Publicize acquisition/ resettlement timetable													
	Mark ROW													
	Conduct Detailed Measurement Survey (DMS)													
	Fix compensation rates and options through Village meetings													
	Identify resettlement locations													
Land Acquisition and Resettlement: Implementation														
	Pay compensation fees to land-holding groups and APs													
	Construction of new houses													
	Land redistribution/ income restoration/ training													
Consultation														
Construction Activities														
	Clearance of ROW													
	Expressway Construction (Dec. 2002 to 2007)													
Monitoring (see next section)														
	Note													

Denotes critical path for resettlement/ land acquisition activities

XII. MONITORING, EVALUATION AND REPORTING

A. General

276. According to requirements stipulated in the “Regulations on Construction Supervision” promulgated by the Ministry of Construction of PRC 1995, a construction project shall be properly supervised. It is a requirement of the ADB that loan projects that result in resettlement be properly monitored and evaluated. In order to ensure that the implementation of the land acquisition and resettlement plan in accordance with the requirements, monitoring of implementation, both “internal” and “external”, will be carried out during and after the implementation of the Project.

277. The “internal” and “external” elements will be combined to provide an assessment of both the process of RP implementation (e.g. disbursement of funds, settlement of grievances, progress on house relocation and land redistribution and the extent to which the primary objective of the RP, e.g. the maintenance or enhancement of the current social and economic conditions of all APs, are achieved in the years following the acquisition of their land or property.

278. Table 35 summarizes the proposed Monitoring and Evaluation system while the remainder of this chapter provides a more detailed description of key aspects of the proposals.

B. Internal Monitoring

279. The overall objective of internal monitoring is to ensure that resettlement implementation is in accordance with the approved RP. Specific objectives are to: (i) check the achievement of milestones in the acquisition and resettlement process, including preparatory phases, against the planned time schedule and budget; (ii) ensure that the channels of communication and consultation between the administrators and affected persons have been established and operationalized; (iii) ensure that compensation payments due to affected persons are paid in full and in a timely manner; (iv) verify that the processing of grievances has taken place within the set time limits; and (v) closely watch the adherence to lawful, approved allocation of acquisition and resettlement money so as to ensure the absence of corruption.

280. Internal monitoring will be the overall responsibility of the resettlement implementation agency. SPCD has already planned arrangements for executing the internal monitoring. It will be undertaken by the Resettlement Officers at village, township, county, and Provincial Level. Table 36 sets out the number of staff who will be involved.

281. Because prompt action reduces escalation of problems, and in the longer run saves money, the emphasis will be on promptly resolving issues at local level with interventions by higher-level officers only when absolutely necessary. Village and township level reports will be prepared on a monthly basis so that prompt action can be taken, if necessary, by higher-level officials without adversely affecting the resettlement execution. County Resettlement Officers will provide quarterly reports to the internal monitoring section of the Provincial Resettlement Office who, in turn, will report to their leadership and the Provincial Construction Steering Group twice every year. Copies of these reports will be submitted to ADB. These reports should include: name of reporting agency, date of reporting, details on the implementation of the resettlement programs scheduled for that year, reasons for any delays, problems encountered, corrective actions and their results, and problems that need to be resolved at a higher level.

282. In addition to the above arrangements, the traditional financial watchdog - the Audit Bureau - will at each level of Government be monitoring and auditing the fund utilization in the compensation program.

Table 35: Summary of Resettlement Monitoring and Evaluation System

Purpose and Responsibility	Type	Responsibility		Benchmark	Key indicators	Timing
		Primary	Secondary			
Compensation payments	Internal	SPCD	Resettlement officers at county, township and village levels	Compensation rates included in RP. Schedule of APs from DMS	Amount and timing of payments to APs	Monthly during resettlement process starting from tie of DMS
House rebuilding/relocation of APs				No. of properties to be relocated/ demolished from RP and DMS.	No. of houses to be rebuilt, progress in site selection and construction.	
Land redistribution				RP data on villages where land reallocation is proposed	No. of APs with reallocated plots No. of other hholds affected	
Grievance Redress				None	No. and nature of grievances and action taken	
Income Restitution/ training programmes				RP proposals and detailed township/ village programmes.	Programmes/ measures implemented. No. of APs assisted/ retrained	
Rehabilitation of vulnerable groups/ ethnic minorities				RP proposals and DMS survey	Measures undertaken to assist vulnerable groups identified during DMS.	
Changes in economic situation along the alignment	External	Independent Monitoring Organization	SPCD	Baseline village level survey carried out as soon as possible after DMS.	See section C below	Biannual surveys undertaken for 3 years
Economic and living conditions of APs				Baseline household survey carried out as soon as possible after DMS.	See section C below	
Attitudes towards resettlement programme				None	APs satisfied/ dissatisfied and reasons	

Table 36: Personnel of Resettlement Organizations Involved in Monitoring

Resettlement Organizations		Total Staff during Peak Period
1	PRO	4
2	Prefecture Resettlement Offices	2
3	Each County Resettlement Office	1
4	Each Township Resettlement Office	1
5	Each Village Administration Committee	1

C. External Monitoring and Evaluation

1. Objectives

283. The objectives of the external monitoring and evaluation are to: (i) establish whether, after the land acquisition and resettlement activity is completed, the welfare levels of those affected were restored and sustained; (ii) if not, identify why not; (iii) assess the overall efficiency, effectiveness, impact (including behavioral responses) and sustainability of the policy and practice of land acquisition and resettlement on this project; and (iv) deduce lessons for future expressway projects in Sichuan.

2. Methodology and Content

284. The general methodology will involve a mix of one-on-one questionnaires administered to households, and participatory rapid appraisal techniques (PRA) repeated on a six-monthly or yearly basis during the resettlement and construction activities associated with the project.

285. The household surveys will concentrate on the changes in economic activity, incomes and other social conditions of individual households. Key indicators will include: household composition, ethnicity, education and skill levels, experience in positions of influence, pre-acquisition rights over land, size and condition of house, accumulated assets, annual income, relative mix of productive activities, marketing channels, access to utilities and services (including social services and irrigation systems), and nature and frequency of major social and cultural activities. This survey will provide a series of socio-economic indicators, which can subsequently be monitored in order to evaluate the success of the resettlement and income restoration process.

286. In addition, the baseline survey, undertaken as soon as possible after the DMS will ask questions on:

- (i) household plans to do when confronted with the impending loss of land and/or housing; and
- (ii) the extent and effectiveness of the dissemination of information on compensation standards and options, acquisition processes and restitution measures.

287. The baseline survey will also ask an open-ended question about the farmers' anticipations and apprehensions regarding the impending land acquisition and resettlement process.

288. The PRA surveys will be conducted at the village level and will consist of similar indicators to those described above but focusing on the village as a whole. The objective is to provide a wider assessment of the effectiveness of the resettlement process than is possible from the surveys of individual households. These surveys will involve focus group discussions and key informant interviews. Experience shows that these surveys can provide a greater understanding of changes in socio-economic conditions that can be obtained from household interviews. In contrast, the household interviews are more suitable for providing a set of quantifiable indicators, which can be compared over time.

289. Subsequent surveys will use the same format but with greater emphasis given to the changes that have occurred since the baseline survey was undertaken, the actual timing of

compensation related activities (signature of contracts, disbursement of funds, identification of new housing sites, construction of new buildings, effectiveness of grievance procedures, and on general levels of satisfaction/ dissatisfaction with the resettlement process. Both household and PRA surveys will be designed to distinguish between changes that are attributable to involuntary resettlement and loss of land and those that result from external factors, e.g. a slump in vegetable prices, the opening of a new factory, etc.

290. The surveys will be completed by interviews with owners or directors of the non-residential establishments affected by the proposal, e.g. schools, enterprises, government offices.

3. Sampling

291. As required by the ADB, the baseline survey for launching M and E activities should cover 10 percent of the APs. By the time the ROW is marked and the DMS commences the exact identity of the APs and the extent of their individual losses and the losses of the land owning groups will be known. At this stage, it is anticipated that around 2,000 households will be affected giving a total sample size of around 200.

292. A two-stage stratified random sample should be used. The first stage sampling will involve the selection of 17 of the affected villages (approximately 1/3rd). The initial selection of villages should involve those losing which will be most affected by land and property loss. This selection can be modified if it is considered that it omits any villages with particular characteristics that are significantly different from those originally selected: e.g. higher proportions of ethnic minorities, poor people, different cropping patterns or non-agricultural activity.

293. Around 12 households should be sampled in each selected village. The sample will be chosen randomly from the schedule of affected households obtained during the DMS.

294. In order to improve comparability, the households selected for the baseline survey will be interviewed in all subsequent surveys.

4. Survey Timing

295. Table 37 provides an indicative schedule of the external M&E surveys to be undertaken. The schedule has been designed to provide, as required, 6 monthly investigations throughout the implementation of the project. The full household surveys would be repeated every year starting with the baseline survey implemented as soon as possible after the DMS. The PRA-type surveys would be repeated every 6 months with the first such survey taking place while the land acquisition and compensation procedures are being implemented. All selected villages would be visited at this time and annually when the household surveys are being carried out. These surveys are shown as 'full' in the schedule. The intervening surveys are described as abbreviated and will only involve the PRA-type surveys in around half the selected villages.

296. The baseline survey will establish the pre-resettlement socio-economic conditions of APs and the affected villages against which subsequent changes can be evaluated.

297. The monitoring survey during the land acquisition and resettlement implementation will concentrate on the extent to which the procedures laid down in the RP have been followed, the

effectiveness of these processes and the level of satisfaction/ dissatisfaction of APs with these processes.

298. Subsequent full surveys will provide a quantification of the changes in the social and economic conditions of APs together with a more qualitative assessment of these changes and the reasons for them.

299. Subsequent abbreviated surveys will provide interim assessments of the changes taking place in the villages most affected by loss of land and/or property. Village level indicators will be collected but the emphasis will be on qualitative information.

300. The final post expressway construction survey should take place approximately one year after the construction is completed. Its main objective is to assess whether the objectives of the RP were achieved, i.e. whether the restoration of income and welfare has been efficiently and adequately restored, and whether the land acquisition and resettlement process has been effective. This survey will also probe sample households and key informants on how the whole process might be better done next time.

Table 37: Tentative Schedule of M&E Surveys

Survey No.	Survey Type	Identification of Resettlement issues Survey Description	Likely Timing as at December 2001
1	Full	Baseline survey of 10% of affected households	April 2002
2	Abbrev	Monitoring survey during land acquisition and compensation payment process	July/ August 2002
3	Full	Initial post land acquisition and resettlement action M&E survey	March 2003
4	Abbrev	Monitoring income Restitution and Resettlement support for vulnerable groups	Oct 2003
5	Full	Quantification of socio-economic changes of APs	April 2004
6	Abbrev	Monitoring income Restitution and Resettlement support for vulnerable groups	Oct 2004
7	Full	Quantification of socio-economic changes of APs	April 2005
8	Abbrev	Monitoring income Restitution and Resettlement support for vulnerable groups	Oct 2005
9	Full	Quantification of socio-economic changes of APs	April 2006
10	Abbrev	Monitoring income Restitution and Resettlement support for vulnerable groups	Oct 2006
12	Full.	Quantification of socio-economic changes of APs	April 2007
13	Full	One year post expressway construction evaluation of land acquisition and resettlement action	Oct 2008

5. Selection of the Independent Monitoring Organization

301. An institute or organization totally independent of the Sichuan Department of Communications, and independent of the local governments along the alignment, to be contracted as the lead agency to carry out the external monitoring and evaluation work under this RP. A likely candidate for this task is the South West Communications University in Chengdu, which already has experiences in monitoring work for international agencies.

302. The selected institute will be the lead agency in conducting M&E however they should be supported by SPDI in the field. SPDI is familiar with the total length of the alignment and has

already been involved with field surveys in many of the villages affected by the expressway. SPDI can also serve as a conduit to ensure full co-operation of relevant local government agencies in the conduct of the surveys.

303. Prior to their participation, both the institute and SPDI must obtain the requisite authority and permissions required by government regulations that permitting them to undertake fieldwork of this type.

304. Provision has also been made for an international consultant to assist with the launch of the initial baseline survey and the next full survey one year later.

6. Reporting and Distribution

305. The results of the M&E survey shall be reported to the SPCD, the counties, townships, and the ADB on an annual basis. Copies sent to the ADB should be in English.

306. The baseline survey should be reported in full. Subsequent reports should provide summaries of principal findings, tabulations of key indicators, qualitative and quantitative descriptions of main changes in socio- economic changes of APs and affected villages and conclusions and implications, if any, for additional action/ assistance.

307. The report on the post-construction survey will constitute a final assessment report on the resettlement process and detail the extent to which the compensation paid and other measures have enabled APs to maintain or enhance their pre-project social and economic living conditions.

XIII. RESETTLEMENT AND LAND ACQUISITION - LOCAL ROAD COMPONENT

A Context

308. The local road component of this project will involve the upgrading of around 560km of unclassified, unpaved roads, mostly in mountainous areas, to class IV paved or unpaved all-weather standard. This component will be undertaken by county highway bureaus under the guidance of SPCD, in parallel with the construction of the XiPan expressway.

309. Because the component involves the upgrading of existing roads and not the construction of new ones, this component is not expected to involve land and property acquisition. However in the course of project construction unforeseen impacts may occur due to localized construction needs outside of the existing right-of-way (ROW) or to damages caused by rehabilitation work. In case they occur, these impacts are expected to be minimal and highly scattered, affecting for instance single buildings located on sharp corners, or small portions of land where the ROW has to be widened.

310. This section outlines the procedures to be adopted to ensure that any unforeseen property and land acquisition impacts are treated in accordance with ADB's resettlement policy.

B. General Policy

311. Following discussions between the ADB, SPCD and SPECL, it has been agreed that all relevant policies and provisions contained in this RP, as pertaining to the construction of the

XiPan expressway, will apply equally to land and property acquisition associated with the local road improvements. In particular:

- (i) all acquisition and compensation will be undertaken in conformity to the national and Sichuan provincial regulations cited in section IV of this RP and to ensure consistency with ADB policy on Involuntary Resettlement as set out in the ADB's *Handbook on Resettlement - A Guide to Good Practice*;
- (ii) the calculation of compensation will be undertaken on the basis of the multipliers and standards set out in section IV.D of this RP;
- (iii) compensation rates will be based on AAOVs for different types of land defined in consultation between the LAB's and representatives from affected villages;
- (iv) land compensation fees and resettlement subsidies will be payable to the affected land-holding group. The land-holding group will decide, through properly constituted meetings, on how this compensation is split between the community and the affected households and how that portion accruing to the community will be used;
- (v) compensation for loss of property, standing crops and trees will be paid directly to the AP. They will also receive the compensation for their house plot unless replacement plots are provided for them, in which case, the organization providing these plots will receive the compensation. APs compelled to relocate will also receive the allowances specified in section V.D.1;
- (vi) special assistance will be provided to vulnerable households;
- (vii) training programmes will be available to households losing over 25% of their land; and
- (viii) a procedure for grievance redress and appeals will be established.

312. The above provisions will be publicized by means of an Information Booklet for the Local Roads (Appendix 4) in all communities affected by the proposed road improvement, simultaneously with the execution of the route surveys needed for the preparation of construction drawings and/or tender documents.

C. Procedures to be Adopted

313. Following completion of the route survey, a Short Resettlement Plan (RP) in the form of an Impacts-data-sheet (IDS) will be prepared for each road section containing the following information:

- (i) scheme information - length, terrain, cost, townships crossed;
- (ii) total population, households, ethnicity, principal economic activity (including types of agriculture and crops), and average per capita income for each village crossed;
- (iii) a table showing the types and areas of land, buildings or property to be acquired disaggregated by village;
- (iv) confirmation that the resettlement booklet for the Local Roads component has been circulated;
- (v) a budget for land and property acquisition including the derivation of AAOVs and the amounts due for relocation allowances;

- (vi) confirmation that the funds required are available; and
- (vii) Confirmation that the affected families have been consulted and accept the compensation offered.

314. The Short RP/IDS will be submitted for information and approval to ADB. In case a road section does not affect land or property the IDS indicating that construction will not affect land or properties will be altogether sent to ADB. The implementation of the local roads component will be included as a chapter of both internal and external monitoring reports. If for completely unforeseen reasons at the time of the route construction surveys it will appear that project impacts caused by a road section may affect larger number of houses or land the EA will prepare an assessment of whether the preparation of a full RP will be necessary in accordance to the ADB Involuntary Resettlement Policy.⁶ The Information Booklet to be circulated to villages affected by this component is contained in Appendix 4.

⁶ As defined by the *ADB Handbook on Resettlement: A Guide to Good Practice*, a full RP is needed when the number of affected people is 200 or more, when the affected people are 100 Minority Nationality members or more; or when the affected people with specifically identified vulnerabilities are 50 or more.

Appendix 1: Resettlement Impact by Villages and Townships

TableA1.1: Land Acquisition Impacts by Village

County	Township	Village	Land Groups	Pop.	Farmland (mu)			Land per cap. (mu)		Affected persons**
					Total	Acquired	%	Before	After	
Xichang	Huangliang	Shiba	1	1845	2263	57	3%	1.2	1.2	47
		Xinzheng	3	1726	2090	272	13%	1.2	1.1	224
		Dade	2	1830	3030	324	11%	1.7	1.5	196
	Huangshui	Luhe	4	1800	3240	200	6%	1.8	1.7	111
		Shufu	na	1800	3240	192	6%	1.8	1.7	107
		Shuanglo	na	1900	3420	66	2%	1.8	1.8	37
		Wanao	5	2086	4056	302	7%	1.9	1.8	155
Dechang	Mali	Sanhe	2	1756	2345	118	5%	1.3	1.3	88
	Yinlu	Xintang	1	1656	2405	142	6%	1.5	1.4	97
	Mali	Minzhu	1	1556	2465	110	4%	1.6	1.5	70
		Daba	5	1874	3273	366	11%	1.7	1.6	209
		Dianma	2	1583	2023	202	10%	1.3	1.2	158
	Dezhou	Daping	3	1812	2919	247	8%	1.6	1.5	153
		Fenghuai	2	1475	1736	178	10%	1.2	1.1	151
		Mayuan	1	1608	1891	179	9%	1.2	1.1	152
		A'Rong	3	1741	2047	251	12%	1.2	1.0	213
	Xiaogao	An'Ning	4	1376	1578	206	13%	1.1	1.0	180
		Lianfeng	3	671	1028	150	15%	1.5	1.3	98
		Lianmen	3	1363	1531	87	6%	1.1	1.1	77
		Qunying	1	1284	1447	17	1%	1.1	1.1	15
		Gaofeng	3	1204	1363	197	14%	1.1	1.0	174
		Huangcao	3	1414	2191	7	0%	1.5	1.5	5
	Luoyao	Banzhany	1	1025	781	121	15%	0.8	0.6	158
		Xintang	2	1052	1026	143	14%	1.0	0.8	147
		Hongxing	2	1100	1150	201	17%	1.0	0.9	192
		Xiula'e	1	1023	1139	80	7%	1.1	1.0	72
		Dafu	2	946	1127	86	8%	1.2	1.1	72
	Jinchuan	Puba	5	1334	1411	235	17%	1.1	0.9	223
		Guanmen	2	601	709	366	52%	1.2	0.6	310
		Xinma	1	1077	1171	121	10%	1.1	1.0	111
		Luomi	3	1553	1633	627	38%	1.1	0.6	596
	Yonglang	Yongyue	5	2283	1921	486	25%	0.8	0.6	578
Miyi	Xijie	Yangjiacu	2	1798	1520	256	17%	0.8	0.7	303
		Reshui	4	2218	1875	308	16%	0.8	0.7	364
	Wangjiu Farm of Miyi County			na	na	130	na	na	na	na
	Guabang	Guabang	6	1775	1184	354	30%	0.7	0.5	531
		Tianba	4	1950	1583	120	8%	0.8	0.8	148
		Qinggang	4	1712	1854	256	14%	1.1	0.9	236
	Shaba	Shaba	2	1282	1645	282	17%	1.3	1.1	220
		Yaqi	2	859	914	88	10%	1.1	1.0	83
	Panlian	Shuitang	6	3855	3128	581	19%	0.8	0.7	717
	Salian	Binghai	7	1191	862	377	44%	0.7	0.4	521
		Pingyang	3	2315	2051	62	3%	0.9	0.9	70
		Wanlai	2	2776	1716	73	4%	0.6	0.6	118
	Yakou	Xintian	3	1567	989	56	6%	0.6	0.6	89
		Dianmu	3	1663	1065	224	21%	0.6	0.5	351
		Yakou	na	1758	1140	60	5%	0.6	0.6	93
		Shitou	na	2159	1301	48	4%	0.6	0.6	80
		Huijing	2	2560	1462	180	12%	0.6	0.5	315
Yanbian	Xinjiu	Mengliang	na	1241	1441	36	2%	1.2	1.1	31
		Jiuchang	4	1436	1434	137	10%	1.0	0.9	137
	Xinmin	Shuiping	5	957	831	532	64%	0.9	0.3	613
		Xinmin	na	1867	1585	16	1%	0.8	0.8	19
Renhe	Jinjiang	Jinjiang	na	1662	1292	150	12%	0.8	0.7	193

Notes:

Villages shown in **bold** were surveyed

* Interchange location; likely to be spread across more than one village.

** Estimate assumes complete loss of land by affected persons.

NB. Table has been produced by SPDI from chainage information. In the absence of properly mapped village boundaries, some inaccuracies are inevitable.

Table A1.2: Land Acquisition by Type by Township

Township/ County	Villages	Permanent Land Acquisition (mu)									Temporary land occupation		
		TOTAL	Farmland			Other Land							
			All	Irrig.	Dry	Barren	Forest	Orchard	Water pond	Housing area	Irrig.	Dry	Barren
Huanglianguan	3	863	653	416	237	191	0	7	6	6	0	29	146
Huangshui	4	780	760	655	105	7	0	0	10	3	0	112	56
Xichang	7	1643	1413	1071	342	198	0	7	16	10	0	141	202
Yinlu	2	262	259	256	4	0	0	0	0	3	0	0	0
Mali	3	696	678	483	194	0	6	6	2	4	0	0	0
Dezhou	4	947	855	431	423	17	28	17	3	27	0	66	0
Xiaogao	6	776	665	373	292	47	40	3	0	21	11	159	0
Leyao	5	729	631	297	333	52	28	10	0	8	0	0	0
Jinchuan	4	1458	1349	678	671	43	0	40	0	27	7	104	0
Yonglang	1	527	486	185	302	26	12	0	0	3	53	173	0
Dechang	25	5395	4922	2703	2219	185	113	76	6	93	71	502	0
Xiejie	2	678	564	339	225	34	36	9	0	34	0	0	0
Wanqiu Farm of Miyi County		142	130	65	66	0	0	0	5	7	0	0	0
Guabang	3	758	731	545	186	8	5	0	5	9	0	169	0
Shaba	2	569	370	108	262	67	79	22	10	20	0	0	0
Lianhua	1	674	581	222	360	26	27	19	7	14	0	53	0
Salian	3	706	513	173	339	60	67	55	0	12	0	159	0
Yakou	5	1106	569	140	429	252	229	35	0	21	0	250	0
Miyi	16	4634	3458	1592	1866	448	443	140	27	118	0	631	0
Xinjiu	2	643	173	10	163	289	169	0	0	13	41	121	21
Xinmin	2	751	548	118	430	192	0	11	0	0	77	4	0
Yanbian	4	1394	721	128	593	481	169	11	0	13	119	126	21
Jinjiang/Renhe	1	217	150	16	134	0	0	0	0	67	0	0	0
LIANGSHAN	32	7038	6335	3774	2561	383	113	83	22	103	71	642	202
PANZHIHUA	21	6245	4329	1736	2593	928	611	151	27	198	119	757	21
TOTAL	53	13283	10664	5510	5154	1311	725	233	49	301	189	1399	223

Source: SPDI, based on the tripartite meeting memorandum. Oct. 2001

Table A1.3: Houses and Fixtures to be Demolished

County	Township	Village	Houses demolished	Type of Construction (m ²)						Type of Fixtures							
				Concrete	Brick + tile roof house	Clay wall + tile-roof	Clay + grass-roof	Simple house	Tent-like house	Sunning ground (m ²)	Enclosure walls (m)	Manure pit (m3)	Water pond (m3)	Wells (m3)	Pump wells (no.)	Fish pond m3	
Xichang	Huanglian	Shiba	13			2197	0	0	0	574	1035	35	0	9	0	0	
		Xinzheng	11	0	500	1038	0	0	0	180	574	22	0	5	1	0	
		Dongping	4	0	0	880	0	0	0	180	238	12	0	3	0	0	
		Dade	3	0	40	240	0	0	0	150	345	12	0	2	0	480	
	Huangshui	Luhe	5	0	304	444	0	0	0	140	354	19.5	0	0	0	0	
		Huangshui Tap Water Company	0										160				
		Wanao	5	0	905	182	0	0	0	969	174	10.8	0	0	0	1987	
Dechang	Mali	Sanhe	12	0	584	1778	0	0	12	827	751	35	0	0	0	0	
		Minzhu	9	0	0	1799	0	0	8	179	158	31.5	0	0	0	2988	
		Dechang Pig Farm (of Food Company)	1			291						8					
		Daba	5	0	0	1003	0	0	25	237	600	20	0	0	0	2454	
		Dianma	2	0	0	674	0	0	36	96	0	9	0	0	0	9092	
		Dezhou	Daping	19	0	0	3789	0	0	0	660	1013	55	0	0	0	3291
		Fenghuang	20	0	386	5159	0	0	32	1491	125	98	0	0	0	216	
		Mayuan	3	0	56	227	0	0	0	24	0	4	0	0	0	749	
		A'rong	8	0	0	1771	0	0	44	286	185	16	0	0	0	9111	
	Xiaogao	An'ning	7	0	0	2002	0	0	28	620	100	25	0	0	0	0	
		Lianfeng (part 1)	7	0	0	1368	0	0	0	332	150	19	0	0	0	0	
		Lianmeng	3	656	233	184	0	0	0	30	0	10	0	0	0	0	
		Lianmeng Primary School	18	1233		150				300		12					
		Lianfeng (part 2)	23	0	0	5879	0	0	0	1420	736	83	0	0	0	0	
		Huangcao	3	0	0	944	0	0	12	188	90	9	0	0	0	0	
	Leyao	Banzhanying	10	192	0	1963	0	0	0	544	70	50	0	0	0	600	
		Xintang	11	0	0	2833	0	0	0	776	100	53	0	0	0	4800	
		Dafu	5	0	0	1071	0	0	0	885	0	17	0	0	0	0	
		Dechang Petroleum Company	0		318	42				550	250						
		Dechang Puba Railway Station	3	5360	400	215				450							
		Jinchuan	Puba	38	864	96	9260	0	0	0	2366	696	192	0	0	0	0
		Guanmen	3	0	155	498	0	0	0	32	0	10	0	0	0	0	
		Luomi	8	0	0	1294	0	0	0	194	30	25	0	0	0	0	
		Yonglang	Yongyao	32	0	0	7504	0	0	0	2033	345	137	0	0	0	825
	Miyi	Xiejie	Yangjiacun Primary School	12			1024										
Yangjiacun			44	400	80	19120	38	0	0	4823	1112	0	0	5	0	4624	
Reshui			5	0	0	1037	0	0	0	219	0	94.5	42	0	1	103826	
		Wangjiu Farm	5	0	938	126	0	0	0	600	0	0	169.6	0	0	0	
Guabang		Guabang	22	384	591	4332	0	0	0	572	0	40	4.6	0	0	3520	
		Qinggang	14	122	446	2578	0	0	0	464	148	66	0	0	8	0	
Shaba		Shaba	16	770	966	1409	0	0	0	1239	211	0	0	0	3	3386	
		Yaqi	2	146	0	385	0	9	0	90	0	0	0	0	0	3600	
Caochang		Kelang	13	538	182	2244	0	0	0	701	210	25	0	0	0	0	
Lianhua		Lianhua	0		72												
		Miyi Bone Powder Making Factory	0	480	206												
		Sichuan Puwei Forestry Bureau	40	3000							1500						
		Lianhua Vet. Station	0		112					128	150						
		Shuitang	32	2470	602	3600	0	0	0	856	632	145.5	443.8	6	2	1296	
		Salian	Binghai	18	612	48	2212	0	0	0	562	30	26	3.3	0	2	0
			Yuwanggong	6	0	0	1344	0	0	0	100	63	68	36	0	1	0
			Pingyang	11	288	144	1236	0	0	0	135	0	28	0	20	1	0
			Wanlai	7	0	247	1974	0	0	0	100	90	86	0	0	0	0
			Xintian	8	512	24	1586	0	0	0	360	0	30	0	0	1	0
			Dianmu	19	199	25	3397	0	0	0	517	60	92	2.3	0	4	0
			Shitou	4	0	48	318	0	0	0	0	0	8	2.5	0	0	0
			Huijing	35	0	35	7635	0	0	0	0	138	116	0	0	0	0
	Yanbian	Xinjiu	3	0	0	800	50	70	0	50	40	12	0	0	0	1200	
		Jiuchang	6	0	0	1520	0	0	0	0	90	0	0	0	0	0	
		Xinmin	19	0	0	10590	100	0	0	735	306	40	0	4	0	0	
		Xinmin	0	0	895	2380	40	0	0	265	210	0	0	0	0	2860	
		Yanbian Forestry Bureau	7		60	40											
		Yanbian Forestry Bureau	0		150	120				160	80						
	Renhe	Jinjiang	Jinjiang	6													
Panzhihua Changjiang Forestry Corporation			105	4000	3000	2000				1800	1000	15					
Primary School of Changjiang Forestry Corporation			20	2000	3000	1000				2000	600	20					
TOTAL			770	24226	15848	130686	228	79	197	33189	14789	1941.8	864.1	54	24	160905	

Appendix 2: Consultations on Compensation Modes and AAOVs

Table B1. Results of Consultation on Compensation Modes and AAOVs.

County	Township	Village	Compensation Mode (see key)	AAOV (Yuan)		
				Irr. Land	Dry land	Veg. Land
Xichang	Huangliangua	Dongping	C	1320	800	-
		Dade	C	1200	800	-
	Huangshui	Luhe	C	1180	750	-
		Shuanglong	A	1180	750	-
		Wanao	B	1100	650	-
	County Average			1196	750	-
Dechang	Mali	Sanhe	B	1000	600	-
		Minzhu	C	1100	600	-
		Daba	C	1200	800	-
		Dianma	C	1100	650	-
	Yinlu	Xintang	B	1150	750	-
	Dezhou	Daping	C	1200	780	-
		Fenghuang	C	1200	800	-
		A-Rong	C	1200	750	-
	Xiaogao	An'ning	E	1400	800	-
		Lianfeng	E	1380	800	-
		Lianmeng	E	1380	800	-
		Qunying	E	1350	800	-
		Gaofeng	E	1350	800	-
		Huangcao	E	1320	800	-
	Le Yao	Banzhanying	E	1320	800	-
		Xintang	E	1320	800	-
		Hongxing	C	1300	700	-
		La-E	C	1300	800	-
		Dafu	C	1250	700	-
	Jinsha	Guanyintang	C	1300	800	-
	Jinchuan	Puba	C	1250	700	-
		Guanmen	C	1200	650	-
		Xinma	C	1300	700	-
		Luomi	C	1380	800	-
	Yonglang	Yongyao	C	1260	800	-
	County Average			1260	751	-
Miyi	Xijie	Yangjiacun	B	1340	800	-
		Reshui	B	1320	800	-
	Guabang	Qinggang	B	1380	800	-
		Guabang	C	1500	850	-
		Tianba	B	1440	800	-
	Shaba	Shaba	B	1290	800	-
		Yaqi	B	1290	800	-
	Caochang	Kelang	B	1260	800	-
	Panlian	Shuitang	B	1440	800	-
	Salian	Binghai	B	1440	800	-
		Yuwanggong	B	1320	800	-
		Pingyang	B	1320	800	-
		Wanlai	C	1400	800	-
	Yakou	Xintian	B	1400	800	-
		Yakou	B	1440	830	-
		Huiging	B	1350	750	-
	County Average			1371	799	-
Yanbian	Xinjiu	Jiuchang	C	1140	620	-
		Mengliang	B	1080	600	-
		Pinggu	C	1140	600	-
	Xinmin	Shuiping	C	1320	700	-
		Xinmin	C	1320	730	-
	County Average			1200	650	-
Renhe	Jinjiang	Jinjiang	A	-	800	3000

KEY

Mode	Land Redistribution	Disbursement of Compensation
A	YES	LC and RS to land-holding group/ village
B	YES	LC to village; RS to APs
C	YES	Part LC to village, part to APs; RS to APs
D	NO	APs transferred to urban status
E	NO	LC and RS to APs

LC: Land Compensation Fee

RS: Resettlement Subsidy

AP: Affected Person who loses land

Appendix 3: Information Booklet - XiPan Expressway

I. SUMMARY OF PROJECT

1. The Xichang to Pangzhihua Expressway (XiPan) is an essential section of National Highway No.108 (G108), which is one of the eight Grand Corridors of the Western Region planned by the Ministry of Communications (MOC) for implementing the national strategy for China's Western Development. The National Highway 108 links Lanzhou, the capital city of Gansu Province in the North and Mohan, a border town in southwest Yunnan Province. Xichang-Panzhihua Expressway is a vital link in the expressway network of Sichuan Province, as well as an arterial corridor from Sichuan to Kunming, the capital city of Yunnan Province.

2. The proposed Xichang to Panzhihua Expressway will accelerate the highway network upgrading in Sichuan Province through improving transport conditions, facilitating the exploitation of rare-metal resources, and strengthening capacity building in local social-economic and environmental development. This will contribute to poverty alleviation and promotion of the welfare of minority nationalities in the project area.

3. The XiPan expressway will link the administration center of Liangshan Yi Minority Autonomous Prefecture (Xichang) with Sichuan's most southern urban center, Panzhihua. The total length of the proposed expressway is 160 Kms and it will include 8 interchanges plus service areas.

4. This booklet outlines the legal background, policies and compensation standards, which will govern land and property acquisition for this project. More information is provided in the full Resettlement Plan, which is available to read in village, township and county offices.

II. COMPENSATION STANDARDS AND POLICIES

A Legal Framework

5. The principal laws and regulations governing land and property acquisition, compensation entitlements and related matters for this project are:

- (i) "The Land Administration Law of the People's Republic of China " (Promulgated by Order No.8 of President of the Peoples' Republic of China on August 29, 1998, and effective as of January 1, 1999). Land compensation will consist of a land compensation fee and a resettlement subsidy.
- (ii) "Implementation Regulations for Land Administration Law of the Peoples Republic of China " (Promulgated by Order No.256 of the State Council of the Peoples Republic of China on December 27, 1998, and effective as of January 1, 1999).
- (iii) "Sichuan Guidelines on the Implementation of the Land Administration Law of the People's Republic of China" (Promulgated by the proclamation No.26 of the Ninth Session of the Standing Committee, Sichuan People's Congress on December 10, 1999, and in effective as of December 10, 1999). The most relevant articles are:
 - Article No.42 details the procedures for payment of compensation and subsidies.
 - Article No.44 states that, after land acquisition, land can be readjusted

subject to the approval of two-thirds members of villagers' assembly (or their representatives) and after approval of township government and county level Agricultural Bureau.

- (iv) "Sichuan Government Notification on Accelerating Highway Development" (May 22, 2001) provides that land compensation and resettlement subsidies will be respectively payable at 6 and 4 times the AAOV of the land (calculated over the last three years) respectively

III. RESETTLEMENT POLICIES

6. In order to undertake land acquisition and resettlement thoroughly and conscientiously, the following principles are followed:

- (i) Affected peoples and units (i.e. those losing land or property) must be assured of at least regaining, if not increasing, their pre-acquisition level of income and welfare in the shortest possible time.
- (ii) All affected persons will be informed of the resettlement plan in order that they may engage in extensive consultation regarding their choice of resettlement sites, standards and area, their preferred option regarding the type of rehabilitation, and compensation rates of land acquisition.
- (iii) Where possible, households losing their farmland will be allocated new land through land redistribution within their land-owning groups. Where land redistribution is not practical, the persons losing land will be resettled according to relevant stipulations of Sichuan Province, which ensure that their living standards will not be lower than that without the project. Compensation for land will be payable to the land-holding group who, through properly constituted meetings, will decide how this money should be used
- (iv) Affected people losing their houses or other structures will get compensation at replacement rates. With housing areas being granted by local government, more selection options should be provided based on local customs, and necessary transition cost and transfer assistance will be provided for those persons who are resettled.
- (v) The primary schools to be relocated should be re-established before the start of expressway construction so as not to disturb students' schooling.
- (vi) Transition and moving allowances will be payable to persons unable to move into a new house before the demolition of their old one, and to owners and employees of businesses who have to relocate and cannot immediately resume their business or employment.
- (vii) All compensation fees and subsidies will be paid out in full to the relevant parties within three months after the approval of the action plan for land acquisition and resettlement.

IV. COMPENSATION RATES

1. Affected Houses and Buildings

7. Compensation for affected houses and buildings, owned by enterprises or individuals, will be paid according to the following replacement rates. No deduction in compensation will be made for depreciation or the cost of salvaged materials.

Table 1: Compensation Rates for Houses and Buildings

Prefectures	Unit: Y/m ²					
	Brick & Concrete	Brick & wood (tile)	Clay & Wood (tile)	Clay & Grass Roof	Simple Houses	Tent-like Houses
Liangshan	400	200	150	100	50	30
Panzhihua	450	200	150	100	50	30

2. Affected Land

8. Table 2 shows the compensation payable for irrigated and non-irrigated land, which will be permanently acquired. These rates have been fixed following discussions with representatives from the affected villages, county and township officials, and the Sichuan Expressway Construction Company

9. Land required temporarily will be compensated at one times the AAOV per year of occupation. It shall be returned to the farmer in its original condition

10. The compensation rate, per mu, for barren land will be Y3,000 and Y6,000 for all other types of land.

11. In addition, standing crops will be compensated at one times the AAOV relevant to that type of land.

Table 2: Compensation Rate for Permanent Arable Land Acquisition

Land Types	County (City)	AAOV ^a (Yuan)	Multipliers x AAOV		Total ^b (Yuan/mu)
			Land compensation	Resettlement subsidy	
IRRIGATED	Xichang	1200	6	4	12,000
	Dechang	1260	6	4	12,600
	Miyi	1370	6	4	13,700
	Yanbian	1200	6	4	12,000
DRY	Xichang	750	6	4	7,500
	Dechang	750	6	4	7,500
	Miyi	800	6	4	8,000
	Yanbian	650	6	4	6,500
	Renhe	800	6	4	8,000
VEGETABLE	Renhe ^b	3000	6	4	30,000

^a Average over last 3 years

^b Excluding payment for crops

3. Relocation Allowances

12. Relocation allowances cover transitional costs, including rent in temporary accommodation, between old house demolition and new house construction (transition allowance), and the cost of moving all household items and any salvageable materials to the new house, or from the rented house to new house (moving allowance). These allowances are

payable where households cannot move directly into a new house following the demolition of their old one and businesses and their employees who cannot immediately resume production.

13. Relocation allowances for households and employees will total Y1,000 per household.

14. The transition allowance for a commercial businesses moving from old buildings to new ones will be a lump sum payment calculated on the basis of total post-tax profit during the six months prior to relocation as declared by the business to the tax-collection agencies.

4. Other Compensation Rates and Assistance

15. Compensation rates for other items are summarized in Table 3.

Table 3: Other Compensation Rates

ITEM	Unit	Yuan	ITEM	Type	Yuan
Sunning ground	m ²	50	Fruit trees	Young/grafted	5
Enclosure wall	m ³	50		Not fruit-bearing	10-20
Manure pits	m ³	30		Mature	30
Water tanks	m ³	200	Mulberry tree	Dependent on size	1.5-3
Wells	m ³	250	Bamboo		1
Pump wells	Unit	300	Timber trees	Small	6
Fish pond	m ³	50		Medium	26
Tomb	Unit	600		Big	100
Bio-gas digester	Unit	1,300		Very large	300

16. Additional assistance will be available for vulnerable households (eg. the widowed, sick, disabled, old) and training programmes will be provided for seriously affected households, especially those unable to continue in agriculture. APs will also be given priority in accessing temporary and part-time employment opportunities provided by the construction and operation of the expressway.

5. Payment of Compensation

17. In accordance with the compensation policies and rates given in this Resettlement Plan, the Provincial Resettlement Office will sign compensation agreements with the local Land Acquisition and Resettlement Offices, supporting units, enterprises and public infrastructure agencies. Payment of funds will be made in accordance with: (i) these agreements and (ii) the time schedule specified in these agreements.

- (i) The land compensation fee for affected land belongs to farming collectives and will therefore be paid directly to the Village Committees for the purpose of developing productive capacity and rehabilitating the economic level of affected persons.
- (ii) The resettlement subsidy is paid to the agency that is responsible for resettling the affected agricultural population. As this responsibility is usually given to the

affected Village Committees and land-owning groups it is they that receive the resettlement subsidy. If an affected household does not receive redistributed land and chooses to arrange its own resettlement, the resettlement subsidy will be paid directly to that household.

- (iii) The compensation for houses, special purpose facilities, auxiliary facilities and unripe crops will be paid directly to the affected individuals.
- (iv) Compensation for affected enterprises will be paid directly to the respective enterprises.
- (v) Relocation allowances will be paid directly to the households or enterprises and social units incurring the costs of relocation.

18. The laws and regulations provide a substantial degree of flexibility to land -owning groups in terms of land redistribution and the disbursement of compensation. A comprehensive series of meetings with representatives from all affected villages was held in December 2001 to identify the preferences of each village. The results are summarised in Table 4 and will provide the basis for the allocation of land compensation fees and resettlement subsidies in each village.

Table 4: Preferred Strategy relating to Land Redistribution and Income Restoration

County	Township	Village Code	Village Name	Preferred Strategy	County	Township	Village Code	Village Name	Preferred Strategy
Xichang	Huanglianguan	1	Dongping	C	Miyi	Xijie	31	Yangjiacun	B
		2	Dade	C			32	Reshui	B
	Huangshui	3	Luhe	C		Guabang	33	Qinggang	B
		4	Shuanglong	A			34	Guabang	C
		5	Wanao	B			35	Tianba	B
Dechang	Mali	6	Sanhe	B		Shaba	36	Shaba	B
		7	Minzhu	C			37	Yaqi	B
		8	Daba	C		Caochang	38	Kelang	B
		9	Dianma	C		Panlian	39	Shuitang	B
	Yinlu	10	Xintang	B		Salian	40	Binghai	B
	Dezhou	11	Daping	C			41	Yuwanggong	B
		12	Fenghuang	C			42	Pingyang	B
		13	A-Rong	C			43	Wanlai	C
	Xiaogao	14	An'ning	E		Yakou	44	Xintian	B
		15	Lianfeng	E			45	Yakou	B
		16	Lianmeng	E			46	Huiqing	B
		17	Qunying	E	Yanbian	Xinjiu	47	Jiuchang	C
		18	Gaofeng	E			48	Mengliang	B
		19	Huangcao	E			49	Pinggu	C
		20	Banzhanying	E		Xinmin	50	Shuiping	C
	Leyao	21	Xintang	E			51	Xinmin	C
		22	Hongxing	C	Renhe	Jinjiang	52	Jinjiang	A
		23	La-E	C					
		24	Dafu	C					
	Jinsha	25	Guanyintang	C					
	Jinchuan	26	Puba	C					
		27	Guanmen	C					
		28	Xinma	C					
		29	Luomi	C					
	Yonglang	30	Yongyao	C					

KEY:

Strategy	Land Redistribution	Disbursement of Compensation
A	YES	LC ^a and RS ^b to land-holding group/ village
B	YES	LC to village; RS to APs ^c
C	YES	Part LC to village, part to APs; RS to APs
D	NO	APs transferred to urban status
E	NO	LC and RS to APs

a LC: Land Compensation Fee

b RS: Resettlement Subsidy

c AP: Affected Person who loses land.

19. On the basis of this table, most APs losing land will be directly compensated to the value of 4 times the AAOV of the land being acquired. In most cases, the land compensation fee element (6 times the AAOV) will be used by the land-holding group for the benefit of all households losing land either directly, or indirectly through land redistribution.

V. PARTICIPATION AND CONSULTATION

20. Participation by and consultation with affected persons (APs) is an integral part of the resettlement process. Affected villages will be largely responsible for the preferred approach to land redistribution, the disbursement of compensation and the use of compensation for income restoration activities. Preferences of individual villages have been presented in Table 4. The attitudes and concerns of village leaders and individual farmers relating to the expressway were also obtained through socio-economic surveys undertaken in July and October 2001. The results of these have been incorporated into the policies for resettlement, compensation and income restoration incorporated into the RP.

21. Further participation and consultation activities will be carried out throughout the resettlement and acquisition process. These activities are as follows:

- (i) The circulation of this handbook.
- (ii) A series of announcements using local newspapers, radio and TV stations as well as handouts to township governments and affected villages. These announcements will describe the proposed timing of land acquisition related activities.
- (iii) Between March and May the final right of way (ROW) will be marked and the detailed measurement survey (DMS) will be completed. The DMS will be undertaken by Resettlement/Land Acquisition Officers by means of face to face meetings with the APs, and will involve the measurement and categorization of all land and other assets to be acquired. It also provides an opportunity to raise concerns such as the final delineation of acquisition boundaries and the positioning and sizing of culverts and irrigation channels.
- (iv) Village meetings will be held to ratify or amend the strategies presented in Table 4. These meetings will also identify new housing sites, plan the redistribution of land to ensure that the land loss is equally spread between all members of the land-holding group, and decide on how the compensation accruing to the land holding group will be used. These meetings will be held throughout the months following completion of the DMS.
- (v) The establishment of a procedure for addressing grievances relating to land acquisition, compensation and other matters such as the reinstatement of roads, tracks and irrigation systems (see section VII).

22. APs will be included in the periodic monitoring and evaluation surveys that will be conducted immediately before, during and after construction. Part of the survey will involve them articulating concerns with the implementation of the resettlement strategies and making suggestions as to how those concerns might be addressed.

VI. INSTITUTIONAL RESPONSIBILITY

23. A Project Management Office (PMO) will be established with the overall responsibility for the coordination, planning and implementation of land acquisition and resettlement activities under the project. The Provincial Resettlement Office (PRO) is responsible for coordinating all resettlement activities under the project. The actual implementation of land acquisition and resettlement work will be carried out by the respective Resettlement Offices and Land Acquisition Bureaus at the county and township level.

County Resettlement Offices (COROs) are the central units in the implementation of resettlement. They supervise actual implementation, and has staff qualified to make implementation decisions as well as the technical capacity to manage census data as a monitoring tool. Their responsibilities are:

- (i) Prepare county Resettlement Plans (RPs) according to census data supplied by the SPDI and according to the resettlement policies of the project;
- (ii) Implement the RP;
- (iii) Guide and monitor Township Resettlement Offices (TROs);
- (iv) Receive resettlement funds on behalf of collectives, enterprises and individuals;
- (v) Allocate resettlement funds for collectives, enterprises and individuals and monitor their use; and
- (vi) Train the staff of TROs;

24. Township Resettlement Offices (TROs) have the following responsibilities:

- (i) Survey, monitor and record all resettlement activity within its jurisdiction;
- (ii) Supervise acquisition of land, houses, other buildings and structures, public utility infrastructure and enterprises as well as the relocation and reconstruction of houses and non-residential buildings; and
- (iii) Supervise the employment and training of the affected persons in township enterprises.

25. Village Administration Committees supported by Land Owning Groups have the following responsibilities:

- (i) To report on: quantity of land acquired, ownership and usufruct rights of land and property, and the land-labor ratio;
- (ii) Participate in surveys;
- (iii) Planning and implementing land redistribution;
- (iv) Deciding how the money received for land compensation will be used and what proportion of this will be distributed directly to APs;
- (v) Select resettlement sites;
- (vi) Address grievance issues; and
- (vii) Report on the progress of resettlement.

VII. GRIEVANCES AND APPEAL

27. Stage 1: If any person is aggrieved by any aspect of the resettlement and rehabilitation program, he/she can lodge an oral or written grievance with the Village Administration Committee or the local Township Resettlement Office (TRO). In case an oral complaint is made, it should be written on paper by the village unit and processed. The Village Administration Committee or the TRO must resolve the issue within two weeks.

28. Stage 2: If the aggrieved person is not satisfied with the decision taken in Stage 1, he/she can bring the complaint to the attention of the County Resettlement Office (CORO) within one month from the date of the receipt of the Stage 1 decision. CORO will reach a decision on the complaint within two weeks.

29. Stage 3: If the aggrieved person is not satisfied with the decision of the CORO, he/she can bring the complaint to the attention of the Provincial Resettlement Office within one month

from the date of the receipt of the Stage 2 decision. The PRO will reach a decision on the complaint within three weeks.

30. Stage 4: If the AP is still dissatisfied by the decision, he/she can appeal to the Peoples Court, at the appropriate level, in accordance with the "Civil Procedures Act", within 15 days of receiving the decision of the PRO.

31. These procedures will be operative throughout the resettlement and construction period in order that they may also address issues related to concerns arising from the construction of the expressway, particularly as it relates to the maintenance of local access routes and irrigation systems.

Appendix 4: Information Booklet - Local Road Component

I. SUMMARY OF PROJECT

1. The South Sichuan Highway Development Project consists of the construction of an expressway from Xichang to Panzhihua and the improvement of around 560kms of local roads in the counties of Xichang, Dechang, Miyi, Huili and Yanbian. The improvement of these roads is expected to reduce transport costs for passengers and goods, improve access to local markets, health and education facilities, increase local agricultural production and accelerate the development of off-farm employment opportunities, thereby contributing to poverty alleviation in mountainous and hilly areas.

2. Because the component involves the upgrading of existing roads and not the construction of new ones, land and property acquisition requirements are expected to be minimal and highly scattered, e.g. single buildings located on sharp corners, or small portions of land where the ROW has to be widened.

3. Following discussions between the ADB, SPCD and SPECL, it has been agreed that all relevant policies and provisions relating to land and property acquisition and compensation as pertaining to the construction of the XiPan expressway, will apply equally to land and property acquisition associated with the local road improvements. The Resettlement Plan (RP) prepared for the XiPan expressway contains a detailed description of these policies including the basis for assessing compensation. The RP is available for inspection at county offices. This booklet provides a summary of the main provisions of the RP and describes how they will apply to any unavoidable land and property acquisition associated with the improvement of local roads.

II. COMPENSATION STANDARDS AND POLICIES

A Legal Framework

4. The principal laws and regulations governing land and property acquisition, compensation entitlements and related matters for this project are:

- (i) "The Land Administration Law of the People's Republic of China " (Promulgated by Order No.8 of President of the Peoples' Republic of China on August 29, 1998, and effective as of January 1, 1999). Land compensation will consist of a land compensation fee and a resettlement subsidy. Compensation for crops and fixtures (including buildings) will be paid at replacement rates
- (ii) "Implementation Regulations for Land Administration Law of the Peoples Republic of China " (Promulgated by Order No.256 of the State Council of the Peoples Republic of China on December 27, 1998, and effective as of January 1, 1999).
- (iii) "Sichuan Guidelines on the Implementation of the Land Administration Law of the People's Republic of China" (Promulgated by the proclamation No.26 of the Ninth Session of the Standing Committee, Sichuan People's Congress on December 10, 1999, and in effective as of December 10, 1999). The most relevant articles are:
 - Article No.42 details the procedures for payment of compensation and subsidies.
 - Article No.44 states that, after land acquisition, land can be readjusted

subject to the approval of two-thirds members of villagers' assembly (or their representatives) and after approval of township government and county level Agricultural Bureau.

- (iv) "Sichuan Government Notification on Accelerating Highway Development" (May 22, 2001) provides that land compensation and resettlement subsidies will be respectively payable at 6 and 4 times the AAOV of the land (calculated over the last three years) respectively

III. RESETTLEMENT POLICIES

5. In order to undertake land acquisition and resettlement thoroughly and conscientiously, the following principles are followed:

- (i) Affected peoples and units (i.e. those losing land or property) must be assured of at least regaining, if not increasing, their pre-acquisition level of income and welfare in the shortest possible time.
- (ii) All affected persons will be informed of the resettlement plan in order that they may engage in extensive consultation regarding their choice of resettlement sites, standards and area, their preferred option regarding the type of rehabilitation, and compensation rates of land acquisition.
- (iii) Where possible, households losing their farmland will be allocated new land through land redistribution within their land-owning groups. Where land redistribution is not practical, the persons losing land will be resettled according to relevant stipulations of Sichuan Province, which ensure that their living standards will not be lower than that without the project. Compensation for land will be payable to the land-holding group who, through properly constituted meetings, will decide how this money should be used
- (iv) Affected people losing their houses or other structures will get compensation at replacement rates. With housing areas being granted by local government, more selection options should be provided based on local customs, and necessary transition cost and transfer assistance will be provided for those persons who are resettled. Depreciation will not be deducted from the current replacement prices for computing the compensation payable.
- (v) The primary schools to be relocated should be re-established before the start of expressway construction so as not to disturb students' schooling.
- (vi) Transition and moving allowances will be payable to persons unable to move into a new house before the demolition of their old one, and to owners and employees of businesses who have to relocate and cannot immediately resume their business or employment.
- (vii) All compensation fees and subsidies will be paid out in full to the relevant parties within three months after the approval of the action plan for land acquisition and resettlement.

IV. COMPENSATION RATES

1. Affected Houses and Buildings

6. Compensation for affected houses and buildings, owned by enterprises or individuals, will be paid according to the following rates. No deduction in compensation will be made for depreciation or the cost of salvaged materials.

Table 1: Compensation Rates for Houses and Buildings

Prefectures	Unit: Y/m ²					
	Brick & Concrete	Brick & wood (tile)	Clay & Wood (tile)	Clay & Grass Roof	Simple Houses	Tent-like Houses
Liangshan	400	200	150	100	50	30
Panzhihua	450	200	150	100	50	30

2. Affected Land

7. Compensation payable for permanently acquired cultivated land comprises three elements:

- the land compensation fee is payable to compensate for the loss of the land itself
- the resettlement subsidy which is payable to compensate for the loss of income to the person or unit cultivating the land
- compensation for standing crops recompenses the farmer for the value of crops in the fields when they are acquired.

8. For each of the above, compensation is calculated as a multiple of the Average Annual Output Value (AAOV) for that type of land (normally classed as either irrigated or dry) averaged over the last three years. The multiples payable are respectively 6, 4 and 1 for land compensation, resettlement, subsidy and crops respectively. Total compensation will thus amount to 11 times the land's AAOV.

9. AAOVs will be determined in discussions involving village representatives, and officials from county and township governments. They will be determined for each local road scheme so as to reflect local conditions and cropping patterns. For indicative purposes only, AAOVs adopted for the XiPan Expressway range from Y1,200 to Y1,400 per mu for irrigated land and Y650 to Y800 per mu for dry land.

10. Land required temporarily will be compensated at one times the AAOV per year of occupation. It shall be returned to the farmer in its original condition

11. Compensation rates for barren and other types (eg. housing, forest, orchard) of land will be similarly determined for each scheme.

3. Relocation Allowances

12. Relocation allowances cover transitional costs, including rent in temporary accommodation, between old house demolition and new house construction (transition allowance), and the cost of moving all household items and any salvageable materials to the new house, or from the rented house to new house (moving allowance). These allowances are payable where households cannot move directly into a new house following the demolition of their old one and businesses and their employees who cannot immediately resume production.

13. Relocation allowances for households and employees will total Y1,000 per household.

14. The transition allowance for a commercial businesses moving from old buildings to new ones will be a lump sum payment calculated on the basis of total post-tax profit during the six months prior to relocation as declared by the business to the tax-collection agencies.

4. Other Compensation Rates and Assistance

15. Compensation rates for other items are summarized in Table 2.

Table 2: Other Compensation Rates

ITEM	Unit	Yuan	ITEM	Type	Yuan
Sunning ground	m ²	50	Fruit trees	Young/grafted	5
Enclosure wall	m ³	50		Not fruit-bearing	10-20
Manure pits	m ³	30		Mature	30
Water tanks	m ³	200	Mulberry tree	Dependent on size	1.5-3
Wells	m ³	250	Bamboo		1
Pump wells	Unit	300	Timber trees	Small	6
Fish pond	m ³	50		Medium	26
Tomb	Unit	600		Big	100
Bio-gas digester	Unit	1,300		Very large	300

16. Rates for other types of productive trees and fixtures will be determined as required.

17. Additional assistance will be available for vulnerable households (eg. the widowed, sick, disabled, old) and training programmes will be provided for seriously affected households, especially those unable to continue in agriculture. APs will also be given priority in accessing temporary and part-time employment opportunities provided by the construction and operation of the expressway.

5. Payment of Compensation

18. In accordance with the compensation policies and rates determined using the above multipliers, the County Land Administration Bureau (or other agency responsible for land / property acquisition) will sign compensation agreements with the owners of all land and fixtures to be acquired, be they individuals or collectives, public or private. Payment of funds will be made in accordance with: (i) these agreements and (ii) the time schedule specified in these agreements.

- (i) The land compensation fee for affected land belongs to farming collectives and will therefore be paid directly to the Village Committees for the purpose of developing productive capacity and rehabilitating the economic level of affected persons.
- (ii) The resettlement subsidy is paid to the agency that is responsible for resettling the affected agricultural population. As this responsibility is usually given to the affected Village Committees and land-owning groups it is they that receive the

resettlement subsidy. If an affected household does not receive redistributed land and chooses to arrange its own resettlement, the resettlement subsidy will be paid directly to that household.

- (iii) The compensation for houses, special purpose facilities, auxiliary facilities and unripe crops will be paid directly to the affected individuals.
- (iv) Compensation for affected enterprises will be paid directly to the respective enterprises.
- (v) Relocation allowances will be paid directly to the households or enterprises and social units incurring the costs of relocation.

V. MAIN STAGES IN THE LAND/PROPERTY ACQUISITION PROCESS

19. The main stages in the land / property acquisition process will be:

- (i) distribution of this booklet
- (ii) the initial route survey to be conducted by the county highway bureau. The objective is to select the most appropriate alignment for the road and identify any requirements for land / property acquisition. It will involve discussions with local farmers and village leaders in order that they are both aware of the scheme and can contribute to its final design
- (iii) determination of AAOVs and other compensation rates through discussions between village, township and county (Land Administration Bureau) officials
- (iv) preparation of an acquisition impact sheet indicating the amount and types of land and property to be acquired from each village and the compensation which will be payable. (by the county highway bureau in association with the Land Administration Bureau)
- (v) distribution of the impact sheet to affected villages
- (vi) the signing of contracts with APs confirming the amount of land/ property to be acquired and the compensation payable
- (vii) the holding of properly constituted village meetings to identify sites for displaced households, decide whether land redistribution is required and how the compensation should be split between the land holding group and individual APs
- (viii) disbursement of compensation to villages and APs
- (ix) construction of new houses
- (x) carry out land redistribution (if applicable) and implement income restoration measures using the compensation accruing to the land-holding group as a whole
- (xi) start of construction.

VI. PARTICIPATION AND CONSULTATION

20. Participation by and consultation with affected persons (APs) is an integral part of the resettlement and acquisition process. The process outlined in the previous section provides for the participation of APs throughout the design and implementation of road improvement and the associated land/ property acquisition.

21. In particular, it is considered essential that affected villages are consulted during the initial route survey so that they can exert an influence on scheme design, especially the detailed alignment where it crosses villages and heavily cultivated areas.

22. Furthermore the laws and regulations provide that affected villages will be largely responsible for deciding on whether or not there should be land redistribution, how

compensation will be split between the community and individual APs and used for income restoration activities. These decisions will be taken by properly constituted village meetings in the affected villages. The main options are summarized in Table 3.

Table 3: Options for Compensation and Income Restoration

Strategy	Land Redistribution	Disbursement of Compensation
A	YES	LC ^a and RS ^b to land-holding group/village
B	YES	LC to village; RS to APs ^c
C	YES	Part LC to village, part to APs; RS to APs
D	NO	APs transferred to urban status ^d
E	NO	LC and RS to APs

^a LC: Land Compensation Fee

^b RS: Resettlement Subsidy

^c AP: Affected Person who loses land

^d Normally applicable only if the AP is unable to continue cultivating land.

23. The establishment of a procedure for addressing grievances relating to land acquisition, compensation and other matters such as the reinstatement of roads, tracks and irrigation systems (see section VIII)

24. APs will be included in the periodic monitoring and evaluation surveys. These will be conducted immediately before, during and after construction. Part of the survey will involve them articulating concerns with the implementation of the resettlement strategies and making suggestions as to how those concerns might be addressed.

VII. INSTITUTIONAL RESPONSIBILITY

25. The agencies principally responsible for acquisition and resettlement will be the County Highway and Land Administration Bureaus. If land acquisition or resettlement is significant (e.g. more than 100 mu of cultivated land or 20 households in a single village, a dedicated County Resettlement Offices (COROs). This office will have overall responsibility that acquisition and resettlement are implemented according to provisions of the RP and this booklet.

26. The county agencies or CORO will establish Township Resettlement Offices (TROs) with the following responsibilities:

- (i) Survey, monitor and record all resettlement activity within its jurisdiction;
- (ii) Supervise acquisition of land, houses, other buildings and structures, public utility infrastructure and enterprises as well as the relocation and reconstruction of houses and non-residential buildings; and
- (iii) Supervise the employment and training of the affected persons in township enterprises.

27. Village Administration Committees supported by Land Owning Groups have the following responsibilities:

- (i) To report on: quantity of land acquired, ownership and usufruct rights of land and property; and the land-labor ratio

- (ii) Participate in surveys;
- (iii) Planning and implementing land redistribution
- (iv) Deciding how the money received for land compensation will be used and what proportion of this will be distributed directly to APs
- (v) Select resettlement sites;
- (vi) Address grievance issues;
- (vii) Report on the progress of resettlement.

VIII. GRIEVANCES AND APPEAL

28. Stage 1: If any person is aggrieved by any aspect of the resettlement and rehabilitation program, he/she can lodge an oral or written grievance with the Village Administration Committee or the local Township Resettlement Office (TRO). In case an oral complaint is made, it should be written on paper by the village unit and processed. The Village Administration Committee or the TRO must resolve the issue within two weeks.

29. Stage 2: If the aggrieved person is not satisfied with the decision taken in Stage 1, he/she can bring the complaint to the attention of the County Resettlement Office (CORO) within one month from the date of the receipt of the Stage 1 decision. CORO will reach a decision on the complaint within two weeks.

30. Stage 3: If the aggrieved person is not satisfied with the decision of the CORO, he/she can bring the complaint to the attention of the Provincial Resettlement Office within one month from the date of the receipt of the Stage 2 decision. The PRO will reach a decision on the complaint within three weeks.

31. Stage 4: If the AP is still dissatisfied by the decision, he/she can appeal to the Peoples Court, at the appropriate level, in accordance with the "Civil Procedures Act", within 15 days of receiving the decision of the PRO.