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Asian Development Bank's Involuntary Resettlement Safeguards

Project Case Studies in the People's Republic of China



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ABBREVIATIONS

ADB	–	Asian Development Bank
AOV	–	average output value
AP	–	affected person
AWDD	–	Ao River Water Diversion and Development Company
BME	–	benefit monitoring and evaluation
CBRP	–	community-based resettlement plan
CP	–	contract package
CRO	–	county resettlement office
EA	–	executing agency
ESPP	–	environmental and social policy and procedures
FMHDC	–	Fujian Mianhuatan Hydropower Development Company Limited
FMRO	–	Fuzhou Municipal Resettlement Office
FPEPB	–	Fujian Province Electric Power Bureau
FPG	–	Fujian Provincial Government
FPRO	–	Fujian Provincial Resettlement Office
GASS	–	Guizhou Academy of Social Sciences
GCD	–	Guangxi Communication Department
GRC	–	grievance redressal committee
GSRC	–	Guizhou Shuibai Railway Corporation
GZAR	–	Guangxi Zhuang Autonomous Region
IP	–	indigenous peoples
IR	–	involuntary resettlement
Km	–	kilometer
kWh	–	kilowatt-hour
MWR	–	Ministry of Water Resources
LMRO	–	Longyan Municipal Resettlement Office
NRCR	–	National Research Center for Resettlement
OEM	–	operations evaluation mission
PCR	–	project completion report
PIU	–	project implementation unit
PMU	–	project management unit
PRC	–	People's Republic of China
PRSF	–	post-relocation support fund
PSP	–	post-relocation support plan
RF	–	resettlement framework
ROW	–	right-of-way
RP	–	resettlement plan
RPF	–	resettlement policy framework
SASS	–	Shanghai Academy of Social Sciences
SEDC	–	Shanxi Economic Development Company
SES	–	special evaluation study
SIDRI	–	Shanghai Investigation Design Research Institute
TA	–	technical assistance
WRO	–	Wenzhou Resettlement Office
YLWWTP	–	Yang Li Wastewater Treatment Plant Company
YMEC	–	YuanMo Expressway Corporation
YRCC	–	Yellow River Conservancy Commission

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This volume of case studies was prepared in the context of the Special Evaluation Study of Involuntary Resettlement Safeguards. The team leader for this evaluation was Walter Kolkma, Senior Evaluation Specialist at the Operations Evaluation Department (OED). He also took most of the photos. The case studies are based on (i) field visits of the Team Leader and interviews he conducted, (ii) existing documentation on the projects, and (iii) reports of field studies conducted by consultants, referred to in the introduction. The consultants had no conflicts of interest with regard to the projects they studied. The views expressed in the case studies do not necessarily reflect the views and policies of the Asian Development Bank, or its Board of Governors or the governments they represent. Reactions are welcome and will be posted on the OED website.

The Asian Development Bank does not guarantee the accuracy of the data included in this report and accepts no responsibility for any consequences of their use. Please send your comments to wkolkma@adb.org.

I. INTRODUCTION

1. The case studies presented in this report were conducted in preparation of the special evaluation study (SES)¹ of the Asian Development Bank's (ADB) 1995 Policy on Involuntary Resettlement (IR)². This SES was conducted by the Operations Evaluation Department (OED) upon the request of the Development Effectiveness Committee (DEC) of ADB's Board of Directors. The evaluation of the IR Policy was carried out within a limited time frame so that it could contribute to the scheduled review process leading to the update of ADB's safeguard policies in 2008.³

2. The evaluation of the IR policy sought to (i) provide an overview of the scale and nature of IR in ADB operations; (ii) examine the extent of application of the IR policy; (iii) review trends; (iv) make pertinent comparisons with other systems; and (v) provide OED's assessment of the policy's relevance, effectiveness, efficiency, and sustainability within the context of past experience, changing circumstances, and new demands. The SES looked into the level of compliance of projects with the IR policy; the policy's probable impact on affected persons (APs) and on institutional development as well as into incremental costs and transaction costs for ADB and its clients.

3. Other than the project case studies reported in this volume, the analysis for the SES was supported by (i) information drawn from ADB's internal databases and project documents; (ii) interviews with relevant ADB staff; (iii) questionnaire surveys; (iv) country case studies, and (v) project case studies in India and the Philippines. The project case studies mostly concerned completed projects but also ongoing projects. This was done to gain insight into the effects of the newer IR procedures and practices.

4. **Project Case Studies.** The project case studies involved visits to two other countries than the People's Republic of China (PRC): India, and the Philippines. The country choice was based on numbers of ADB-supported projects with past and present resettlement activity. The three countries covered more than 50% of all ADB projects with resettlement planning and 80% of all APs.

5. Sixteen projects were chosen as case studies for the IR policy evaluation: apart from eight done in PRC, five were done in India, and three in the Philippines. The latter are reported in companion volumes to this volume. The case studies in PRC included resettlement operations in mostly completed projects; two projects were still ongoing. The studies were undertaken in the period March-June 2006. The projects covered the following sectors: (i) transport; (ii) energy; (iii) urban (i.e. water supply and sanitation and multisector projects); and (iv) agriculture and natural resources. Basic data on the eight projects studied in PRC is in Table 1 on the next page.

¹ ADB. 2006. Special Evaluation Study. *Involuntary Resettlement Safeguards*. Manila. Available: <http://www.adb.org/Documents/SES/REG/sst-reg-2006-14/SES-on-IR.asp>

² ADB. 1995. *Involuntary Resettlement*. Manila.

³ Available: <http://www.adb.org/Safeguards/about.asp>

Table 1: Basic Data Project Case Studies and Status of Affected People, 2006

Loan No. and Country	Year of Approval	Project Title	Project Cost at Appraisal (\$ million)	Loan Amount (\$ million)	APs at Appraisal (Number)	APs at Completion (Number)
1417-PRC	1995	Fujian Mianhuatan Hydropower	721.0	170.0	41,054	39,393
1544-PRC	1997	Zhejiang-Shanxi Water Supply	518.0	100.0	36,888	37,199
1626-PRC	1998	Guizhou-Shuibai Railway	381.0	140.0	2,466	29,653
1636-PRC	1998	Fuzhou Water Supply and Wastewater Treatment	192.2	102.0	514	521
1691-PRC	1999	Southern Yunnan Road Development	770.3	250.0	5,376	21,329
1692-PRC	1999	Suzhou Creek Rehabilitation	875.8	300.0	17,552	22,256
1835-PRC	2001	Yellow River Flood Management (Sector)	404.7	150.0	2,896	Not complete*
1851-PRC	2001	Guangxi Roads Development	455.2	150.0	31,700	Not complete*

AP = affected person, No. = number, PRC = People's Republic of China.

* not complete at the time of the field investigations (generally between March and June 2006).

Sources: Regional Sustainable Development Department Involuntary Resettlement database; various reports and recommendations of the President/resettlement plans; various project completion reports; and loans, technical assistance, grants, and equity approvals database.

6. The methodology for the case studies depended on the nature of the resettlement operations. The analysis was conducted by international and local consultants and was generally based on (i) study of project documents; (ii) interviews with project staff; (iii) interviews with officials of executing/implementing agencies and line agencies involved in the projects' implementation; (iv) focus group discussions with APs; (v) rapid field assessments; and (vi) limited field questionnaire surveys (totaling about 600 questionnaires, or about 30-60 questionnaires per project). Questionnaires were used to gain insight on the actual resettlement implementation process; compensation levels, relocation and livelihood rehabilitation assistance provided; as well as the satisfaction levels of APs with the whole process. The results of the questionnaire surveys were used to validate earlier findings in PCRs and resettlement status reports, as well as assess the quality of preparation and implementation and obtain first hand data on results of the policies in projects. The synthesis of the findings of the case studies is in the SES, chapter 5, and its appendixes 20 and 21 (footnote 1). Further methodological notes are in Supplementary Appendix A of the SES.

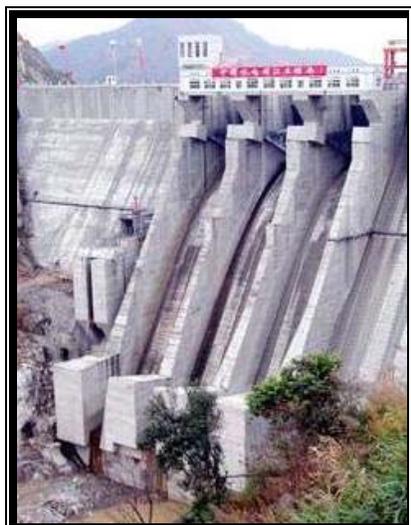
7. Four project case studies in PRC were conducted by Ping Li and Keliang Zhu of the Rural Development Institute (Beijing-Seattle), and another four by a team of researchers of the National Research Center on Resettlement based in Nanjing, under the leadership of Guoqing Shi and Shaojun Jen. These consultants wrote draft reports, which were later summarized and standardized in terms of their format, and sometimes complemented by other information.

A. LOAN 1417-PRC: FUJIAN MIANHUATAN HYDROPOWER⁴

1. Background

8. The Fujian Mianhuatan Hydropower Project involved the construction of a 600 megawatt storage hydropower scheme located on the Ting River in the southwest part of Fujian Province in the People's Republic of China (PRC). The Project also aimed to improve the province's flood protection system and provide assistance for the corporatization and restructuring of Fujian Province Electric Power Bureau (FPEPB), the Project's executing agency (EA). The Project was estimated to cost \$721.0 million⁵ at appraisal. The actual cost was \$437.6 million.⁶ In 2000, FPEPB was corporatized as the Fujian Provincial Electric Power Corporation. As envisaged during appraisal, FPEPB established and maintained a Project Management Office (PMO) that was responsible for overall coordination on project implementation, including communications with ADB. The Project was physically completed with the commissioning of the last generating unit and the associated transmission lines in December 2001, 6 months behind the original completion date.

2. Scope of Land Acquisition and Resettlement and Budget



The dam

9. Since the Project entailed the construction of a large water reservoir and a dam site, the Project needed to resettle a large number of people. Resettlement operations were largely based on PRC's Land Management Law of 1998, the regulations stipulated in 1991 by the Government for resettlement in the case of hydrodams, and ADB's Involuntary Resettlement (IR) Policy of 1995. This meant that the Project aimed to at least restore or improve the incomes and living conditions of APs.

10. The Shanghai Investigation Design Research Institute (SIDRI) was engaged to assist the EA in designing the entire Project. Together with Longyan Municipal Resettlement Office (LMRO) and county resettlement offices, SIDRI carried out the detailed designs of the Project. The institutional responsibility for resettlement was borne by the local governments in the Project area. Resettlement Management Coordination Offices were established in the provincial, municipality, county and

⁴ The data for this summary are drawn from the project case study conducted for this SES from March to April 2006 by the Rural Development Institute (RDI), Beijing-Seattle; (ii) Report on resettlement implementation for the Project Completion Report by the National Research Center on Resettlement (May 2004); (iii) the Project's Report and Recommendation of the President (ADB. 1995. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Fujian Mianhuatan Hydropower Project*. Manila); and (iv) the Project's Project Completion Report (ADB. 2004. *Project Completion Report on the Fujian Mianhuatan Hydropower Project in the People's Republic of China*. Manila).

⁵ ADB approved a loan of \$170.0 million on 14 December 1995 to finance the Project's entire foreign exchange cost. The local currency cost of \$551.0 million was to be financed through equity financing from shareholders and debt financing from domestic banks (China Construction Bank and China Development Bank).

⁶ With the decrease in project costs, ADB's actual financing was \$53.0 million (the remaining unused \$117.0 million was cancelled) and actual borrowing from domestic banks was \$266.0 million (60.8% of total costs).

township levels to carry out the RP. The then Ministry of Electric Power and Fujian Provincial Resettlement Office appointed the Reservoir Resettlement Special Committee of State Hydropower Engineering Association as the Resettlement Supervisor for the Project. Supervision was carried out on the basis of the approved resettlement plan (RP), annual implementation plans, Fujian Mianhuatan Hydropower Development Company, Limited⁷ (FMHDC)-prefecture contracts and the supervision contract covering all aspects of the resettlement implementation. In 1997, FMHDC engaged an international resettlement specialist to assist with the supervision and monitoring resettlement aspects of the Project.

11. The Project planned for three types of resettlement:

- (i) *Off-reservoir (or Move-Out) agricultural resettlement*, where affected persons (APs) moved to a new agricultural setting away from their original areas. In this case, a certain amount of arable land was provided for them for farming.
- (ii) *Near-reservoir (or Move-Back) agricultural resettlement*, where APs moved to a location near their original areas and above the submergence line. Arable land was provided for APs. Older APs preferred this arrangement since they were not completely uprooted from their original areas and sources of livelihood.
- (iii) *Off-reservoir discretionary (Self-Determined) resettlement*, where APs were given the choice of relocation sites (not necessarily from the resettlement sites prepared by the local governments) and livelihood. In this case, their residential registrations were often changed from rural to urban and they were provided with higher compensation rates and resettlement subsidies since they were practically on their own immediately after relocation.

12. The Project would inundate 64 square kilometers of land and have to move the residents of 8 townships and 71 villages in Yongding County and Shanghang County. The number of relocation sites planned was 60. Between 1993 and 2000, at least 3 different RPs were prepared, all with different estimates of the number of APs and costs of the resettlement operation. The last plan was prepared by LMRO in September 2000, and the Fujian Provincial Government (FPG) approved the revision of the budget to CNY1,147.0 million (or \$138.2 million equivalent). Table 2 compares planned and actual resettlement impacts of the Project.

Table 2: Summary of Resettlement Impacts

	Unit	RP (2000)	Actual (2003)
People affected	Person	38,146	39,292
People relocated	Person	34,377	36,913
Submerged farmlands	Mu	34,145	30,640
Submerged houses	m ²	1,764,303	1,812,426
Budget	CNY million	1,146.8	1,256.9

RP = resettlement plan.

Source: Resettlement Implementation Report, Longyan Municipal Resettlement Office (December 2003).

13. Residential reconstruction included: (i) the construction of 56 new villages and replacement housing for 36,913 displaced APs; (ii) the residential reconstruction for 1 new town;

⁷ FMHDC was established in 1995 to own and operate the Mianhuatan hydropower plant. The name of the company was changed to Fujian Mianhuatan Hydroelectric Development Limited Liability Company according to its revised charter dated 29 October 2003.

(iii) relocation of special institutions; and (iv) the reconstruction of affected infrastructure. The County Resettlement Offices (CRO) arranged the transfer of all salvageable materials and belongings to the new resettlement sites.

14. As of December 2003, of the 39,292 APs, 36,522 lost farmland, and 36,913 housing. 391 were urban dwellers from the inundated areas. 14,756 APs (40%) opted for “move-back” resettlement. 13,352 APs (36%) opted for “move-out” resettlement. The others opted to choose their relocation sites on their own (Table 3).

Table 3: Resettlement Impacts, by Type of Resettlement

County	Town	RP 1999				Actual				% Increase
		Total Displaced Persons	Move-Back	Move-Out	Self-Determined	Total Displaced Persons	Move-Back	Move-Out	Self-Determined	
Yongding	Fengshi	11,062	4,024	6,380	658	11,800	4,741	6,261	798	6.7
	Xianshi	5,125	3,427	980	718	5,182	2,793	980	1,409	1.1
	Hongshan	7,173	1,833	3,342	1,998	7,173	1,652	3,546	1,975	0.0
	Subtotal	23,360	9,284	10,702	3,374	24,155	9,186	10,787	4,182	3.4
Shanghang	Rentian	9,671	6,886	1,921	864	10,076	4,862	2,387	2,827	4.2
	Xiadu	639	281	0	358	716	200	101	415	12.1
	Zhongdu	697	281	0	416	702	107	77	518	0.7
	Lufeng	810	488	0	322	1,015	239	0	776	25.3
	Lincheng	249	214	0	35	249	162	0	87	0.0
	Subtotal	12,066	8,150	1,921	1,995	12,758	5,570	2,565	4,623	5.7
Total		35,426	17,434	12,623	5,369	36,913	14,756	13,352	8,805	4.2

RP = resettlement plan.

Source: Fujian Mianhuatan Project Case Study, National Research Center for Resettlement.

15. Fifty-six new villages and 1 small town were established and provided with infrastructure and public facilities such as electricity, water supply, drainage system, communications facilities, roads, health and education facilities. About 1.5 million square meters (41.76 square meters per person) of new houses were built with better construction materials, better sanitary conditions, and overall improved quality compared to the previous houses. Lands affected by reservoir inundation included 30,640 mu of farmland, 40,334 mu of forest land, and 1,750 mu of fruit garden. The submerged assets included 1,812,426 square meters of houses, 632,540 economic trees, 469,815 fruit trees, 206 kilometers of roads, 30 bridges, 77 ferry crossing sites, 9 docks, and 26,664 tombs. The 4,220 APs who were expected to be affected before the flood control level was lowered, also received compensation for demolition of their houses. Table 4 presents the key impacts of the reservoir inundation.

Table 4: Impacts of Reservoir Inundation

Item	Unit	Estimated in 2000			Actual			% Increase
		Yong-ding	Shang-hang	Total	Yong-ding	Shang-hang	Total	
Displaced persons requiring relocation	person	23,360	12,066	35,426	24,155	12,758	36,913	4.2
Displaced persons requiring production arrangement	person	22,408	15,738	38,146	23,116	16,176	39,292	3.2
Loss of Fish Ponds	mu	502	198	700	502	198	700	0.0
Loss of Economic Forest	Tree	341,443	52,413	393,856	378,049	254,491	632,540	60.6
Loss of Sporadic Fruit Trees	Tree	256,721	24,587	281,308	374,227	95,588	469,815	67.0
Loss of Farmland	Paddy field and dry land	mu	17,499	10,578	28,077	18,288	10,578	2.8
	Reclaimed wasteland	mu	1,332	591	1,923	1,183	591	7.7

Item	Unit	Estimated in 2000			Actual			% Increase	
		Yong-ding	Shang-hang	Total	Yong-ding	Shang-hang	Total		
	Subtotal	mu	18,831	11,169	30,000	19,471	11,169	2.1	2.1
	Land with trees	mu	31,894	8,095	39,989	32,333	8,001	0.9	0.9
Loss of Forest Land	Bamboo	mu	237	46	283	Included in the compensation of Forest Land			
	Favorable for forest ground	mu	49	140	189	49	140	189	0.0
	Subtotal	mu	32,180	8281	40,461	32382	8141	40523	0.9
Loss of garden plot	Tea	mu	1,482	161	1,643	1589	161	1750	6.5
	Mulberry	mu	704	--	704	--	--	--	--
	Private and collective	m ²	1,015,195	521,237	1,536,432	1,123,002	526,832	1,649,834	7.3
Loss of houses	State owned	m ²	57,332	12,457	69,789	66,593	14,390	80,983	16.0
	Culture, education and sanitation	m ²	44,497	37,112	81,609	44,497	37,112	81,609	0.0
	Subtotal	m ²	1,117,024	570,806	1,687,830	1,234,092	5,783	1,812,426	7.3
Loss of traffic facilities	Roads of different grades	km	59	64	124	119	86	206	66.1
	Bridge	piece	2	17	19	13	17	30	57.9
	Ferry and Dock	piece	32/5	24/2	56/7	53/5	24/4	77/9	--
Loss of tobacco firing house		m ²	10,647	8,400	19,047	18,164	7,758	25,922	36.1
Tomb displacement		piece	13,565	6,874	20,439	19314	7,350	26,664	30.4

km = kilometer, m² = square meter, mu = 1/15th hectare.

Source: Fujian Mianhuan Hydropower Project Case Study, National Research Center for Resettlement.

3. Compensation and Entitlements

16. **Land compensation.** More than two thirds of APs were relocated to nearby agricultural regions. Each AP was provided with agricultural land of about 0.3 mu (or 0.02 hectare), which was consistent with a special directive issued by the Fujian provincial government in 1998. However, this was much less than the 0.9 mu (0.06 hectare) average arable land available to each farmer before the implementation of resettlement activities. In terms of compensation, the APs initially received CNY7,000 (or \$843) per mu as land compensation. But due to the many complaints received from APs regarding this rate, the local government increased the compensation to CNY9,000 (or \$1,084) per mu or nine times the average annual yield of the land (using an average yield of CNY1,000 per mu yearly). The rate did not take into account the farmer's investment in land or other conditions of the land which may influence its value. Furthermore, according to the findings of the the rate did not represent full replacement value since the farmers could have benefited from the land for a period well over nine years had the project not been implemented.

17. In 2002, about 70% of the land compensation was allocated not to Village Committees but directly to the displaced persons themselves as per their desires. This set a precedent in PRC in terms of disbursing the bulk of the land compensation not to Village Committees but to APs. While most displaced persons utilized the land compensation for production purposes, some displaced persons used a portion of the land compensation to purchase non-production commodities such as TVs and motorcycles. When this became known to LMRO, it issued instructions that the remaining compensation would be distributed only for production development activities of APs. Village Committees then signed agreements with the displaced persons to ensure that the land compensation would cover 10 years and be used properly. According to the external monitor, the displaced persons selected proper production developing

projects or other activities. The case study by NRCR found that a portion of land compensation equivalent to about CNY2,000 per mu (totaling CNY28.4 million or \$3.42 million) was yet to be paid to the APs in Shanghang County since the local resettlement offices intended to use the remaining land compensation instead to cover the increased costs of infrastructure, public facilities construction.

18. The survey conducted for the SES case study by Rural Development Institute found that the loss of use of about 200,000 mu (or 13,333 hectares) of forest land had not been compensated for as APs reported that before their resettlement they had access to about 8.1 mu per person (or 0.54 hectare) of forest and hilly land which provided about 10%–25% of their household income. Few of them still had access to the land after project implementation. Compensation, however, was only provided if APs moved more than 50 kilometers away from the reservoir.

19. **House compensation.** Before resettlement, most of the APs lived in hilly areas and were about ten kilometers away from the nearest towns. Their houses generally consisted of wood-earth materials. They were compensated at an average rate of CNY110 (or \$13.25) per square meter. Because the national valuation standards were general and vague, the provinces and the local governments used their discretion in determining the value of houses. Relocated APs were required to build their new houses according to government specifications, which exceeded what many APs could afford based on the compensation they had received. The APs were also required to pay for house foundation sites at an average rate of CNY110 per square meter, almost equivalent to the total compensation they received for their old houses. Many APs built their houses using their savings, and many had to incur debts or used other compensation received for their other assets. In some areas, the resettlement offices or the local government completed the construction of the house foundation sites for APs and then charged the cost (ranging from CNY15,000 to CNY30,000 or roughly \$1,800 to \$3,600) to these APs. Nevertheless, the APs that can pay off their mortgage like debt, will in time build up their own assets, as the value of housing in PRC appreciates over time. The case study for this SES did not find any cases of resettlers that had to sell their houses due to the debts.

20. **Standing crops.** Full compensation for standing crops and trees was provided, but the rates varied from place to place. Even if some of the crops and trees were not submerged in water, these crops would no longer generate income for APs due to their remoteness, and thus they were provided with full compensation for these crops and trees.

21. **Moving and Transitional Costs.** A moving and relocation subsidy was provided to most APs, but each county or district gave a different rate per AP which ranged from CNY100 to 500 (or \$12 to 60) per person. There were cases when the moving/relocation subsidy amounted to CNY2,000 (or \$241) per household. However, the project case study for this SES did not establish whether this subsidy was considered to be enough by the APs.

4. Livelihood/Income Restoration

22. The Project was mindful of the community ties and social resources of the APs of an affected village. Many villages were transferred with all their inhabitants to one new location. Thus, many villages remained intact after the relocation and community ties and resources were preserved. This helped speed up the transition in a new environment.

23. The resettled population enjoyed better living conditions as their resettlement sites were provided with good infrastructure such as power, water supply and drainage systems, schools,

health facilities, and easy access to roads, transportation, and markets as well as non-farm job opportunities. The Project achieved its target in land-based rehabilitation strategy and all displaced APs had been allocated with at least some arable land. A small number of displaced APs have taken up jobs in enterprises located near their resettlement sites.

24. The Project had planned to provide 5,935 rural laborers with new sources of income through the development of village enterprises, services, forestry, fishing and other “extra income” businesses. However, according to case study findings, per the request of most displaced persons, LMRO reassessed the feasibility and risks of this plan and decided to implement a “household-based” program which utilized part of the land compensation fund. The CROs supported this decision. Most of the planned activities covered 85 township and village enterprises, 1,604 fishing cages in 36 sites, 3,903 mu (260.2 hectares) of fishing area in 24 sites and 1,025 sheep in 5 sites. These activities were implemented until the end of 2003, with some villages putting up non-farm investment collectives with the land compensation fund and about 8,000 people (or 37% of the total affected farmers) benefited. Most of the displaced persons found the non-farm related jobs by themselves and used the cash from farmland compensation and their own money as investments.

25. LMRO and CROs also organized several training programs for displaced persons as part of the program for livelihood restoration. The training program included: (i) labor-exporting training organized by LMRO (for APs aged between 18 and 30 years old); (ii) production technology organized by LMRO (for APs aged between 30 to 50 years old who were engaged in livestock breeding, fishery, fruit tree growing, etc); (iii) technology training for production development organized by CROs; and (iv) technology training for agriculture, livestock and fishery breeding organized by the Agriculture and Fishery Department. LMRO also sought the assistance of a major electronics enterprise in Xiamen City which agreed to hire trainees once they have finished the required classes and obtained the necessary certifications. More than 400 young APs now have high-paying jobs at this enterprise.

26. Survey data provided by the two CROs revealed that a major factor in livelihood/income restoration of the APs was the unexpected “extra income-generating activities” and the opportunities to start non-farm businesses. This was particularly so with APs who moved out into suburban areas or in the countryside where they had more access to transportation, markets, and information. Moreover, APs invested part of their land compensation in planting cash-crops, livestock raising, roads and waterway transport businesses, and in small enterprises.

27. The Yongding and Shanghang County Statistics Bureaus conducted a survey⁸ in 2003. The survey indicated that the average annual net income per capita in most villages had been restored to the pre-project income levels (Table 5). The displaced persons’ average income level in Yongding County was CNY2,547 (or \$307) in 2002, nearly equal to the Phase 1 average income level in 1996. The 2002 net income level was, however, CNY882 (or \$106) less than the average income level of the farmers within Yongding County (earning an average of CNY3,429 per capita in 2002). The survey also showed that the displaced persons’ expenditure was higher than the average expenditure level of the Yongding County in 2002. Displaced persons in phase 1 were better off than those in phase 2 and phase 3. Based on the analysis of the County Statistics Bureaus’ survey results, LMRO concluded that about 35% of displaced persons have

⁸ The survey involved 1,968 households or 20% of the displaced persons in Yongding and Shanghang Counties.

exceeded their pre-project income level, 40% have restored or slightly exceeded their pre-project income level, and 25% have still not restored their pre-project income.⁹ The majority of the net income was derived from the displaced persons' wage income¹⁰ (43.1% of total), transfer income¹¹ (33.5% of total), and family business incomes (21.6% of total).

Table 5: Comparison of Incomes of Displaced Persons
(CNY/person/year)

Survey and Date	Phase	Yongding	Shanghang
SIDRI Baseline (Phase 1–3 in Yongding in 1996, phase 2 and 3 in Shanghang in 1999)	Phase 1	2,445	NA
	Phase 2	2,047	2,504
	Phase 3	2,047	2,517
SIDRI survey in April 2002 (income in 2001) ^a	Phase 1	1,618	NA
	Phase 2	1,359	1,458
	Phase 3	958	1,156
County Statistics Bureau in April 2003 ^a (Income in 2002)	Phases 1–3	2,547	2,946

NA = not applicable, SIDRI = Shanghai Investigation Design Research Institute.

^a Incomes have been adjusted using the national inflation ratios for specific years.

Source: Fujian Mianhuatan Hydropower Project Case Study, National Research Center for Resettlement.

28. According to the case study for this SES, the restoration of the APs' incomes to their pre-project income levels may be attributed to the following factors: (i) most move-out villages were near towns which provided better non-farm opportunities and business conditions; (ii) the APs got more financial resources in cash from the distributed land compensation; (iii) the amount of arable land provided for them was less than what they had before the Project, thus freeing up more farm-labor hours to engage in other income-generating activities; (iv) farming income decreased which prompted them to be active in searching for additional sources of livelihood; and (v) LMRO and CROs supported APs who moved from agriculture to the non-farming sector through the provision of training programs; technical know-how; and financial resources.

29. SIDRI also conducted a survey from April 1997 to March 2002 as part of the continuing monitoring and evaluation. Their third evaluation report in April 2002 estimated that the average annual net income of 706 households sampled was CNY1,342 (or \$161.70) per capita proving that most displaced persons had not restored their pre-project income level. These results were in contrast with the findings of the LMRO and CROs.

30. The RP specified that a Post-Relocation Support Fund (PRSF) would be made available to affected villages once the Project started to generate electricity. This was intended for the income restoration of displaced persons. FMHDC contributed to the PRSF since 2001 following the central government's policy. However, the SES case study found that no funds had been disbursed to the affected households as of the first quarter of 2006. In February 2004, MOF approved the increased rate for the PRSF in Mianhuatan Reservoir Resettlement from CNY0.005 per kilowatt-hour (kWh) to CNY0.009/kWh. This is equivalent to CNY300 (or \$36.15) per person per annum. The Project had been contributing about CNY9.0 million (or \$1.08 million

⁹ *Resettlement Implementation Report* by Longyan Municipal Resettlement Office (December 2003).

¹⁰ Wage income is defined as cash income earned by APs from daily work near their homes in the resettlement sites.

¹¹ Transfer income is defined as cash remittance from family members who have permanently gone outside the village to gain employment somewhere else.

equivalent) each year to the Fujian Provincial Resettlement Office (FPRO) since 2001. In line with the annual generation of the Mianhuatan Hydropower Plant after 2004, the Project's contribution to the PRSF would reach CNY12 million (or \$1.44 million) annually. So far, Shanghang County received the first payment from PRSF amounting to CNY600,000 (or about \$72,300 equivalent) in September 2003. LMRO and two CROs have so far received only a small portion of the PRSF from FPRO because no agreement has been reached as to how the funds were to be allocated between them and the guidelines for the use of PRSF were yet to be issued by FPRO.

5. Consultation and Information Disclosure

31. According to the findings of the case study for this SES, the Project followed a highly consultative and participatory process in its planning, design, and implementation. Displaced persons participated in the inventory and census, planning and design, livelihood development programs, as well as in the implementation of resettlement operations in their respective relocation sites. As a prerequisite for effective participation, the project followed an information disclosure strategy that enabled participation of the displaced persons. All media channels¹² had been mobilized to disseminate project information for consultation and participation purposes. A resettlement information booklet was distributed to the affected households and villages prior to relocation containing information on the project, resettlement policies, compensation rates and measures, household inventory, resettlement alternatives and site designs, and grievance channel. During implementation, the methods for use of land compensation, production activities of communities, distribution of house plots and new farmland, the use and management of collective compensation were consulted with the resettled households by staff from CROs and the township governments.

32. Despite these efforts, the survey and rapid assessments made for the SES case study recorded the APs' disappointment with compensation rates. They felt that the compensation rates table had been created unilaterally by the local government without any meaningful participation/contribution by the APs. Moreover, although more than 90% of the APs, received advanced notice of the proposed resettlement through village meetings or other channels, these notices were not negotiable.

6. Grievance Redress and Benefit Monitoring and Reporting

33. The planned grievance redress mechanism was established with assigned staff at county level. The project management office also maintained a continuous presence in the field to facilitate early identification and fast resolution of grievances. About 1,900 grievances were recorded, 50% of which were on fiscal compensation amounts and standards, 20% on housing impacts around the reservoir, 20% on livelihoods in farmlands redistribution, protection and compensations, and the remaining 10% were on enterprises compensation, relocation and rehabilitation. According to the SES case study findings by NRRCR, most complaints were resolved.

7. Gender and Vulnerable Groups

34. Women, children and vulnerable groups accounted for the majority of the displaced

¹² Print, radio, and television.

persons. According to the findings of the Project Completion Report (PCR), women participated in the entire process of project planning and implementation, including the inventory, census, the finalization of resettlement sites, and selection of housing type. About 242 women and 140 men participated in various skills training organized by LMRO for the labor output to enterprises in Xiamen and Shengzhen cities (219 people) and in production development of stockbreeding, fishery, timber forests, fruit trees, etc. (163 people). More women participated in various agriculture technical training activities that were organized by LMRO and CROs. The resettled villages had improved access to education and health facilities, with much improved educational and medical treatment facilities. Displaced persons who moved to the sites near the county centrals enrolled their children in the same primary and middle schools as the host community's children, and at no extra cost.

35. According to the SES case study findings, vulnerable households¹³ received their resettlement entitlements and have all moved into new houses with assistance from the Project and supported by their communities. Particular care was taken for the elderly and widowed people who were relocated in local retirement homes. Poor families¹⁴ who relocated near their original counties shared the social security welfare for poor urban residents and received subsidies from the government. Ninety one households received old age welfare in Shengheng County, 423 in Yongding County, and 227 in Shanghang County.

8. Issues

36. **Post-Relocation Support.** Although the RP had stipulated that post-relocation support should be provided in order to assist APs in regaining their pre-relocation incomes, unexpected issues and problems cropped up during and after implementation. In implementing the RP, higher priority was given to the compensation for lost assets, than the rehabilitation of the APs' earning capabilities. According to the findings of the case study, PRSF funds were not disbursed to the affected households and no funds have been utilized to date. The project case study by NRCR suggested that local governments should reach an agreement on a plan and set implementation procedures to allocate and utilize the PRSF in order to solve the remaining resettlement issues and develop sustainable livelihood programs for the benefit of APs. Moreover, the case study by Rural Development Institute suggested that post-relocation support plans (PSPs) should be considered in the development of initial RPs particularly in "significant level" development projects since planning ahead is the best way of addressing any possible post-relocation risks and issues. This requires not only the involvement of an asset-valuation expert but also someone specializing in post-relocation rehabilitation.

37. **Indebtedness of APs.** Over 90% of the APs incurred debts of more than CNY22,000 (or \$2,650 equivalent) to build their new houses. The construction costs (including mandatory payments to local governments for house foundation plots) easily wiped out the compensation they received for their houses. This posed a burden for APs who lacked financial resources to invest in new livelihood sources or engage in new income-generating means.

38. **Public consultation.** Despite the supposed consultative nature of the Project's implementation, some APs felt this was inadequate. According to the findings of NRCR, APs

¹³ Vulnerable households refer to the elderly, disabled persons, or households with people suffering from chronic diseases, with unskilled labor, or with widowed people and are extremely poor.

¹⁴ Income is lower than CNY120 per month per capita.

expressed disappointment in the compensation rates provided. Thus, it was not surprising that half of the almost 2,000 complaints lodged in grievance committees were on fiscal compensation amounts and standards.

39. **Acceptance of Resettlement Work.** The Yongding and Shanghang County governments organized acceptance inspections in 2003, which resulted in the *Report on the Implementation of the Reservoir Inundation Treatment and Resettlement Program Under the Fujian Mianhuatan Hydropower Project* (December 2003). But the FPRO has not conducted official resettlement acceptance inspections based on the final adjusted budget. Both FMHDC and LMRO advised that the resettlement acceptance inspection was to be carried out by a joint group that comprised experts and government officials from LMRO, FMHDC, SIDRI, the external supervisor, and other agencies concerned. It was found during the PCR Mission that a small part of the roads around the reservoir had not been completed. According to LMRO and FMHDC the final acceptance was yet to be conducted and the final acceptance of resettlement work should be completed as soon as possible.

40. **Monitoring and Evaluation.** No external monitoring on the implementation of the resettlement plan was conducted after April 2002, when the last monitoring report was submitted. Monitoring and evaluation for the sampled households should be undertaken to evaluate the APs' income changes and the effect of post-relocation support activities. The ADB PCR Mission in March 2004 found that living conditions and livelihoods of many people had been restored or improved. However, there was a need for good documentation of resettlement progress and achievements since 2002, when there were concerns about decreased income levels. A subsequent survey by the County Statistics Bureaus corroborated that the situation was better and attributed the registered decrease in income level to faulty methods used by the external monitor. However, the County Statistics Bureaus survey results were also not fully satisfactory since they registered that 25% of the affected people had not restored their incomes to their pre-relocation levels. The project case study suggested that LMRO and FMHDC should: (i) monitor the resettlement results and submit and document these in a report to be submitted to ADB; (ii) identify the households that are still facing difficulties in restoring their incomes; (iii) identify remedial measures, formulate an implementation plan and budget, secure additional funding from FPG, forward the plan to ADB for review, and implement these measures; and (iv) conduct a final external evaluation and submit the report to ADB to verify that all the households have restored their incomes and living standards.

B. LOAN 1544-PRC: ZHEJIANG-SHANXI WATER SUPPLY¹⁵

1. Background

1. The Zhejiang-Shanxi Water Supply Project aimed to meet the water supply requirements of the Wenzhou region¹⁶ in the PRC through 2010. The Project included storage and diversion dams, hydroelectric generation, flood protection, irrigation, and water conveyance works. The Project's short-term objectives were: (i) the provision of up to 1.8 million cubic meters per day of good quality water supply to the three main urban areas in Wenzhou Prefecture; (ii) the provision of an improved flood protection system for 250,000 persons in the lower Feiyun River valley (iii) the provision of irrigation water for 60,000 hectares; and (iv) the construction of a 130-meter high storage dam at Shanxi town with a 200-megawatt hydroelectric generating plant, related diversion tunnels, electrical transformer station, and transmission facilities. In addition, the Project aimed to support improved efficiency and governance of the Shanxi Economic Development Company¹⁷ (SEDC). The estimated project cost was \$518.0 million¹⁸ equivalent, including foreign exchange costs of \$111.5 million. The actual cost was \$437.0 million,¹⁹ or an underrun of \$81.0 million (16%) of the original estimate. The cost underrun is attributable to major savings in procurement of civil works, materials, and equipment, as well as unused contingencies. Zhejiang provincial government as the EA had overall responsibility for the Project.



2. The RP was prepared in September 1995 by Wenzhou Municipal Government (WMG) and the former East China Institute of Reconnaissance Planning, a domestic design institute. The Wenzhou Resettlement Office (WRO), under the leadership of the WMG, was responsible for the implementation of the RP. WRO developed an organizational structure to undertake all resettlement tasks including administration; project planning, implementation, and

¹⁵ The data for this summary are drawn from the project case study conducted for this SES from March to April 2006 by the Rural Development Institute (Beijing-Seattle) (June 2006); (ii) report on Resettlement Implementation for the Zhejiang-Shanxi Water Supply Project for the Project Completion Report by the National Research Center for Resettlement (June 2004); (iii) Summary Report of Shanxi Water Reservoir Project Resettlement prepared by WRO (April 2004); (iv) the Project Completion Report (ADB. 2004. *Project Completion Report on the Zhejiang-Shanxi Water Supply Project in the People's Republic of China*. Manila); (v) report on "Post-Resettlement Planning for Shanxi Multipurpose Dam Project" prepared by WRO (May 2003); and (vi) the Project's Report and Recommendation of the President (ADB. 1997. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Zhejiang-Shanxi Water Supply Project*. Manila).

¹⁶ Wenzhou prefecture is one of 14 special economic zones in PRC and is located in the southeast coast of Zhejiang province.

¹⁷ SEDC, jointly owned by Wenzhou Prefecture and Zhejiang Province is a shareholding company established to formulate, finance, implement, and operate the Project facilities.

¹⁸ ADB approved a \$100.0 million loan on 24 September 1997 to finance 90% of the foreign exchange cost of the Project. The local currency financing was provided through a combination of equity and shareholder advances (in the same ratio as their ownership). Equity contributions of \$158.3 million equivalent were estimated to cover approximately 30% of total project costs. Shareholder advances of \$259.7 million equivalent were estimated to finance approximately 50% of the total project costs (including 10% of foreign exchange costs).

¹⁹ The costs were converted at average exchange rates for the years of disbursement.

supervision; monitoring; finance and accounting. Resettlement offices were established at municipality, county, and township levels. Management rules and procedures were developed covering planning, progress reporting, disbursements, completion inspections, grievances, resettlement supervision, etc.

3. According to the resettlement plan (RP), 37,256 APs from 100 administrative villages would be partially or fully affected by the Project and would need to be relocated. Affected persons (APs) included 32,516 from Shanxi reservoir inundation area, 4,372 in the Zhaoshandu reservoir inundation area, and 368 at the dam sites. Of the APs in the reservoir areas, about 88% (32,355 persons) were land based. Land acquisition for the Project, including the inundated areas behind the two dams, was completed. SEDC had control of all the land required for the Project.

2. Scope of Land Acquisition and Resettlement

4. Under the resettlement strategy, APs were given the choice in selecting their relocation sites from among a number of sites prepared for them. APs were encouraged to relocate to communities in the coastal plain, either going back into agriculture or non-agricultural livelihood means.

5. In general, the Project planned for three types of resettlement:

- (i) *Off-reservoir (or Move-Out) agricultural resettlement*, where APs moved to a new agricultural setting away from their original areas, with a certain amount of arable land provided for them for farming.
- (ii) *Near-reservoir (or Move-Back) agricultural resettlement*, where APs moved to a location near their original areas and above the submergence line. In short, APs were not completely uprooted from their original areas and sources of livelihood, with arable land provided for them.
- (iii) *Off-reservoir discretionary (Self-Determined) resettlement*, where APs were given the choice of relocation sites (not necessarily from the resettlement sites prepared by the local governments) and livelihood. In this case, their residential registrations were often changed from rural to urban and were provided with higher compensation rates and resettlement subsidies since they were essentially on their own immediately after relocation.



Near-reservoir resettlement site, on hilltops

6. Relocation decisions were made after households received help through a participatory program initiated by WRO. According to the report prepared by WRO in 2004, 37,199 APs were relocated as of the completion of resettlement activities in December 2003 (Table 6). The APs moved to 123 resettlement sites in 10 counties or districts within Wenzhou City. About 74% (27,432 APs) were relocated to agricultural sites and 26% (9,767 APs) were resettled to non-agriculture sites. SEDC and WRO reported that most APs opted to resettle in the coastal areas since residents of these areas were more willing to accept the influx of resettlers aside from the fact that these areas have a more vibrant economy. Thus, 31,248 APs (84%) moved to the coastal plain and 5,951 APs (16%) relocated around the Shanxi reservoir. On the other hand, many APs opted not to move out of the basin area and move to areas around the reservoir since the economic activity in these areas had not taken off as expected. The Project also permanently occupied 4,303 mu (286.9 hectares) of land, which included about 709 mu (or 47.3 hectares) of farmland.

7. A national resettlement conference held in 2003 regarded the Project's resettlement implementation as one of the best in PRC, but was not easy to replicate elsewhere. The Project had been helped significantly by the relatively ample financial resources of WMG, one of the first cities in PRC to have had a successful partnership with the private sector.

Table 6: Resettlement Impacts by County

County	Number of Resettlement Sites	Total APs	Land-based	Move-Back	Self-Determined	Others
Lucheng	2	3,140			2,646	494
Longwan	13	5,227	4,301		921	5
Ouhai	13	4,072	3,958			114
Ruian	36	10,637	8,913	1	685	1,038
Pingyang	24	4,145	4,075			70
Cangnan	20	2,514	2,514			
Yongjia	2	286	286			
Yueqing	8	1,227	1,227			
Wencheng	2	2,420		970	474	976
Taishun	3	3,531	844	243	500	1,944
Total	123	37,199	26,118	1,214	5,226	4,641

Source: Summary Report of Shanxi Water Reservoir Project Resettlement (April 2004), Wenzhou Resettlement Office.



Ferries for traversing the reservoir



Tent shelters erected by people fearful of earthquakes

deemed a result of the creation of the reservoir

3. Policy Framework

8. Resettlement was carried out in accordance with the RP and local regulations issued by the State Council under PRC's Land Management Law. These regulations from the former Ministry of Water Resources and Power stipulated relocation and compensation standards for medium and large-scale conservation and hydro-electric power projects. Other applicable state standards that were complied with were those concerning construction and village town planning. Several local policies and regulations were likewise issued to facilitate the resettlement process, the most significant of which were those that made it easier for host community residents to transfer their registration from rural to urban residents. This policy was, in fact, a first for the PRC.

9. The RP was based on the review of the following documents: (i) WMG RP (designed by EIRP with support from the consultants of the project preparatory technical assistance); (ii) the report prepared by the Environment and Resettlement Advisory Board (January 1997); (iii) Social and Economic Survey of Inundation and Host Areas by the Resettlement and Environment Coordination Office (March 1997); and (iv) the report of the ADB-funded staff consultant who supported the Fact-finding Mission in April 1997.

4. Resettlement Budget

10. According to the RP, the resettlement budget was CNY920 million (or \$110.8 million²⁰). The budget was revised in 2001 to CNY1,139.0 million (or \$137.2 million) due to: (i) changes in resettlement policies that increased compensation for replacing homes and relocation costs; (ii) increases in the estimated value of submerged assets such as infrastructure houses in the inundation areas; (iii) increases due to inflation; and (iv) increases caused by design changes. By April 2001, 85.5% of the budget (CNY974.0 million or \$117.3 million) had been disbursed. At completion, the Project incurred savings amounting to CNY80 million (or \$9.6 million) due to the decreased need for farmland for rural affected persons and decreased farmland compensation for residents of the host communities who voluntarily sought urban registration. These savings will be transferred to a PRSF to help relocated households restore their income and livelihoods.

5. Compensation and Entitlements

11. **Land compensation.** The compensation rate for land ranged from CNY10,000 to 12,000 (or \$1,205 to 1,446) per mu of arable land. According to an official notice of the WMG (1996), this rate was largely based on the standards applied in the Jinai-Wenzhou Railway construction project in 1992–1996. The cash compensation was paid to and retained by the village collective.

12. According to the findings of the 2006 project case study, WRO provided a “land-for-land” policy for APs who relocated to a new agricultural area and an “urban-registration-for-land” for APs who relocated to cities. Under the “land-for-land” policy, relocated APs received a comparable amount of arable land at their chosen relocation sites. On the other hand, the “urban-registration-for-land” approach involved changing the residential registration of residents

²⁰ Foreign exchange used \$1 = CNY8.3.

of the host communities from rural to urban and in doing so they returned their contracted farmland to their village collective, making the land available for resettlers. Many APs considered this approach as a “fair deal” since this meant enjoying the rights and benefits that were normally not available in the rural areas such as access to better schools, access to employment opportunities in cities, and social security benefits.

13. **House compensation.** According to the findings of the 2006 case study, the WRO issued the following compensation standards for housing structures in 1996 (Table 7). The results of the fieldwork done for the case study showed that the standard was implemented in most cases:

Table 7: Compensation Rates for Houses

Building material	Compensation rate (CNY/m²)
Brick-concrete	245
Brick-wood	185
Wood	160
Wood-earth	145
Domestic-animal farm, bathroom, or miscellaneous shops	35

CNY = Chinese Yuan, m² = square meters.

Source: Findings of the Zhejiang-Shanxi Water Supply Project Case Study, 2006.

14. According to the Summary Report of Shanxi Water Reservoir Project, the WRO adjusted compensation rates (based on file No. 36 [1996]) as follows: (i) compensation for self-determined resettlers increased from CNY3,000 to CNY5,000 (or \$361 to \$602) which included a resettlement subsidy and production rehabilitation subsidy; (ii) additional resettlement subsidy of CNY3,000 (or \$361) for “self-determined” resettlers; (iii) resettlement subsidy of CNY1,500 (or \$181) in addition to housing construction subsidy of CNY4,000 (or \$482) and village endowment insurance subsidy of CNY1,000 (or \$120) per person for APs voluntarily relocating to the local village; (iv) house construction subsidy of CNY3,000 (or \$361) for APs relocating in the resettlement sites; and (v) resettlement of “five guarantee families²¹” in apartment complexes for the elderly.

15. The Project provided public infrastructure including roads, water supply, drainage, electricity, and communications in the resettlement sites. Access to health and education facilities were also provided to relocated APs. Their original homes were primarily wood-frame construction, but their new houses were made of concrete and brick and most have two to four floors. These new homes were comparable to homes in the host communities. House size in the resettlement villages averaged 57 square meters per capita in 2003 and varied from 43 to 82 square meters per capita (Table 8). The house size of affected persons only averaged 36 square meters per capita prior to resettlement. Housing conditions and the physical environment of the relocated APs have improved significantly as a result of the Project.

Table 8: House Plot Sizes at Resettlement Villages, per capita

County	Resettled Population	House Plots, per capita (m²)
Lucheng	3,140	72.5

²¹ “Five guarantee families” are extremely poor and are therefore assured to be provided with food, housing, clothing, medical treatment, and burial expenses by the government.

Longwan	5,227	47.4
Ouhai	4,072	81.6
Ruian	10,637	55.2
Pingyang	4,145	60.2
Cangnan	2,514	50.2
Yongjia	286	42.6
Yueqing	1,227	35.7
Wencheng	2,420	44.4
Taishun	3,531	49.7
Total	37,199	56.7

m² = square meters.

Source: Summary Report of Shanxi Water Reservoir Project Resettlement (April 2004), Wenzhou Resettlement Office.

16. **Standing crops.** Inundated standing crops were compensated based on the standards set by the WRO (Table 9). According the results of the survey done for the 2006 project case study, APs found the compensation rates for inundated standing crops to be fair and reasonable. However, APs felt that trees and crops which were not included in the inundated area but were nevertheless deemed as inaccessible after the Projects implementation should have also been compensated.

Table 9: Compensation Rates for Standing Crops

Crop Type	Rate (CNY/mu)
Tea garden, orchard, mulberry field	2,100
Pine tree	480–780 (based on age)
Metasequoia	1,080–1500 (based on age)
Tea-oil camellia	450
Tung tree	880
Chinese chestnut tree	2,050
Bamboo	800–1,000

Source: Findings of the Zhejiang-Shanxi Water Supply Project Case Study, 2006.

17. **Moving and relocation subsidy.** A moving and relocation subsidy was provided to APs which was formulated and implemented by WRO (Table 10). The 2006 case study confirmed that APs found this standard to be satisfactory.

Table 10: Compensation Rates for Moving and Relocation

Item	Rate (CNY/person)
Transportation subsidy.	80–150
Meal cost during moving	37–55
Medical cost during moving	14
Transportation of goods/household items	20
Transportation damages to goods/household items	50
Lost labor time due to moving	70–100
Transitional rent subsidy	150

Source: Findings of the Zhejiang-Shanxi Water Supply Project Case Study, 2006.



Inundation of agricultural lands in the valleys



Large scale inundation

6. Livelihood/Income Restoration

18. According to WRO, livelihood restoration is going very well, due in part to a booming economy and because of a number of initiatives undertaken to help APs. Resettled households received support needed to help them restore their livelihood and achieve a standard of living comparable to residents of their host communities. A number of rehabilitation projects were also initiated by WRO including: (i) helping farmer APs establish farms; (ii) organizing donation campaigns for the extremely poor; (iv) social stability activities, focusing on crime prevention; (v) land redistribution activities and issuance of land certificates; (vi) grievance redress; (vii) assistance with factory registrations, (viii) loan assistance²² through rural credit unions have been established; (ix) assistance in establishing agricultural economy centers for fruits and vegetables as well as six fishery or livestock farms; (x) conducting trainings²³ on improved agricultural production skills; and (xi) infrastructure improvement which included construction of roads, schools, and water systems. For land-based resettlers, training was provided in the production of lowland paddy rice, specialty crops and breeding livestock, and in non-agricultural job skills such as factory work and hairdressing. Local manufacturing enterprises were given tax relief in return for providing on-the-job training to resettlers. All resettlers participated in training sessions on resettlement laws and their legal rights, and they were introduced to the customs and habits of residents in their host villages. About 3,400 farmers obtained employment in enterprises and in the services sector.

19. About 15.6% of APs were regarded as poor with annual incomes below CNY1,200 (or \$145) per person. Government assistance amounting to CNY500 (or \$60) per year is usually provided for the poor to subsidize their farming needs (e.g., to purchase seeds, etc). Additional assistance was also provided to 377 destitute APs amounting to CNY1,200 (or \$145) per year and 4,600 APs received medical insurance benefits.

20. According to the findings of a survey²⁴ conducted by the WRO, the structure of incomes of APs and expenditures of APs changed since less income was obtained from agriculture and more from employment and rental of space in their new homes. The average annual income per capita in 38 resettlement villages was CNY4,851 (or \$585) in 2003 or 1.73 times higher than

²² According to the findings of the 2006 project case study, loan applications amounting to over CNY122.0 million (or \$14.0 million) have been approved benefiting 1,949 APs. These loans were used to invest in factories or small businesses or spent on improving farming production.

²³ APs who successfully completed the classes were reimbursed for their tuition and other costs.

²⁴ WRO conducted a survey in December 2003 among 267 families (with 13,739 family members) in 38 out of 123 resettlement sites.

their 1996 income of CNY1,775 (or \$214). Table 11 shows the disparity of incomes among the APs in the counties where they chose to resettle. The APs who chose to resettle in Lucheng, Longwan, Ou hai, and Ruian had higher incomes than the APs who chose to resettle in the other areas because these counties had thriving economies and provided better opportunities for non-agricultural employment. Moreover, the APs who shifted to non-agricultural livelihoods and who live closer to urban areas tend to have higher incomes. According to WRO, the average income of APs in 2005 was CNY4,456 (or \$534) per person and about CNY6,600 (or \$795) per person for the farming population. The proportion of household expenditures on food staples had fallen while expenditures on such things as better quality food, medicine, education and entertainment have increased.

Table 11: Average Annual Per Capita Income in 38 Resettlement Villages

County	Sample family	Net income per capita (CNY)
Lucheng	12	8,267
Longwan	30	5,432
Ouhai	29	4,050
Yueqing	21	2,693
Ruian	75	5,713
Cangnan	38	3,539
Pingyang	40	4,962
Yongjia	6	3,826
Wencheng	8	2,160
Taishun	8	2518
Total	267	4,851

CNY = Chinese Yuan.

Source: General Report of Shanxi Water Reservoir Project Resettlement, Wenzhou Resettlement Office.

21. According to the PCR, the resettlement of APs was successful since 89% of the APs have restored and improved their income. However, 11% of affected households have yet to restore their 1996 income level. WMG and WRO are aware of their situation and have, in fact, taken measures since 2002 to help these APs. A 10-year PSP for the Project was prepared by WRO and East China Institute of Reconnaissance Planning in December 2002. The scope of the PSP included all resettlers as well as non-resettlers who were adversely affected by the Project. The PSP aimed to help resettlers achieve living standards that match those of the host villages and obtain access to the same development opportunities that the residents in the host villages have. The PSP also aimed to provide support to improve public infrastructure, improve employment opportunities of non-agricultural resettlers, and undertake economic development planning in the reservoir area. A PRSF was established and included the following components: (i) the Reservoir Area Construction Fund²⁵ and Maintenance Fund;²⁶ (ii) Resettlement Support Fund;²⁷ (iii) Resettlement Derived Costs and Balance of Contracted Resettlement Cost; (iv) Benefits from Post-Relocation Support Projects; and (v) Inputs of Local Governments and Related Agencies. The PRSF consisted of contributions from the hydropower plant and

²⁵ This consists of CNY10.0 million each year and should receive contributions from SEDC operations amounting CNY0.01 per kWh of electricity sold and CNY0.01 per cubic meter of annual water supply sold.

²⁶ This amounted to CNY0.001 per kWh of electricity sold and about CNY 1.0 million each year.

²⁷ The Resettlement Support Fund was taken from the land compensation at the rate of CNY3,000 per capita. The main part of this fund will be used to develop resettlers' production capabilities in the course of post-resettlement support. But WRO had not received any post-relocation support funds or maintenance funds from SEDC since the operation of the power plant and water supply.

contributions from the WMG's general budget and resettlement budget. Currently, the total PSP fund requirement is CNY403.0 million.

22. During the dam construction period, a total of CNY10.0 million from the contingency of resettlement budget of the PRSF was used to support the resettlers' income restoration activities. However, according to the WRO, it has yet to receive any amount from the PRSF since the operation of the hydropower plant and water supply facility.

7. Consultation and Information Disclosure

23. WRO initiated a highly consultative and participatory process in the planning, design, and implementation of the Project. All APs received full information on the implementation plans of the Project and on the resettlement policies, compensation measures, resettlement options, grievance procedures, and the resettlers' legal rights. Resettler representative committees were established in every administrative village, 6 to 12 months prior to relocation. Local governments often consulted these groups regarding the RP and they were also involved in planning and implementation. Senior officials of WMG were also directly involved in discussions with representative committees.

8. Grievance Redress and Benefit Monitoring and Evaluation

24. A grievance redress mechanism was established at every level of government. Processing procedures and deadlines for complaints were also set and disseminated to APs. Officials were also assigned to grievance desks in resettlement offices. Over 2,500 complaints were received concerning land areas, infrastructure services, and eligibility for resettlement.

25. SEDC was tasked to carry out benefit monitoring to ensure that the works and facilities provided under the Project were controlled, operated, and managed efficiently to maximize the project benefits using a benefit and performance monitoring and evaluation system developed by SEDC following ADB's *Guidelines for Benefit Monitoring and Evaluation*. The monitoring system covers the municipal, county and township offices and addresses financial management, implementation progress, disbursements, construction, etc.

9. Issues with Resettlement

26. The project case studies noted several issues about the implementation of resettlement activities that need to be addressed.

27. **Diminished incomes.** According to the findings of the 2006 project case study, one of the biggest concerns of 11% of APs is their diminished income-earning abilities, which they attributed to: (i) smaller and inferior-grade land that they received after relocation; (ii) little or no access to forest land, hills/mountains and other common areas that used to provide them with additional income or food sources; and (iii) their inability to secure employment in towns or cities because they were underqualified in terms of skills or technical know-how compared with their counterparts in the cities.

28. **Post-relocation support.** Funding the PSP posed some problems given WMG's bold plans to support and improve the lives of APs over a ten-year period. Since bulk of the PRSF comes from SEDC, the company needs to contribute immediately to the fund. If SEDC revenues are inadequate, the funding responsibility should be transferred to WMG. The PSP should be

revised in consultation with the APs to incorporate the additional households that have not achieved their previous income levels.

29. **Indebtedness of APs.** Housing conditions of APs have improved significantly after the Project. However, such improvement came at a cost to APs since their compensation was not enough to cover construction expenses and other mandatory payments to the local government. On average, APs incurred about CNY20,000 (or \$2,410) in debt just to build a new house. This had often caused them considerable distress, thus they are constantly under pressure to find additional sources of income just to make ends meet.

10. Field Visit to Resettlement Villages

30. An Operations Evaluation Mission (OEM) was organized in early 2006 for this SES to assess the application of the social safeguard policy in the Project. Following are the findings of the OEM field visits in four resettlement villages.

a. Fanguan Village (Coastal Area)

31. Forty-nine households from one village in the mountain areas moved to Fanguan village in the coastal area and were allowed to jointly build a set of 4 apartment-like buildings in a small housing colony. Although all houses were built individually, they were designed according to design specified by the project. On the ground floor, most houses have a workshop area and or installed an electric carpet weaving loom purchased with assistance of the Project.²⁸ There was also a small plastic bags factory that provided resettlers with employment while their houses were being built and while their individual loans were being processed. The owner of the factory, who was not a resettler, was given a long term loan, in exchange for providing work to resettlers (120 in the beginning, but still 60 at the time of the field visit). The project built road access and provided water and power. At the other side of the village, a small pot plant producing farm was run by two farmer resettlers, who had rented the land of the 60 or so households each endowed by the project with 1 mu. They also received an interest-free loan from the Project.

32. The resettlers generally regarded their lives as more convenient after resettlement. One lady who operated a small brick factory in the hills, had set up another factory in the coastal area and earned around CNY90,000 (or \$10,843) now compared to her initial earnings of only CNY20,000 (or \$2,409). Six families had moved out to do business elsewhere since their resettlement but had left their parents behind.

33. The resettlers were regarded as fairly well integrated in the host village, a fact demonstrated by smooth relations and several intermarriages. Remaining problems were related to some of the resettlers having insufficient education or training to engage in business activities and set up companies. It was difficult for them to borrow from banks or even relatives. However, the Project to some extent, subsidized micro loans²⁹ for the resettlers. In the county, 17% of the resettlers had obtained micro loans, although 70% of the resettlers had initially applied for this.

²⁸ The Project gave the households short term loans of between CNY10,000 and CNY100,000 (or \$1,205 and \$12,048), without interest.

²⁹ Micro loans had a 3% interest rate instead of the usual 6.5% interest rate for commercial loans.



New apartment buildings
in a Fanguan village



Carpet loom on
ground floor



Plastic bag making factory

b. Longhua Village (Coastal Area)

34. Longhua Village was the largest community in the coastal areas to host displaced persons. The village hosted over 2,000 resettlers from three upland communities. For two of the three communities, 800 mu of land (54 ha) or 0.4 mu per person were bought from people who availed of urban residential registration. The town-based resettlers did not get land but got more cash compensation and thus could buy or build bigger apartments.

35. The OEM found that the resettlers were generally satisfied with their conditions in their new village. The cost of the houses that they were allowed to build with their compensation had gone up dramatically from CNY100,000 to CNY800,000 (or \$12,048 to \$96,386). The average size of an apartment was around 70 square meters for a family of three persons. If the family consisted of more than three members, it was provided with two apartments.³⁰ In 2005, a vegetable market building was constructed with assistance from the Project and some private donors. The WRO also launched the 'One Helps One' campaign to entice resettlers who are economically better off to support poorer resettlers. Another campaign focused on enterprises to help resettlers find employment. The local government also provided assistance to the more vulnerable members³¹ of the community particularly elderly people without children to support them—whether resettlers or not (see front page picture).

36. WRO did not provide an estimate of the total compensation cost per resettler, as so many resettlers had chosen their own arrangements and land donations and exchanges were made which could not be quantified.

37. One issue that was yet to be resolved was that of the forest land rights of the resettled people. Another issue concerned the large influx of migrant workers from Jianxi province. The village itself had received 2,000 migrants who rented apartments from resettlers who moved elsewhere.

³⁰ Often the ground floor with shop or workshop space was rented out, or in the case of families with two apartments, one of the two apartments.

³¹ These were supported by an allowance of around CNY280 (or \$34) per month and medical insurance.



Extra storeys on top of apartment building



Vegetable market built with support from private sector

c. Fouqiang Town (on the side of the dam reservoir)

38. A total of 335 families (with 447 APs) resettled in Fouqiang from the hillsides and the Project provided 122 houses for them costing around CNY3.5 million (or \$421,687). The local government provided CNY2.8 million (or \$337,349) for land and public services. The apartments were built by the resettlers themselves based on designs provided by the Project. At present the resettled population had grown to 565 persons.

39. The OEM found that the resettlers felt they were rushed into deciding about resettlement. The underlying reason by the local government was that since Fouqiang was prospering, it would prosper even more from electricity generation and the development of tourism. However, this did not take place and industrial development lagged behind thus, the resettlers encountered difficulty in finding employment from local industries and businesses.

40. The resettlement subsidy in the early years was only about CNY800 (or about \$96) per capita. Compensation for housing was also not sufficient so that many had to invest their own savings or had to borrow money to build a house. Several families even had to sell their houses so they could repay the loans. Eighty families left the town to work elsewhere and 20 families left to establish businesses outside of Fouqiang. Nineteen families got access to the benefits of the “five guarantee families” due to their classification as “extremely poor”. Most of the farmers at the time did not get opportunities to work as laborers during the construction of the dam. They were also not allowed to fish in the lake for reasons that were not explained to them. Microcredit was also not available. A perceived benefit at the time was the provision of an urban registration for farmers. However this seemed to have lost its appeal since APs thought this only provided few advantages and not a guarantee for securing employment.³²

41. WRO organized training programs for APs but only a few showed up and the success after the training was limited. Much was expected of the recent Central Government policy to pay more attention to the welfare of the rural people, which may mean the expansion of a social safety net for the rural areas.

³² Newborn babies in the resettler community cannot automatically get an urban registration but have to wait for the death of a relative with such a registration.

42. Resettlers are currently facing the following concerns: (i) the lack of employment opportunities in the town; (ii) poverty experienced by the elderly;³³ and (iii) a shortage of electricity load (over CNY500,000 or \$60,241 is needed to improve the service).



Lack of available employment in the shops below the apartments in Fouqiang town

d. Pai Zhang Town (on the side of the dam reservoir)

43. Pai Zhang town had been rebuilt in part on the top of the hill, about 100 meters above the dam's water line. Before the resettlement operations in 1996, the population was 15,700, but only 1,010 people remained after the final resettlement activities in April 2004. In the past 3 years, the town concentrated on building infrastructure, such as roads and a new town hall.

44. Overall, many people who opted to resettle on the slopes have regretted not to have moved to the coastal areas when the resettlement offer was made because there was very little economic activity in the area. Before resettlement activities began, the average land use was 2 mu per capita compared to the present 0.5 mu per capita. The forest area however did not change.

45. Compensation for land and a resettlement subsidy amounting to CNY8,420 (or \$1,014) was offered per farmer and additional compensation was also provided to APs whose houses have been inundated. However, the cost of building a four-storey townhouse at the time was CNY40,000 (or \$4,819), but on average every family would have to shell out CNY20,000 (or \$2,410) to buy the house. Thus, each family still needed about CNY12,000 (\$1,445) for a house provided they use up the whole compensation amount given them. Sometimes, if the allotment was two houses, the second house (at CNY20,000) would have to be sold in order to pay off the cost of the first house. This situation often led APs to be under considerable debt. But in spite of all these, the OEM found that most people were better off after resettlement compared to their pre-resettlement economic situations.

46. The OEM also found the following concerns: (i) about 140,000 mu of forest area have been "unmanaged" since farmers have been resettled elsewhere; and (ii) the safety of the APs in the resettlement site since earthquakes have often occurred in these areas.

³³ Women aged 40 and above and men aged 50 and above were deemed as "unemployable" in the new economy. Some 150 people aged between 50 and 60 years had no job and no land. However, some found employment that offered average incomes of less than CNY2,000/year (or \$241/year).



Zhejiang Shanxi dam reservoir



Resettler village on top of hill



Back view of resettler houses

Nice façade, and the reality inside



The Outside



The first floor



The third floor



The fourth floor

C. LOAN 1626-PRC: GUIZHOU-SHUIBAI RAILWAY³⁴

1. Background

47. Guizhou-Shuibai Railway Project involved the construction of a 118.5-kilometer railway line between Liupanshui and Baiguo in western Guizhou, a poor mountainous province in the southwest of the PRC. The three counties³⁵ through which the railway line passed were designated as national poverty counties. The Project was designed primarily to increase coal and other mineral and industrial output and provide a more reliable and economic mode of transport for coal to energy-deficient areas in Guizhou and neighboring provinces. Furthermore, the Project was intended to facilitate the establishment of related industries, and thus create employment and income-generating opportunities that would help reduce poverty in the project area. The Guizhou Shuibai Railway Corporation (GSRC) was the project's executing agency (EA). The Project was estimated to cost \$381.0 million.³⁶ However, upon Project completion in 2002, the total Project cost increased to \$392.6 million.³⁷ due to: (i) design changes during construction; (ii) increased bid prices for civil works; (iii) increased land acquisition and resettlement costs; (iv) increased cost of interest during construction; and (v) increased costs of administrative, consulting services, and miscellaneous expenses. The project's main civil works began in January 1998 and all construction work was completed in December 2002. Commercial operations of the railway started in March 2004.



48. As part of preparations for the Project, a socioeconomic sample survey was carried out to collect additional data and to assess the likely impact of the Project on the residents of the area along the 118.5-kilometer railway connecting Liupanshui and Baiguo. In October 1997, an RP was prepared by the consultants working under a project preparatory technical assistance for the affected residents of Zhongshan District,

³⁴ The data for this summary are drawn from the project case study conducted for this SES from March to April 2006 by the National Research Center for Resettlement (NRCR), Hohai University, Nanjing, PRC. Complementary data is drawn from: (i) Aide Memoire for the Operations Evaluation Mission conducted for this SES in March 2006; (ii) the Project's Report and Recommendation of the President (ADB. 1998. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Guizhou-Shuibai Railway Project*. Manila); and (iii) the Project Completion Report (ADB. 2005. *Project Completion Report on the Guizhou-Shuibai Railway Project in the People's Republic of China*. Manila). See also: ADB. 2007. *Project Performance Evaluation Report on the Guizhou-Shuibai Railway Project in the People's Republic of China*. Manila.

³⁵ The project railway line from Liupanshui-Shuicheng to Baiguo passes through Zhongshan and Panxian districts and Shuicheng County of Liupanshui Prefecture in western Guizhou. The Project involved the construction of a new standard-gauge single-track electrified railway line between Liupanshui and Baiguo, which links up with the Guiyang-to-Kunming and Nanning-to-Kunming railway lines and the recently completed Neijiang-to-Kunming railway line. These combined lines provide a shortcut for transporting export goods from Sichuan, Guizhou, and other provinces in northwest China to the nearest seaports.

³⁶ ADB approved a loan of \$140.0 million on 18 August 1998 to finance 82.3% of the estimated foreign exchange expenditures and 36.7% of the total project cost. The remaining 17.7% in foreign exchange requirements and \$138.6 million in local currency requirement were borne by the EA. A loan from the State Development Bank of PRC (SDB) made up the \$72.3 million balance.

³⁷ Of the amount financed by ADB, only \$105.0 million was used or 26.7% of total project cost. GSRC financed \$154.4 million and SDB provided a \$72.6 million loan for the local currency requirement. The ADB loan was underutilized because tender prices for international bidding of civil works contracts were lower than expected.

Shuicheng County, and Panxian County of Liupanshui Municipality.

49. The resettlement implementation was carried out in a “principal-agent” mode. The EA assigned staff to take charge of the land acquisition and resettlement. The Liupanshui Municipality and the three affected local governments set up resettlement offices (supporting the railway offices) to coordinate resettlement in the townships, while similar offices in the 14 affected townships coordinated resettlement at the village and household level. There was at least one woman member in every township resettlement coordinating team. Women’s federations at provincial, prefecture, county, and township levels were also involved in implementing the resettlement plan (RP). The civil construction contractors assigned staff to process matters related to land acquisition and resettlement. GSRC engaged an independent resettlement monitoring agency, the Guizhou Academy of Social Sciences (GASS), to conduct external monitoring of resettlement activities.

2. Scope of Land Acquisition and Resettlement

50. Land acquisition and resettlement were implemented in accordance with the following:

- (i) The Land Administration Law of PRC (passed by the 16th session of the 6th National Congress in June 1986, and revised by the 5th session of the 7th National Congress in December 1988);
- (ii) The Guizhou Provincial Implementation Regulations of the Law of Land Administration of PRC; and
- (iii) The notification (No. 75 of 1997) of land acquisition and house relocation for the construction of the Guizhou Shuibai Railway (issued by the Liupanshui municipal government).
- (iv) ADB’s Involuntary Resettlement (IR) Policy (1995)

51. At appraisal, it was estimated that about 434.47 hectares of land would be permanently acquired for the railway construction and about 124.13 hectares of land would be temporarily occupied. This would have an impact on 997 people in 265 households who were foreseen to lose part of their productive land. At completion, GSRC reported that a total of 539.75 hectares (3.4% less than estimated) of land had been permanently acquired or borrowed temporarily. GSRC also reported that more people were affected than had been anticipated as 29,653 people in 7,925 households³⁸ were affected by land acquisition (i.e. 1,102.5% more than estimated). Changes in the alignment of the railway during the detailed design stage (after project approval) apparently caused these large increases which also led to a doubling of compensation and resettlement requirements.

52. Affected persons (APs) could be divided into two categories according to ownership type: (i) family dwellings and (ii) buildings owned by factories or public institutions. According to the RP, 37,774 square meters of houses and buildings were to be removed along the length of the railway line. The RP estimated that about 1,469 people in 350 households were to be

³⁸ The estimates of affected households (615) and persons (2,466) in the RP were arrived at by dividing the farmland area to be acquired for the railway by the average farmland per capita. This meant that the equivalent of 2,466 persons (including dependents) would lose their farm livelihood (total loss of land was assumed for each person). In reality, for many people, railway projects affect only a small portion of their land as the railway crosses a village (typically 10% loss on average). The Ministry of Railways reported that 7,925 households lost some land and therefore received compensation.

affected by house demolition. At completion, demolished dwellings totaled 98,042 square meters (160% higher than the RP estimate), affecting 4,364 APs in 1,073 households (74% higher).

53. Demolished public and business structures totaled 10,102 square meters whereas none had been anticipated in the RP. The enterprises and public institutions affected by the Project were mainly village schools, small clinics, and small enterprises. Table 12 compares estimated and actual resettlement impacts.

Table 12: Comparison of Resettlement Impacts

Resettlement Impacts	RP (1997)	Actual (2001)	% Change
Land acquisition (ha)			
- Permanent	434.47	539.75	3
- Temporary	124.13		
House Demolition (m²)			
- Residential		98,042	160
- Factories	37,774	10,102	
People Affected			
- By Land Acquisition			
(i) Households	265	7,925	1,188
(ii) Persons	997	29,653	1,102
- By Housing Demolition			
(i) Households	350	1,073	74
(ii) Person	1,469	4,364	77

ha = hectares, m² = square meters.

Source: Guizhou-Shuibai Railway Project Case Study, National Research Center for Resettlement (2006).

3. Budget and Implementation Schedule

54. The actual total cost of land acquisition, house relocation, and affected power and telecommunication facilities was CNY71.6 million (equivalent to \$8.6 million³⁹), 95% higher than the CNY36.7 million (\$4.4 million) estimated in the RP because of increased dwelling/building relocation and the higher costs of affected infrastructure. The total cost comprised CNY33.4 million (or \$4.03 million equivalent) for land, CNY25.9 million (or \$3.1 million) for houses and auxiliary structures, and CNY12.3 million (or \$1.48 million) in other costs (Table 13). The EA allocated resettlement funds to Liupanshui Municipality, which paid out the funds to affected village groups and households through the counties and townships.

Table 13: Resettlement Budget Estimates and Actual Payments
(CNY million)

Item	RP (1997)	Actual (2001)	% Change
Permanent land acquisition and temporary land occupation	30.7	33.4	8.8
Houses and auxiliary structures	5.1	25.9	407.8
Others	0.9	12.3	1,266.7
Total	36.7	71.6	95.1

Sources: Guizhou Shuibai Railway Corporation and Guizhou Academy of Social Sciences.

³⁹ Exchange rate used: CNY8.3=\$1.0.

55. The measurement of land, buildings, and facilities to be acquired began in August 1997. Actual land acquisition and resettlement began in January 1998, 6 months earlier than assumed at appraisal, and were completed by March 2001, almost two years earlier than envisaged (December 2002).

4. Compensation and Entitlements

56. **Compensation for Land Loss.** According to the RP, replacement land for cultivation was to be provided to APs by the concerned county local government by: (i) redistribution of the existing land in the village, and/or (ii) development and preparation of new land for cultivation. A minimum amount of arable land (0.4 mu or 0.026 hectare) per person was to be provided by the local government. If the village arable land was not enough, the APs were entitled to jobs in the township and village enterprises. Necessary training to facilitate vocational changeover was to be provided using the resettlement funds from local governments. House plots were to be allocated to APs or improved houses were to be built by the county prior to the demolition of existing houses with APs able to salvage building materials. Cash compensation, assistance from the local government in the purchase of building materials, and local transportation were to be provided to APs who decide to build houses on their own. Persons affected by the temporary land use were to receive compensation annually at the rate equal to the average output value (AOV) of the land over the past three years. GSRC was responsible for restoring the borrowed land to its original condition before returning it to their owners.

57. The RP had specified different compensation standards for various categories of affected land based on the AOV of the acquired land averaged over the three years prior to acquisition: (i) cultivated land with high economic benefits (e.g., rice fields and vegetable plots): 4-6 times AOV; (ii) dry lands, garden plots, and other land with economic forest: 3-5 times AOV; and (iii) other land with benefits: 2-3 times AOV.

58. On the basis of total land acquired and the compensation paid, the actual land compensation rates were higher than the average rates stipulated in the RP. During implementation, the compensation rate for land acquisition was uniformly set at CNY 60,000 (or \$7,229) per hectare for both permanent and temporary acquisition (Table 14). Depending on the type and quality of land, the rate was readjusted by the township governments to CNY54,000-63,000 (or \$6,506-7,590) per hectare. After negotiations between the EA and the Liupanshui Office, the land acquisition rate in Zhingshan district and Baiguo township in Panxian county was increased to CNY90,000 (or \$10,843) per hectare because a large proportion of the land required/rented in both areas was irrigated land or house plots and APs demanded a higher compensation rate for these. However, with the 7% deduction in management fees for the railway construction supporting organizations at all levels, the actual compensation rate was CNY83,000 (or \$10,000) for Zhongshan District and the rest of Panxian county, and CNY46,500 (or \$5,602) per hectare for Shuicheng county.

59. The resettlement activities related to land acquisition were implemented at village and village group level. Cash compensation was provided to APs and no land redistribution or readjustment was carried out within villages. New housing plots⁴⁰ were provided to APs free of charge by the villages or village groups. Although a large number of affected households were

⁴⁰ New house plot entitlements include 150 square meters per household for families with less than five members and 170 square meters per household for families with more than five members.

in rural areas, the acquisition of farmland was not significant. The compensation per mu⁴¹ was set between CNY6,000 and CNY3,100 (or \$723 and \$373).

Table 14: Comparison of Compensation Standards

Item	Unit	Compensation (CNY)	
		RP	Actual
Land acquisition			
- Irrigated land	ha	218,897	
- House plot	ha	302,344	
- Dry land	ha	52,008	
- Forest land	ha	54,422	60,000~90,000
- Orchard land	ha	181,407	
- Waste land	ha	42,828	
Temporary land occupation	ha per year	9,070	
Housing demolition			
- Concrete and brick structure	m ²	415	140~210
- Brick and timber structure	m ²		105~145
- Timber and tile structures	m ²	170	60~140

CNY = Chinese Yuan, ha = hectare, m² = square meters,.

Source: Guizhou-Shuibai Railway Project Case Study, National Research Center for Resettlement (2006).

60. **Compensation for Demolished Structures.** According to the RP, compensation was to be paid for loss of structures (houses and business/commercial premises) along the railway line that belonged to APs, including sheds, wells, walls, graves and tombs, and any other assets that were not removable. Compensation was to be at replacement cost (including labor costs) in the form of cash or in kind or both.

61. The RP also stipulated that the compensation standard for brick-concrete was CNY415 (or \$50) per square meter and compensation for brick-timber houses was CNY170 (or \$21) per square meter. The actual house compensation rates were much lower at CNY140–210 (or \$17–25) per square meter for brick and concrete structures, CNY104–145 (or \$13–17) per square meter for a brick and timber structures, and CNY60–140 (or \$7–17) per square meter for timber and tile structures (Table 3).

62. According the data from Liupanshui Railway Construction Support Office, 60% of the demolished houses were wooden-brick structures, 15% were brick-concrete structures, 10% were earth-wooden structures and the rest were of other types. Of the rebuilt houses, 71% were brick-concrete structures while others were brick-tiles houses. The new houses were generally bigger and better in style and quality than the old houses, resulting in an improvement in the living conditions of those who were relocated. The per capita floor space of the new houses was 27.9 square meters. The villagers preferred to build larger and better houses by using part of their savings or borrowing from relatives and friends to supplement the housing compensation funds they received.

63. Compensation for those affected by the demolition of buildings and factories included a compensation fee, additional compensation for affected structures and attachments, moving costs, replacement land costs, and compensation for other losses. This was paid directly to the

⁴¹ 1 mu = 1/15 hectare.

affected factories/institutions. For instance, the compensation provided for public institutions such as schools had helped finance the construction of new school buildings.

64. **Damaged Trees and Crops.** The RP stipulated that APs were to be compensated for crop losses on the acquired land. Compensation rates were set to reflect current values of the crops. All damaged economic and medicinal trees were also entitled for compensation set at their current values. During implementation, the compensation rate was uniformly set at CNY 60,000 (or \$7,229) per hectare of orchard or forest land (Table 49).

65. **Graves and Tombs.** About 2 mu (0.13 hectare) of cemetery land were to be acquired for the right of way which involved the relocation of tombs. According to the RP, the compensation rate was at CNY220 (\$27) per tomb, inclusive of removal and reburial.

66. **Other Assistance.** According to the RP, a resettlement subsidy was to be provided by GSRC to local governments to assist APs restore their livelihoods and living standards through farming or employment. The resettlement subsidy varied from 3–10 times AOV based on the average cultivated land area per person. The resettlement subsidy for the acquisition of other lands was set at half the value of the arable land. The resettlement subsidy would increase as the average arable land area per person decreased. The RP stipulated that relocated APs were entitled to a direct relocation and subsistence allowance of CNY100 (\$12) per person per month for at least two months. If APs experienced difficulties in restoring their livelihoods after relocation, the resettlement subsidy was to be increased such that the total land compensation and resettlement subsidy will not exceed 20 times AOV of the acquired land for the three years preceding the acquisition.

67. Infrastructure such as roads, water systems and power supply facilities were provided in the areas along the railway line. In 2003, 76% of the affected households and 77% of the non-affected households had access to piped water. All of the households had access to electricity and 95% of the villages had access to roads. In general, all the households along the railway line enjoyed better housing conditions and better infrastructure facilities than before the implementation of the Project.

5. Livelihood/Income Restoration

68. The APs were given two relocation options: (i) scattered resettlement and (ii) concentrated resettlement. Scattered resettlement involved moving to other places within the same village with new house plots provided. Concentrated resettlement involved building resettlement sites near the original villages and setting up new towns for the APs. This option involved the relevant township government and village committees to jointly make land-use plans and allocate 100–500 square meters of land to each relocated household. The location of each household plot was decided through “casting lots”. Expenses incurred for the construction and installation of infrastructure facilities (e.g., roads, water systems, power supply, etc.) were borne by the local governments and the EA.

69. The affected households were relocated with their original village groups to keep the social and economic relationships intact. Household incomes typically come from either agricultural or non-agricultural sources. Agricultural income sources included growing rice, corn, wheat, etc and breeding livestock. Non-agricultural income sources included engaging in seasonal labor or commercial activities (such as renting out vehicles or running small stores).

70. The compensation for land provided affected households with additional income-generating opportunities such as going into the production of other crops, livestock breeding or engaging in small businesses. More than half of the rural workers sought jobs outside their villages or engaged in non-agricultural work to supplement their households incomes. Some APs engaged in coal mining since the affected area was rich in coal resources. On average, each of those villagers earned at least CNY6,000 (or \$723) per year. Contractors also provided employment opportunities to the affected farmers for unskilled labor. The average daily wage provided for them was at least CNY20 (\$2.40).



Coal mining



Poor villages in the mountains

71. According to the final monitoring and evaluation report prepared by GASS, the 1998 per capita agricultural incomes of affected households was 16.7% less than their pre-resettlement level in 1997. With less cultivated land, relocated households readjusted the structure of agricultural production by increasing inputs for cash crops production and livestock raising. As a result, the per capita net agricultural income of affected farmers increased by 22.8% after the completion of the Project in 2003 compared to its 1998 level. On the other hand, the per capita agricultural incomes of non-affected households exhibited a steady increase in 1998 and 2003 compared to the 1997 level. Per capita income levels from non-agricultural sources of affected households increased by 57.7% in 2003 compared to its 1997 level. This may be attributed to the fact that more affected households engaged in non-agricultural sources of income to augment the losses they incurred as a result of reduced farmlands (Table 15).

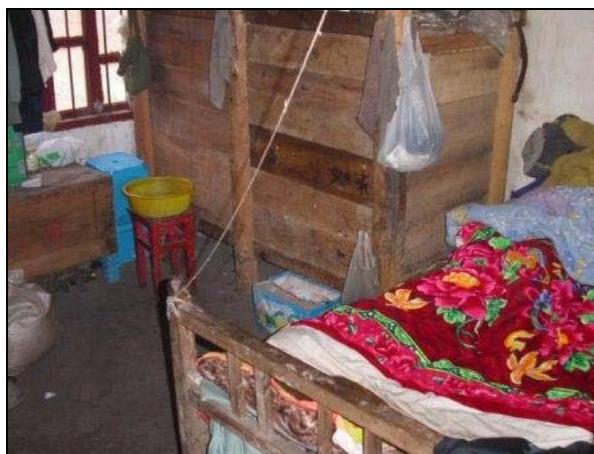
Table 15: Comparison of Per Capita Net Income of Rural Households (CNY)

Item	Affected Households			Non-affected Households		
	1997	1998	2003	1997	1998	2003
Agricultural Income	558	465	571	565	576	679
Non-agricultural Income	607	702	957	629	641	905
Total	1,165	1,167	1,528	1,184	1,217	1,584

Source: Monitoring and Evaluation Report by Guizhou Academy of Social Science (2004).

72. The total per capita income of the affected households was CNY1,528 (or \$184) in 2003, about 31% higher than that in 1997 and 30% higher than the income level in 1998 (Table 50). However, compared with the income levels of non-affected households in the project areas, the incomes of APs were generally lower (i.e., 1.6% lower in 1997, 4.1% lower in 1998, and 3.5% lower in 2003). In summary, incomes for both APs and non-APs in the area had risen and APs did not seem to be disadvantaged by the land losses.

73. In terms of annual income ranges, the number of households that earned between CNY6,000–12,000 (or \$723–1,446) increased by 144%. Those earning an annual income between CNY12,000–18,000 (or \$1,446–2,169) increased by 350%, while those earning more than CNY18,000 (\$2,169) yearly increased by 100%. Table 16 shows the proportion of households that experienced increases in their annual income. These clearly showed that at the minimum, affected households have improved their annual income levels after resettlement implementation. This can be attributed to, among others, national economic development over the period and more opportunities for non-agriculture sources of income.



Grandmother takes care of children; parents of the children work in city. Modest living conditions.

Table 16: Comparison of Estimated Annual Incomes of Affected Households

Annual Income (CNY)	Pre-Project (Number of Households)	% Share	Post-Project (Number of Households)	% Share
Less than 1000	0	0.0	0	0.0
1,000–1,875	1	2.6	0	0.0
1,875–2,500	3	7.9	0	0.0
2,500–4,000	2	5.3	2	5.3
4,000–6,000	21	55.3	3	7.9
6,000–12,000	9	23.7	22	57.9
12,000–18,000	2	5.3	9	23.7
More than 18,000	0	0.0	2	5.3
Total	38	100.0	38	100.0

Source: Guizhou-Shuibai Railway Project Case Study, National Research Center for Resettlement (2006).

74. A survey conducted for the project case study by NRCR confirmed that overall household incomes had gone up compared to their pre-resettlement levels. A total of 38 respondents were asked whether their annual household incomes had increased or decreased after resettlement. A large portion of the respondents (71%) said that their incomes had increased, while 5% said their incomes had “increased significantly” and 16% said that their incomes remained at the same level. However, 8% of the respondents indicated that their incomes had decreased after resettlement (Table 17).

Table 17: Post-Resettlement Annual Income Levels of Affected Households

Income Level	Number of Households	% Share
Decreased	3	7.9
Same as before	6	15.8
Increased	27	71.1
Increased significantly	2	5.3
Total	38	100

Source: Guizhou-Shuibai Railway Project Case Study, National Research Center for Resettlement (2006).

75. In addition to the foregoing, the following measures were also undertaken to restore the livelihoods of the APs: (i) employment support measures (the Project provided about 6,000 job opportunities to local farmers and nearly 8,000 local un-skilled workers, 25% of which were APs; (ii) support measures to start businesses (local governments, community organizations, and financial institutions provided information, training and micro-credit programs to help APs start businesses); (iii) agricultural credit and technical training (APs were provided with poverty-relief loans and technical training was provided to help APs improve their cultivation practices); and (iv) coordinating infrastructure development (construction of all service roads and power transmission facilities was also attempted to address the needs of APs).



Employment due to construction of roads and railways



Ethnic minority children

76. Vulnerable members of the community had the same entitlements for land acquisition and housing demolition. The following measures were taken in order to help vulnerable groups restore their pre-project living conditions:

- (i) A total of 57,660 local non-skilled workers (15% of whom were women) were employed by project contractors. A total of 298 kilometers of service roads and link roads, 8,000 square meters of temporary housing, and water and power supply facilities were transferred to local governments and/or village autonomous organizations free of charge in order to promote the production and living conditions of vulnerable groups.
- (ii) Preferential policies were formulated for affected members of minority groups in the ten ethnic minority townships along the railway line. According to the final monitoring and evaluation report by GASS, 672 households or 3,091 persons in 52 ethnic minority villages had benefited from clean water-supply, 75 ethnic

minority villages had become connected to country-roads, and 1,312 households in 82 ethnic minority villages had benefited from access to power.

6. Consultation and Information Disclosure

77. Before resettlement activities began, mobilization campaigns were held in all villages and among all village groups that would be affected by the Project. During resettlement implementation, land compensation and allocation programs were settled in consultation with the affected villagers. Resettlement sites and methods for relocating residents, enterprises, and institutions were identified after extensive consultation. Investigation teams were formed involving EA staff, local government officials, village leaders, and APs to assess the resettlement impacts. In addition, the tri-media⁴² was extensively used to disseminate the status of resettlement implementation as well as other relevant information (including relocation plans and compensation standards used). However, according to the findings of the Project case study, the RP or the Resettlement Information Booklets were not disseminated to APs during the Project planning stage.

7. Grievance Redress and Benefit Monitoring and Evaluation

78. The Project established a grievance redress mechanism to deal with complaints regarding project-related activities. In cases where APs had complaints, these were directly lodged to the concerned agencies, i.e., from the Village Resettlement Committee to Leading Groups for Supporting Railway Construction of Liupanshui prefecture.

79. The EA engaged an independent resettlement monitoring agency, GASS, which was responsible for monitoring the progress of resettlement implementation. Between 1998 and 2001, five resettlement monitoring reports were prepared and submitted to ADB. The monitoring reports described the resettlement organizations, consultation, compensation standards, and income restoration activities.

8. Issues

80. **Preparation of RP.** The large difference between the estimated and actual impacts of land acquisition and resettlement was due mainly to poor estimates at the appraisal stage and also partly to the need to realign the railway during construction to avoid difficult terrain and landslide-prone areas. It is therefore necessary that more care should be taken when preparing appraisal projections and to avoid presenting over-optimistic estimates in the RP. Data collection should be systematic and timely and should include details about the affected people, land, dwellings and important land attachments to allow a more comprehensive review and assessment of the possible impacts of the Project. APs should also be consulted in the preparation of the RP.

81. **Compensation Standards.** There was a difference between the compensation standards stipulated in the RP and the actual compensation provided to APs affected by the Project. The RP should be able to specify feasible compensation standards for all affected land, structures, and other assets. Aside from relying on the standards stipulated under relevant

⁴² Radio, print, television.

country rules and regulations, adequate consultation and participation of APs in preparing compensation standards and entitlement should also be done.

9. Attitudes to Resettlement

82. An attitudinal survey among 38 household heads was conducted in relation to the project case study for this SES. The goal of the survey was not merely to gauge the “satisfaction” of APs with the resettlement implementation but also to evaluate the level of success of the resettlement implementation against the objectives set at the beginning of the Project from the point of view of APs. In general, the results of the survey indicated that APs found the overall resettlement implementation as “favorable.” Table 18 provides a summary of the results of the survey.

83. Eighteen percent of the 38 interviewed APs said that the resettlement implementation was successful but a huge portion (82%) said the implementation was “neither a success nor a failure.” The consultation process during resettlement planning and implementation was found to be unsatisfactory as 68% of the respondents indicated that they were unsatisfied with the consultation process while only 8% indicated their satisfaction and 24% said they were “neither satisfied nor unsatisfied” with the consultation process.

84. More than half of the respondents found the resolution of grievances to be unsatisfactory and 18% said they were “very unsatisfied. Only 8% of the respondents indicated satisfaction while the rest of the respondents (18%) said they were “neither satisfied nor unsatisfied” with the resolution of grievances.

85. The respondents gave the highest favorable rating to compensation and measures taken to help them restore or improve their living standards as 16% indicated that they were “very satisfied” and 66% said they were simply “satisfied”. Only 5% of the respondents said they were “very unsatisfied” and 13% said they were “neither satisfied nor unsatisfied.”

86. When respondents were asked if they were economically better off after resettlement implementation compared to their pre-resettlement situations, 76% said they were indeed better off than before while 16% said they were “slightly better off.” Only 8% said that their income levels were the same as before resettlement. In terms of general satisfaction with the resettlement implementation, a huge portion (84%) expressed satisfaction while 8% of the respondents said they were “very satisfied”. Only 3% said they were unsatisfied with the overall implementation and 5% were “neither satisfied nor unsatisfied.”



New housing next to railway (note the satellite dishes)



Preferred type of facade

Table 18: Attitudes to Resettlement

Item	Number of responses	% Share
A. Perception of Success of Resettlement Implementation		
Very successful	0	0.0
Successful	7	18.4
Neither Success nor Failure	31	81.6
Unsuccessful	0	0.0
Very unsuccessful	0	0.0
Total	38	100.0
B. Perception of Effectiveness of Consultation Process		
Very satisfied	0	0.0
Satisfied	3	7.9
Neither satisfied nor unsatisfied	9	23.7
Unsatisfied	26	68.4
Very unsatisfied	0	0.0
Total	38	100.0
C. Perception of Effectiveness of Grievance Resolution		
Very satisfied	0	0.0
Satisfied	3	7.9
Neither satisfied nor unsatisfied	7	18.4
Unsatisfied	21	55.3
Very unsatisfied	7	18.4
Total	38	100.0
D. Restoration of Income		
Very satisfied	6	15.8
Satisfied	25	65.8
Neither satisfied nor unsatisfied	5	13.2
Unsatisfied	2	5.3
Very unsatisfied	0	0.0
Total	38	100.0
E. Comparison of Household Income Levels (Pre-project vs. Post-project)		
Definitely Better-off	0	0.0
Better than before	29	76.3
Slightly better than before	6	15.8
Same	3	7.9
Worse than before	0	0.0
Total	38	100
F. Overall Satisfaction on Resettlement Operations		
Very satisfied	3	7.9
Satisfied	32	84.2
Neither satisfied nor unsatisfied	2	5.3
Unsatisfied	1	2.6
Very unsatisfied	0	0.0
Total	38	100.0

Source: Guizhou-Shuibai Railway Project Case Study, National Research Center for Resettlement (2006).

10. Field Visits to Resettlement Sites

87. An operations evaluation mission (OEM) was organized in early 2006 for this SES to assess the application of the social safeguard policy in the Project. Following are the findings of the OEM field visits in a resettlement village in Haikutang.

88. The resettlement village is located in a very mountainous and inaccessible area and currently has a population of 90 households. Land ownership is around 2–4 mu (or 0.13–0.27 hectare) per household. About 180 mu (or 12 hectares) of land was acquired by GSRC for the railway line construction and 20 houses had to be demolished. A total of 17 households were

affected by land acquisition but did not require resettlement. Villagers were given a choice between building a house in a relocation site or cash compensation for lost structures.

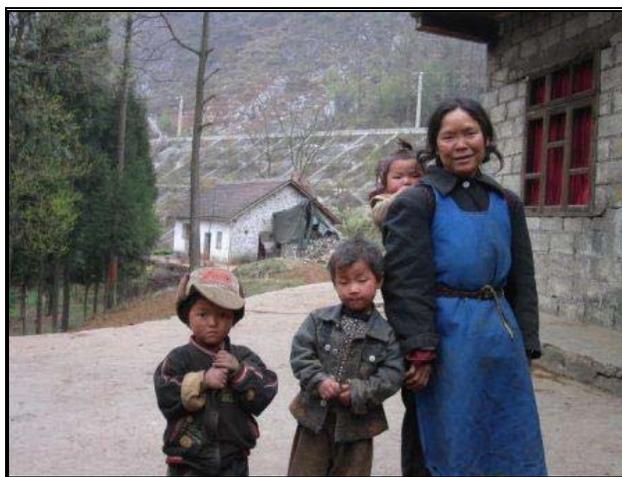
89. According to some villagers, they were not satisfied with the compensation provided for land loss and for demolished houses (amounting CNY3,000 or \$361 per mu and CNY7,000 or \$843, respectively). However, they said that these amounts would allow them to build a bigger and better house in the resettlement village. The resettlement village itself has been provided with water supply, a small pool for water storage, and other infrastructure such as roads and power supply. The village has also obtained access to a row of small houses built by the contractor for construction workers. Some of these houses were also being used by a number of relocated families. Conditions in the resettlement village were poor but the houses had television sets and satellite dishes. At the time of construction of the railway, some 300 people in the village were employed by the contractor as laborers with a salary of CNY15 (or \$1.80) per day for males and CNY10 (or \$1.20) per day for females.



The railway, from bridge to tunnel



House moved to side of railway embankment



D. LOAN 1636-PRC: FUZHOU WATER SUPPLY AND WASTEWATER TREATMENT⁴³

1. Background

90. The Fuzhou Water Supply and Wastewater Treatment Project was implemented in Fuzhou City, the capital of Fujian Province, on the southeastern coast of PRC. Rapid urbanization and economic development in Fuzhou City over the past 20 years caused serious shortfalls in urban infrastructure services, especially water supply and wastewater treatment. A shortage of potable water and pollution of the Min River, the city's main source of water, threatened the health and living conditions of residents, as well as the region's sustainable economic development. The Project aimed to improve the quality and quantity of water supply in Fuzhou City and improve the urban environment by reducing contamination of the Min River and the city's watercourses. The Project had two parts: Part A consisted of the development of a new water supply source and water treatment and supply facilities from the Ao River; and Part B comprised sewage collection and wastewater treatment facilities at Yang Li in Fuzhou City.

91. At appraisal, the total Project cost was estimated to be \$192.2 million. ADB approved a loan of \$102.0 million for the Project on 30 September 1998. Total costs incurred at completion were \$157.7 million due to savings resulting from competitive bidding and lower-than-expected inflation and interest during construction. Actual ADB financing was \$71.5 million. All project activities were completed by December 2003. The actual project implementation period was 57 months compared with 48 months projected at appraisal. The FPG was the executing agency (EA) and provided overall project coordination through a provincial steering committee and an administrative office under the provincial finance bureau. ADB issued a project completion report (PCR) in July 2004.

2. Scope of Land Acquisition and Resettlement

92. Both project components were expected to involve land acquisition and resettlement of APs. Ao River Water Diversion and Development Company (AWDD) and Yang Li Wastewater Treatment Plant Company (YLWWTP) prepared resettlement plans (RPs) for the two project components in accordance with the policies of the PRC and ADB. Site selection for both components took housing relocation and resettlement issues into account. Secondary distribution pipelines were to be built along existing right-of-ways where possible. The resettlement strategy was twofold: (i) demolished housing would be replaced with new concrete housing, and (ii) the Project would help restore the livelihoods of people who lost agricultural land, fish ponds, and other assets.

93. The project monitoring office (PMO) and the Fuzhou Municipal Resettlement Office (FMRO) had overall responsibility for formulating and supervising the implementation of resettlement activities. AWDD was responsible for designing the water supply component of the

⁴³ The data for this summary are drawn from a limited project case study conducted for this SES from March to April 2006 as part of a performance assessment of 4 completed projects in PRC, by the Rural Development Institute (RDI), Beijing-Seattle (June 2006). No questionnaire survey was conducted in this case. Complementary data is drawn from: (i) the Project's Report and Recommendation of the President (ADB, 1998. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China on the Fuzhou Water Supply and Wastewater Treatment Project*. Manila); and (iv) the Project's Completion Report (ADB, 2004. *Project Completion Report on the Fuzhou Water Supply and Wastewater Treatment Project in the People's Republic of China*. Manila).

resettlement plan, and the Fuzhou Municipal Construction Commission and YLWWTP, for the wastewater treatment component. The Fuzhou Municipal Bureau of Real Estate Management was responsible for the water supply component of the RP. The Fuzhou Municipal Engineering Management Department was responsible for the wastewater treatment component. PMO and the Municipal Resettlement Office monitored the RPS. The management and monitoring arrangements remained as appraised, with significant inputs from AWDD and YLWWTP during implementation, particularly in preparing progress reports for ADB.

94. The Project was estimated to permanently acquire about 32.4 hectares of land to be used for treatment plants, pumping stations, and pipeline construction. About 1.5 hectares would be borrowed temporarily for pipeline construction. Land acquisition was estimated to affect about 514 people, 164 of which needed housing relocation to a rural area while 350 people opted to obtain urban resident status. The total cost of land acquisition and resettlement was estimated to be \$11.2 million.⁴⁴

95. Land acquisition and resettlement for the water supply component began in November 1998 and was completed in July 2000. A total of 13.7 hectares⁴⁵ of land was permanently acquired affecting 300 people. About 29.9 hectares of land was temporarily borrowed. Resettlement involved 87 people in 20 households. Of the 20 resettled households, 13 chose to build their own houses in a nearby resettlement area while the other households opted to buy new houses in other locations. On the other hand, land acquisition and resettlement for the wastewater treatment component started in November 1998 and was completed in May 2000. A total of 24 hectares of land⁴⁶ was permanently acquired affecting 100 people in 20 households. No households required relocation because the location of the wastewater treatment plant was changed. The total cost of land acquisition and resettlement at completion was \$11.3 million. Table 19 provides a comparison of the land acquisition and resettlement impacts at appraisal and at completion.

⁴⁴ The budget allocation for the water supply components included \$2.5 million for land acquisition and \$2.1 million for resettlement subsidy, housing relocation, and asset compensation, trainings, income restoration initiatives and monitoring and evaluation. The budget allocation for the wastewater treatment component included \$1.4 million for land and resettlement subsidy, compensation for warehouses, pigsties, village enterprises and facilities, training, employment replacement, old-age pension, and monitoring and evaluation.

⁴⁵ Actual permanent land acquisition for the water supply component included 6.7 hectares for the water treatment plant, 1.9 hectares for roads, and 5.1 hectares for a sludge pond.

⁴⁶ Actual permanent land acquisition for the wastewater treatment component included 94.6 hectares of vegetable land, 10 hectares of fish ponds, 0.9 hectares of hog pen, 1.9 hectares of an electroplating plant, and 1.6 hectares of a storehouse.

Table 19: Comparison of Land Acquisition and Resettlement Impacts, Appraisal versus Completion

	Ao River Water Supply		Yang Li Wastewater Treatment		Total	
	Appraisal	Actual	Appraisal	Actual	Appraisal	Actual
Land acquired permanently (hectares)	10.5	13.7	21.9	23.8	32.4	37.5
Land borrowed temporarily (hectares)	1.5	29.9	0	0	1.5	29.9
Persons affected permanently (Number)	293	300	221	221	514	521
Persons requiring housing relocation (Number)	53	87	111	0	164	87
Persons changing to urban resident status (Number)	240	182	110	221	350	403
Total cost of land acquisition and resettlement (\$ million)	4.6	4.7	6.6	6.6	11.2	11.3

Source: Ao River Water Diversion and Development Company and Yang Li Wastewater Treatment Plant Company.

3. Compensation and Entitlements

96. Entitlements for land acquisition and resettlement were determined by laws and regulations of the PRC State Government, provincial and local governments, and calculated by the Fuzhou Municipal Construction Commission in collaboration with YLWWTP and AWDD. Table 20 provides the Project's entitlement matrix.

Table 20: Resettlement Entitlement Matrix

	Water Supply Component	Wastewater Treatment Component
Loss of farmland	Compensation is six times the annual average output value (AAOV) of production for the past 3 years. Resettlement subsidy is three times AAOV.	Compensation is six times the AAOV of production for the past 3 years. Resettlement subsidy is three times AAOV.
Loss of housing	Provision of replacement housing sites on 4 mu of land within Yuanzhong village by AWDD. Electricity and water connections will be installed. Floor space to be at least equal to that of the old houses.	Replacement housing of 5.7 mu at Gushan New District (2 kilometers away and 8 kilometers away from Fuzhou center) in apartments of at least equal floor space, to be completed before construction. Services include transport, water supply and sewerage systems, 5 kilowatts of power for each household, access to schools and a cultural center.
Loss of other assets	Fishponds, water supply roads, electrical facilities, and other assets to be compensated.	Fishponds: Compensation is two times the AAOV in the three years before acquisition; Resettlement subsidy: 1–2 times AAOV in the past 3 years; Pigsties: CNY1,100/head/mu per year; Compensation will be provided for warehouses and sewerage tanks.
Income replacement	Pre-employment training for 153 people, 15-5 years old, and 21 of whom will be employed by the new water treatment plant, and 52 will be employed in the township and village enterprises. From the resettlement subsidy, the village will fund 20 shops employing 80 people along the new ring road. Workers over 55 years old will be given a pension of CNY250 per month. Urban resident status will be given to 240 people.	Pre-employment training for 110 people, funded by AWDD, 15 younger workers to be employed by YLWWTP, the remainder will work in township and village enterprises in Gushan. Workers over 55 years old will be given a pension of CNY250 per month. Urban resident status will be given to 110 people.

Source: Fuzhou Water Supply and Wastewater Treatment Project Resettlement Plan.

97. According to the project case study, procedures for land acquisition and resettlement were relatively simple because the project was of a smaller scale compared to the scope of the other ADB projects. The main negotiation for land acquisition and resettlement occurred between the administrative village and the wastewater treatment company, with officials of the city government acting as moderators. Once the total compensation package was agreed upon,

the administrative village gave up the land and used the compensation money for various social welfare or public interest programs such as providing elderly farmers (males aged 55 years old and above and females aged 50 years old and above) with a monthly pension amounting to CNY180–200 (or \$22–24 equivalent⁴⁷) per person.

98. **Compensation for land loss and damaged crops.** Two villages located at the outskirts of Fuzhou were affected by land expropriation. Land and damaged crops were compensated together at CNY68,000 (\$8,193) per mu. The annual AOV of the expropriated land was estimated to be about CNY5,700 (\$687) per mu, a high rate since the land was used for growing vegetables sold in the city and it was located near the city's expanding suburbs. The land compensation represented 11 to 12 times the annual yield. According to the findings of the project case study, ADB did not play a direct role in the negotiations for compensation rates, but according to local officials ADB's presence in the Project was clearly a contributing factor to the high compensation rate.

99. However, all land compensation was kept by village collectives since all land was owned by the villages and was not "contracted" to individual households. Thus, most village members here did not rely on farming as a major income source and the village land was either developed for other non-agricultural purposes or leased to migrants from other provinces to grow vegetables. Such a phenomenon is uncommon in China as the overwhelming majority of arable land has been contracted out to farmers under the Household Responsibility System and in accordance with the Rural Land Contracting Law.

100. Land acquisition affected an electroplate plant and a storehouse. Relocation of the electroplate plant and storehouse affected 52 workers and each worker was compensated six months' salary. In addition to cash compensation, the Fuzhou City construction and Resettlement Engineering Division and the YLWWTP helped the electroplate plant obtain approval to be built at a new site, adjacent to the original site. The storehouse also received land and resettlement compensation according to Fuzhou resettlement policies. All affected persons either retained their original employment or found new employment, with assistance from the resettlement office. The 20 households (100 people) that lost their farmland or fish ponds were compensated with cash, agreed upon through consultation with the village committee.

101. **Compensation for demolished houses and other structures.** According to the RP, calculation of the direct cost for housing replacement was based on the actual size or the original floor space. The project case study found that affected persons (APs) were offered two compensation options: (i) stay and build a new house at a new site in the village, and (ii) receive a higher compensation rate and move out of the village. The average size of old houses was about 280 square meters, and for those who chose to stay, their new houses were about 15% smaller but of higher quality (all brick-concrete structures). The specific compensate rates were as follows:

⁴⁷ Exchange rate used: CNY8.3:\$1.0.

Table 21: Compensation Rates for Houses
(CNY)

	Houses with Proper Building Permits	Houses without Proper Building Permits
Option 1: Stay in the village	510/m ²	300-460/m ²
Option 2: Move out of the village	840-880/m ²	400-680/m ²

CNY = Chinese Yuan, m² = square meters.

Source: Fuzhou Water Supply and Wastewater Treatment Project Case Study, Rural Development Institute (2006).

102. Of the 20 resettled households affected by the water supply component, 13 chose to build their own houses in a nearby resettlement area and the other households chose to buy new houses in other locations. During transition, as the new houses were being built, each affected person was compensated monthly, in accordance with local resettlement policies and standards. Based on interviews with some of the affected persons, compensation measures for resettlement seem to have been satisfactory and indebtedness due to construction of new houses was uncommon.

103. Compensation was also provided to APs who lost other assets such as fishponds and pigpens. Table 22 shows the compensation rate for a pigpen (regardless the existence of proper building permits). According to the project case study, the compensation rates provided for other assets affected by the project were higher compared to the rates provided in other similar projects in PRC.

Table 22: Compensation Rates for Pigpens
(CNY)

Building Material	Compensation Rate
Brick-concrete	280/m ²
Brick-wood	120/m ²
Other materials	70-100/m ²

CNY = Chinese Yuan, m² = square meters

Source: Fuzhou Water Supply and Wastewater Treatment Project Case Study, Rural Development Institute (2006).

104. **Resettlement subsidy.** A resettlement subsidy was provided to affected households to cover transition and moving costs, as follows: (i) moving subsidy amounting to CNY150 (\$18) for families with four members or less, CNY200 (\$24) for families with more than four members; (ii) rental subsidy of CNY30 (\$4) per family member per month (not exceeding ten months).

4. Livelihood Restoration

105. Resettlement caused no adverse impact on the average household income. The affected villagers received monthly allowances in accordance with local resettlement policies and standards since 2000. Two hundred and twenty-one affected villagers opted to obtain urban resident status to find work in the city. Household incomes of affected people have risen after resettlement, because many now work in the city and collect rent from their farmland. Findings of the PCR indicated that the APs were satisfied with the compensation arrangements, including both cash compensation and livelihood opportunities.

5. Consultation and Information Disclosure

106. According to the RP, policies and guidelines in implementing the resettlement strategy were to be explained in public meetings at the village level. Continuous consultations with APs were intended to ensure that their livelihoods and living standards were restored to their previous levels. Regular follow-up visits to affected households were to be implemented for at least six months after relocation.

6. Grievance and Redress Mechanism and Benefit Monitoring and Evaluation

107. The RP stipulated that APs were to have direct access to the PMO and the FMRO in case they had any complaints or grievances concerning the resettlement implementation. Civil Mediation Committees had been formed in the host villages or neighborhoods and Mass Mail Appeal Offices were set up at various municipal and district levels of local governments to hear grievances and handle appeals. FMRO, in coordination with the PMO, had overall responsibility for the monitoring and evaluation of the resettlement activities.

E. LOAN 1691-PRC: SOUTHERN YUNNAN ROADS⁴⁸

1. Background

108. The Southern Yunnan Road Development Project was implemented in Yunnan, a poor, interior, landlocked province in southern PRC. The Project constructed a part of the 704-kilometer (km) Kunming to Mohan expressway whose central section (147 km) connects Yuanjiang with Mohei (the Yunnan YuanMo expressway). The project involved the construction of a 147 km four-lane access-controlled toll expressways including 9 interchanges, 25,300 meters of large and medium bridges; 12,300 meters of tunnels and five service areas and upgrading about 540 km of feeder roads. The Project was estimated to cost about \$770.3 million⁴⁹ at appraisal. ADB approved a loan of \$250.0 million on 24 June 1999. Actual costs amounted to an equivalent of \$985.5 million, and the whole amount of the loan was disbursed. The Expressway was opened to traffic in December 2003 and 876 km of feeder road improvements were completed in 2004.⁵⁰



109. The resettlement plan (RP) was prepared by YuanMo Expressway Corporation⁵¹ (YMEC), the Project's EA in October 1998. YMEC took the lead responsibility for implementing and monitoring land acquisition and resettlement activities in accordance with the RP. YMEC established the Division for Land Acquisition and Resettlement as the implementation unit and resettlement offices were also established in Yuxi and Simao prefectures and in the three affected counties. The Provincial Land and Management Bureau was responsible for supervision and support. The two affected prefectures and the

three affected counties coordinated operations at county/district, township, and village levels.

2. Scope of Land Acquisition and Resettlement

110. The RP anticipated that the Project's permanent land acquisition requirement was 998.4 hectares (14,976 mu) and nearly 50 hectares (750 mu) of temporary land borrowing. Land acquisition was expected to affect a total of 5,376 rural people along the expressway alignment, including 1,434 people who would require relocation. The primary resettlement impacts included

⁴⁸ The data and findings are drawn from the following sources: (i) case study conducted for this SES from March to April 2006 by the National Research Center for Resettlement, Hohai University, Nanjing, PRC; (ii) the Project's Report and Recommendation of the President (ADB.1999. *Report and Recommendation of the President to the Board of Directors on Proposed Loan to the People's Republic of China for the Southern Yunnan Road Development Project*. Manila); and (iii) the Project's Project Completion Report (ADB. 2006 *Project Completion Report on the Southern Yunnan Road Development Project in the People's Republic of China*. Manila).

⁴⁹ The rest of the project cost was to be financed by the Yunnan provincial government, the Ministry of Communications, the Ministry of Finance, and the China Development Bank.

⁵⁰ The Expressway passes through Yuanjiang county in Yuxi prefecture and Mojiang county and Pu'er county in Simao prefecture. Townships affected included Lijiang, Dong'e and Yangchajie in Yuanjiang County; Tongguang, Lianzhu, Bixu, Shuanglong, and Zhonag'aiqiao in Mojiang County; and Baibian and Mohei in Pu'er County.

⁵¹ Aside from being the project's EA, YMEC is also the lead agency tasked to oversee the land acquisition and resettlement implementation.

permanent loss of farmland including assets such as trees, crops, roads, and communications and power lines. According to the survey conducted by the Yunnan Provincial Communications Department's (YPCD), 1,103 households (4,732 people) were estimated as not in need of resettlement, but would be affected by loss of agricultural land. Upon completion, the Project affected 19,300 people⁵² who lost farmland and relocated 2,029 people.⁵³

111. The estimated and actual impacts of land acquisition and resettlement are summarized in Table 23. The table shows that there was 22% more permanent land acquisition, and there were 259% more affected persons (APs) than anticipated. APs lost 17% of their cultivated farmland, on average, which included 0.013 hectares (0.19 mu) of paddy land and 0.017 hectares (0.25 mu) of dry land. However, farmers retained significant amounts of dry land which they used for producing other cash crops to augment their household incomes. On the other hand, temporary land occupation was 11 times higher than the estimated 50 hectares. During the expressway construction, additional land was required due to landslides and related slope stabilization work because of the precipitous terrain in the project area.

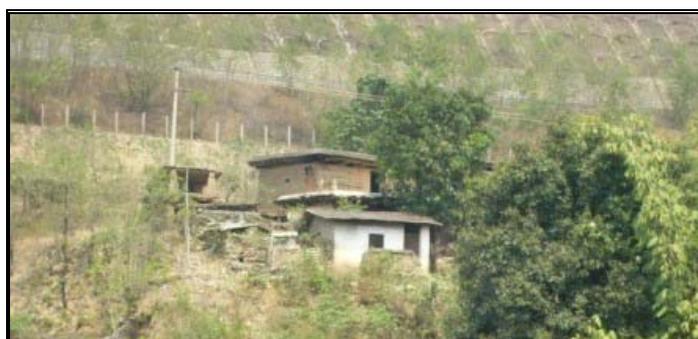
Table 23: Comparison of Resettlement Impacts (Estimate vs Actual)

Impacts	Unit	Draft RP (1998)	Approved RP (1999)	Actual (2005)	Change from RP
Permanent Land Acquisition	ha	885.1	998.4	1,221.0	22%
- Farmland	ha	482.9	490.6	720.9	47%
Temporary Land Occupation	ha	50.0	50	564	11 times
Affected Persons Losing Farmland ^a	Persons		5,376	19,300	259%
House Demolition	m ²	18,950.0	50,429	70,825	40%
Relocated Households	ha	338	334	542	62%
- Affected Persons	Persons	1,569	1,434	2,029	41%

ha = hectare, m² = square meters, RP = resettlement plan,.

^a Farmland includes cultivated land; vegetable, tea, and fruit gardens; and fish ponds.

Sources: County Land Administration Bureaus and YuanMo Expressway Corporation.



Shacks near to the road



Rebuilt house

⁵² According to the PCR, the estimates 1,103 households (4,136 people) affected by land loss was calculated based on 100% loss on average landholding. In reality, road projects tend to result in partial losses of land to households. For this Project, the average impact was a 17% loss of cultivated land per capita. This, plus the 22% increase in land acquisition, explained the difference in the number of households affected.

⁵³ A total of 1,029 people (275 households) were relocated together, while 1,000 people (267 households) were individually relocated within their villages. The distance of their new homes from their original locations was no less than one kilometer. The choice of relocation sites and the design and construction of the new houses were based on the decision of the APs.

3. Policy Framework

112. The RP was based on ADB's Involuntary Resettlement (IR) Policy⁵⁴ and PRC's national/local land acquisition and compensation regulations, including: (i) The Land Administration of the PRC (January 1999), (ii) Regulation on Land Administration for Yunnan Province (of September 1999 and effective on January 2000), (iii) The Forest Law of PRC (revised in 1998), and (iv) The Management Methods for Forestland in Yunnan Province (No. 43 [1997]).

113. In terms of compensation policies, different compensation rates were set up in the counties of Yuanjiang, Mojiang, and Pu'er based on the annual average output value (AOV). The Yunnan Provincial Government announced in December 1998 that the Project would follow the compensation standards set forth in the Standard for Land Acquisition and Compensation on the Yuxi-Yuanjiang Expressway (based on the increased compensation rates in the Land Law of 1998) and that the prefecture and county government would pay compensation in advance, the amount of which would be reimbursed by the executing agency (EA) after project completion. Subsequently, each county formulated its own set of standards and procedures for compensation based on the provincial standard and agreed budget, and government documents. The case study, however, noted that the EA has yet to reimburse the counties for expenses incurred. The county governments of Yuanjiang and Mojiang used provincial standards and adopted more detailed categories to accommodate variations in land and housing quality. The government of Pu'er county also adopted the same compensation standards and also provided APs with indirect mitigation measures (e.g., livelihood rehabilitation support, local infrastructure, and housing construction costs). Buildings were classified as various types and a standard compensation rate was set for each type.

4. Budget and Implementation Schedule

114. The RP estimated that the total cost for land acquisition and resettlement would be \$22 million, which included the costs of livelihood development, supervision, management, and a small allowance for monitoring and evaluation. Contingencies were added since the baseline survey and a full census of assets was yet to be completed at the time of RP preparation. According to YMEC, the cost of land acquisition and resettlement activities rose to \$51.0 million at completion because of the increased scope of impacts, new administration fees, modifications of alignment and service areas, and acquisition of land needed for landslide control. Land acquisition alone accounted for 65% of the total resettlement costs.

115. Resettlement proved to be a lengthy process, with land acquisition and house relocation largely completed by December 2002 rather than July 2001 as anticipated; however, compensation and rehabilitation occurred mainly in subsequent years, with a few issues that were yet to be resolved and some funds to be disbursed. The actual completion of all land acquisition and resettlement activities was in 2004.

5. Compensation and Entitlements

116. Different compensation rates were established in the three affected counties based on annual AOV. Some farmlands which were blocked off by the expressway could no longer be

⁵⁴ ADB. 1995. *Involuntary Resettlement Policy*. Manila.

farmed as paddy land and needed to be converted to dry land. The compensation rate for this was 12,000 yuan/mu. Table 24 shows the comparison of rates among the three affected counties. The conclusion is that in various cases, the RP rates were not achieved and probably little attention was paid to these agreed rates.

Table 24: Land Compensation Rates by Land Type, RP Rates vs Actual Rates

County	Land types	RP Rate (CNY/mu)	Actual Rate (CNY/mu)	Variation of rates (%)
Yuanjiang	Dry	12,000	8,000–12,000	(-33.3)–0
	Paddy	24,000	20,000–33,000	(-16.7)–(37.5)
	Vegetable	26,400	20,000–26,400	(-32.0)–0
Mojiang	Dry	12,000	10,000–12,000	(-16.7)–0
	Paddy	24,000	20,000–53,000	(-16.7)–(54.7)
	Vegetable	26,400	20,000–24,000	(-32.0)–(10.0)
Pu'er	Dry	12,000	8,000–12,000	(-33.3)–0
	Paddy	24,000	13,000–24,000	(-45.8)–0
	Vegetable	26,400	16,000–24,000	(-39.4)–(10.0)

CNY = Chinese Yuan.

Source: County Land Administration Bureaus.



Interviewing affected people



Smoking a pipe in South Yunnan

117. In Yuanjiang and Pu'er counties, compensation rates were formulated according to the affected township annual AOV, while in Mojiang County the annual AOV was considered to be equal in all townships affected. The compensation rate was 16 times of annual AOV for paddy land and dry land in Yuanjiang County. In Mojiang County, the compensation was 16 times for paddy land while 15 times for the dry land. In Pu'er County, the compensation was 14 times for paddy land and 11 times for dry land. This is all in accordance with the law in PRC. Table 25 shows the land compensation rates used.

Table 25: Land Compensation Standards in Affected Counties

County	Land Type	Land Compensation (CNY)	Resettlement Subsidy (CNY)
Yuanjiang	Paddy Land	10	6
	Dry Land	10	6
Mojiang	Paddy Land	10	6
	Dry Land	10	5
Pu'er	Paddy Land	8	6
	Dry Land	6	5

CNY = Chinese Yuan.

Source: County Land Administration Bureaus.

118. The compensation rate for temporary land use was based on seasonal crop values to cover the losses of APs. Contractors were requested to submit their temporary land use proposals and provide the compensation payments to the county land administration bureau. The latter was responsible for providing the compensation payments to the APs. Table 26 provides the details of the compensation rates for temporary land use.

Table 26: Comparison of Compensation Standards for Temporary Land Use, By Crop and by Affected County

Items	RP Rates (CNY/mu)	Actual Rates		
		Yuanjiang (CNY/mu)	Mojiang (CNY/mu)	Pu'er (CNY/mu)
Winter Season Crops	600–800	400	500	
Summer Season Crops	1,600	1,000 (field crops)	800	
		600 (valley)	NA	NA
		500 (mountain)		
Sugarcane in mountainous fields	1,320	130 CNY/ton	NA	NA
Sugarcane in valley	2,200	130 CNY/ton	NA	NA
		250 (Seedling)	NA	NA
Vegetables	1,500	800	1,000	
		1,800 (Sugarcane)	NA	NA
		1,500 (Jasmine)	NA	NA
		1,500 (Aloe)	NA	NA

CNY = Chinese Yuan, NA = not applicable.

Sources: County Land Administration Bureaus.

119. Compensation rates for demolished houses and relocation were set according to the Standard for Land Acquisition and Compensation on the Yuxi-Yuanjiang Expressway. Buildings were classified and a standard rate was set for each type. Lower rates than what the RP specified were applied in Pu'er County, but this was offset by indirect payments for house plot preparation and provision of services. These costs were paid by the township. Table 27 presents the compensation rates for different types of houses.

Table 27: Compensation Rates for Houses

County	Structures	RP Rate (CNY/m ²)	Actual Rate (CNY/m ²)	Variation of rates (%)
Yuangjiang	Steel enforcement concrete structure	700	700	0
	Brick concrete structure	500	500	0
	Brick and wood concrete structure	280	300	7
	Earth and wood concrete structure	250	250	0
Mojiang	Steel enforcement concrete structure	700	600–700	(-14)–0
	Brick concrete structure	500	360–500	(-28)–0
	Brick and wood concrete structure	280	270–300	(-4)–(7)
	Earth and wood concrete structure	250	230–250	(-8)–0
Pu'er	Steel enforcement concrete structure	700	350–500	(-50)–(-29)
	Brick concrete structure	500	200–350	(-60)–(-30)
	Brick and wood concrete structure	280	150–200	(-46)–(-29)
	Earth and wood concrete structure	250	100–150	(-60)–(-40)

CNY = Chinese Yuan, m² = square meters.

Sources: County Land Administration Bureaus.

120. According to the findings of the case study, the APs were fully aware of compensation rates and approaches. Yuanjiang and Mojiang county governments delivered compensation to the APs via a township resettlement team, while the Pu'er county government opened bank accounts for the APs and directly transferred funds to the APs' bank accounts. About 70% and 80% of compensation and resettlement subsidy was paid to affected families without land readjustment within collectives and the remaining funds were used for public facilities. Only two villages readjusted land equally among group members.

121. Most relocated APs built new houses that were larger and of better quality using their savings to finance the construction in addition to the compensation they received. Compensation based on replacement value was provided directly to the affected households along with various transfer and rehabilitation assistance. For new house construction, it was necessary to provide village infrastructure in addition to the following services: (i) land leveling, water supply, (ii) electricity, (iii) access roads, (iv) broadcasting and television connections, and (v) improved access to clinics and schools.

122. By the end of 2001, only 18% of resettlement funds had been paid to affected villages. By the end of 2003, 44% of compensation had been paid and by 2004, the proportion of actual compensation payments increased to 79%. Other outstanding amounts were scheduled to be paid by December 2006 once the final audits had been completed. Cash compensation for temporarily acquired land was paid to villages or APs by the contractors on time.

6. Livelihood/Income Restoration

123. The APs employed two strategies in order to cope with the reduction of their production capacity: (i) they increased cultivation of cash crops, and (ii) sought more non-farm activities (like engaging in seasonal labor) to augment their incomes. As a result, the APs' incomes from cash crops and seasonal labor increased while those coming from traditional farming declined. Some households used the compensation provided to engage in transport and other small businesses while many of those that sought non-farm activities were provided with training to develop new skills.

124. County governments carried out several measures to help APs restore their livelihoods. Various trainings in cash crop production, health and legal knowledge were provided. In addition to these, several indirect mitigation measures were provided by local governments to address resettlement impacts: (i) the relocation of living quarters as close as possible to the highway or town development centers; (ii) finding acceptable new employment for those whose jobs were lost or severely affected by means of providing the training courses and organizing the resettlers to work outside; (iii) restoration of affected productive resources such as land, workplaces, trees, and infrastructure; (iv) educating APs on how to use the compensation provided; (v) provision of better infrastructure like tap water, electricity, village road, livestock sheds, improved toilets, etc.; (vi) support the restoration of affected private and public enterprises; and (vii) restoration of adversely affected cultural or common property (such as sacred forests and trees); and (viii) agricultural technical training by relevant personnel from county agriculture technical stations. Through all these measures, the quality and output of crops as well as the number of animals increased, which led to improved income and revenue for the affected persons. The EA also employed about 20% of local families from the villages as unskilled laborers during the construction of the project expressway and for supplying materials and providing other services.

125. In Mojiang County, the local government issued a decree in 2000 to assist APs who lost more than 50% of their farmland that would make rural residents become urban residents. In addition, 3,990 APs (789 households) were provided with minimum living guarantee and they were also entitled to 30–130 yuan monthly subsidy. In Yuanjiang County, some poverty alleviation activities were provided. For instance, training on planting tobacco and sugarcane was provided and about 370.6 hectares (5,559 mu) of tobacco 1,284.5 hectares (19,267 mu) plantation areas were developed. From 2000 to 2004, 1,970 biogas installations were built in the villages along the Yuanmo expressway that could benefit 11,279 people (1,966 households). The Pue'er county government undertook indirect measures such as the provision of CNY2,700 to affected households to build biogas installations.

126. A survey⁵⁵ was conducted in connection with the project case study to determine if household incomes had increased or decreased after resettlement activities indicated that 10% of the respondents had increased their incomes significantly, 72% stated that their incomes had increased, while 12% said that their incomes had remained in the same level. However, 6% of the respondents indicated a decrease in their income level. Table 28 shows the proportion of households that had changes in their annual income levels.

Table 28: Changes in Annual Income Level of Affected Households in Post-Resettlement Period

Income	Number of Households	% Share
Decreased	3	6
Same as before	6	12
Increased	36	72
Increased significantly	5	10
Total	50	100

Source: Southern Yunnan Roads Development Project Case Study.

127. The survey also showed that the number of households earning an annual income between CNY6,000–12,000 increased by 225%, those earning between CNY12,000 to 18,000 increased by 150%, while those earning between CNY18,000 to 24,000 increased by 100% (Table 29). The results of the survey clearly illustrated that affected households have generally improved their annual income levels after resettlement implementation. This can be attributed to the compensation package provided for the loss of farmland, more opportunities available for non-agriculture employment, and the provision of know-how in the cultivation of other crops.

Table 29: Estimated Annual Incomes of the Households

Annual Income (CNY)	Pre-Project (Number of Households)	% Share	Post-Project (Number of Households)	% Share
Less than 1,875	4	8%	1	2
1,875–2,500	10	20%	2	4
2,500–4,000	17	34%	12	24
4,000–6,000	13	26%	13	26
6,000–12,000	4	8%	13	26
12,000–18,000	2	4%	5	10
18,000–24,000			4	8
Total	50	100%	50	100

⁵⁵ A total of 50 persons from affected households were interviewed by the case study consultants from the three project-affected counties.

CNY = Chinese Yuan.

Source: Southern Yunnan Roads Development Project Case Study.

7. Consultation and Information Disclosure

128. The PMU carried out extensive consultations with the affected households, other residents, and local governments. Thus, the overall process of preparing and implementing the RP was transparent to all the affected parties. During the project preparation stage, staff from the EA and the design institute visited the project area and met with various representatives from government agencies and people's congress, citizen associations, and county governments. In the case of resettlement, consultants and representatives from resettlement offices held extensive discussions with APs and various sectors of society. During implementation, representatives from the resettlement offices encouraged the participation of the APs in discussions of resettlement impacts (including the extent of land acquisition, compensation rates to be provided, arrangements for resettlement, etc) with the EA, design institute, monitoring institute, county/township land bureau, and village leaders.⁵⁶ During monitoring and evaluation stage, APs, village heads, women and members of the ethnic minority were also consulted and their concerns were noted.

8. Grievance Redress and Benefit Monitoring and Evaluation

129. The Project established a grievance redress mechanism to deal with complaints regarding project activities. According to resettlement offices at the county and township levels, around 50% of the 112 inquiries and complaints lodged were about compensation standards and delay in the payment of compensation. The top three complaints received by the resettlement offices were the following: (i) delayed compensation payments, (ii) disputes over land area, and (iii) damages to land by contractors. Villagers also raised concerns relating to community facilities and unconvertible temporarily used land that cannot be restored to farmland. Table 30 shows the grievance statistics.

Table 30: Grievance Statistics, by County

Type	Yuanjiang	Mojiang	Pu'er	Total	% Share
Delay in payment	18	25	2	45	40.19
Compensation too low	9		2	11	9.82
Dispute over area	5	10	2	17	15.18
Community facilities	3	8		12	10.71
Temporary land problem		12		12	10.71
Damage to land	12	3		15	13.39
Total	48	58	6	112	100.00

Source: County Land Administration Bureaus.

130. The EA undertook internal benefit monitoring and evaluation during the project implementation. Ital Consults S.P.A. was hired as the external agency responsible for overall project benefit monitoring and evaluation, including resettlement activities, with assistance from a local consultant. A reporting system was established internally. The Township Resettlement Office reported their progress to the County Resettlement Office who in turn reported to the EA. The external consultants were responsible for submitting quarterly progress reports to ADB.

⁵⁶ The PMU encouraged the "six-party participation" in the project's consultation process.

9. Attitudes to Resettlement

131. The project case study conducted an attitudinal survey in order to evaluate the level of success of the resettlement implementation against the objectives set at the beginning of the Project from the point of view of APs. Table 31 provides a summary table on the results of this survey. About 84% of the respondent APs agreed that the resettlement activities had been successfully carried out, 12% said that this was neither a success nor a failure and 4% said the implementation was a failure. In general, 84% of respondents agreed that adequate consultation with APs had been carried out during resettlement planning and implementation, 10% of respondents neither agreed nor disagreed, while 6% disagreed that the consultation process was effective. Eighty-six percent of respondent APs agreed that the grievance mechanism was effective, 10% neither agreed nor disagreed, and 4% disagreed. Eighty percent of the respondents agreed that their household incomes have been restored, 16% neither agreed nor disagreed, and only 4% indicated otherwise. Sixty-eight percent stated they were economically better off than before, 22% said they were slightly better off and 10% said they had the same income levels as before the project commenced. In terms of general satisfaction to the resettlement operations, 88% of the respondents said they were satisfied, 10% said it was better than nothing, and 2% were dissatisfied with the resettlement implementation.

Table 31: Attitudes to Resettlement

Item	Number of responses	% Share
A. Perception of Success of Resettlement Implementation		
Success	42	84
Neither Success nor Failure	6	12
Failure	2	4
Total	50	100
B. Perception of Effectiveness of Consultation Process		
Strongly agree	20	40
Agree	22	44
Neither agree nor disagree	5	10
Strongly disagree	1	2
Item	Number of responses	% Share
Disagree	2	4
Total	50	100
C. Perception of Effectiveness of Grievance Resolution		
Strongly agree	16	32
Agree	27	54
Neither agree or disagree	5	10
Strongly disagree	1	2
Disagree	1	2
Total	50	100
D. Restoration of Income		
Strongly agree	5	10
Agree	35	70
Neither agree or disagree	8	16
Strongly disagree		
Disagree	2	4
Total	50	100
E. Comparison of Household Income Levels (Pre-project vs Post-project)		
Definitely Better off	10	20
Better than before	24	48
Slightly better than before	11	22
Same	5	10
Poorer than before		

Total	50	100
F. Overall Satisfaction on Resettlement Operations		
Very satisfied	12	24
Generally satisfied	32	64
Better than having nothing	5	10
Dissatisfied	1	2
Extremely dissatisfied		
Total	50	100

Source: Southern Yunnan Roads Development Project Case Study.

10. Issues Identified

132. The case study identified several issues and shortcomings with the implementation process of the involuntary resettlement policy.

- (i) The disparities in the estimated and actual resettlement impacts (i.e. total land requirements, number of demolished houses, number of affected persons, and budget) are quite large, which proves that the data from the socio-economic survey in the RP is flawed. Poor resettlement planning has an impact not only on budgetary requirements but also on the restoration of APs' standards of living. Thus, a full assessment of the risks and other impacts should be thoroughly done prior to the commencement of the Project, including planning and budgeting sufficient resources for resettlement activities and compensation.
- (ii) Resettlement costs should not have been financed by the local county governments, especially if they have poor fiscal positions. The main concern in relation to resettlement implementation was the lack of funds of county governments which resulted in serious delays in the delivery of compensation payments to APs. In addition to this, the local governments of Mojang and Pu'er resorted to borrowing money from banks in order to finance the amount needed for compensation payments. At present, the three county governments state that reimbursement by YMEC is insufficient and late. According to the agreement signed between the YMEC and the county governments, YMEC should speed up reimbursement of funds and resolve some disputes about the amount of compensation funds.
- (iii) Local governments have detailed and adjusted provincial compensation standards and have formulated their own. In particular, the compensation standard Pu'er County was only about 50–60% of the provincial compensation standard. Although some supporting and indirect measures were provided, the compensation and resettlement policies adopted were not very clear to the APs.
- (iv) The experience of the Project confirmed the need to enhance external monitoring and evaluation as well as regular supervision by ADB staff. Resettlement issues that stemmed from insufficient local government funds were not immediately noted since only the PCR mission had a resettlement specialist.
- (v) More attention should be given to the seriously affected households who lost most of their farmland. Only two village groups in affected areas readjusted the contracted land since there is no reserve land. Thus, some households who did not have sufficient non-agricultural income sources had encountered difficulties in restoring their incomes after the resettlement process. These households should be provided with more skills training and should be monitored for a longer period to ensure that they are able to restore their pre-resettlement incomes.
- (vi) Damaged community infrastructure facilities like irrigation systems, paths and walls against mudflow were not repaired well during construction and the affected

villages experienced difficulties in getting the contractors to address this. A mechanism should be established to avoid disputes over community facilities reparation. The EA should require contractors to submit a clearance form which affected community leaders should sign stating that the community infrastructure facilities are properly repaired before leaving the site.

- (vii) The case study consultants observed that some of the officials at the county level had not seen the RP which was approved by ADB. Few officials participated in the formulation of the RP, thus the RP can not be expected to be implemented well if the county governments have not been involved in its preparation. The EA should ensure that county officials, affected administrative villages, APs should be involved during the preparation of the RP.

F. LOAN 1692-PRC: SUZHOU CREEK REHABILITATION⁵⁷

1. Background

133. The loan for the Suzhou Creek Rehabilitation Project supported Phase I of a 12-year program to rehabilitate the polluted Suzhou Creek and congested area around it in the center of Shanghai in PRC. The major objectives of the Project were to improve water quality, strengthen water resources management, and improve flood control, in order to enhance health standards and quality of life for residents living in the vicinity of the creek.

134. At appraisal, the total project cost was estimated at \$875.8 million, for which ADB approved a \$300.0 million loan on 29 June 1999. The actual project cost amounted to \$841.3 million (3.9% lower than estimated). ADB financed the entire foreign exchange cost of \$162.1 million (about 19% of the total project cost). Surplus loan funds of \$135.0 million were cancelled⁵⁸ in February 2003 and the ADB loan was reduced by almost 45%, from \$300.0 million to \$165.0 million. Counterpart financing was provided by the MOF, Shanghai Municipal Government, districts and county, and the State Development Bank.



135. Project implementation was scheduled to start in November 1998 and be completed by September 2004. The Project was completed as scheduled despite experiencing some initial delays during the start-up period. The total implementation period was 64 months. The Shanghai Suzhou Creek Rehabilitation and Construction Company, a government-owned independent limited company established on 1 September 1998, was the executing agency (EA). Shanghai Suzhou Creek Rehabilitation and Construction Company actively utilized the ability of the private sector in project implementation and management. Tendering

companies were engaged to manage tendering works, resettlement activities were coordinated and managed by resettlement companies, and operations of some of the facilities improved and/or constructed under the Project were contracted out. This approach was effective for such a large, complicated, and multifaceted project.

136. Out of nine project components,⁵⁹ eight involved land acquisition and resettlement. Table 32 shows the project components that had land acquisition and resettlement impacts.

⁵⁷ The data for this summary are drawn from the project case study conducted for this SES from March to April 2006 to assess performance of 4 completed projects in PRC conducted for this SES from March to April 2006 by Rural Development Institute (RDI), Beijing-Seattle (June 2006). Complementary data is drawn from: (i) the Project's Report and Recommendation of the President (ADB. 1999. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China on the Suzhou Creek Rehabilitation Project*. Manila); and (iv) the Project's Completion Report (ADB. 2001. *Project Completion Report on the Suzhou Creek Rehabilitation Project in the People's Republic of China*. Manila).

⁵⁸ The reduction in project cost was due to an increase in local costs and decrease in foreign exchange costs, reduction of the project scope from 10 to 9 components, and competitive bids received for both civil works and equipment.

⁵⁹ Originally, the Project comprised 10 components grouped under three parts: Part A (wastewater management) included: (i) wastewater interception on six tributaries of Suzhou Creek, (ii) wastewater interception from Hongkou

Table 32: Project Components with Resettlement Impacts

No.	Component Title	Remarks
1	Locks and Gates on Mudu Gang and Seven Tributaries	
2	Wastewater Interception for Six Tributaries	Seriously affected by demolition of factories/public institutions
3	Integrated Low-Flow Augmentation	Seriously affected by temporary land borrowing
4	Shidongkou Wastewater Treatment Plant	Seriously affected by permanent land acquisition
5	Wastewater Interception for Hongkou Gang and Yangpu Gang	Seriously affected by house demolition
6	Removal and Relocation of Nightsoil and Garbage Wharves	
7	Rehabilitation of Hongkou Gang System Embankment and Land Reconstruction	No resettlement impacts at planning stage, but actually affected by land acquisition and resettlement
8	Re-aeration of Suzhou Creek	Estimated to be affected by land acquisition and resettlement at planning stage, but had no actual resettlement impacts

Source: ADB. 2005. Project Completion Report for the Suzhou Creek Rehabilitation Project in the People's Republic of China. Manila.

137. In 1998, the EA, in collaboration with the Shanghai Academy of Social Sciences (SASS) and the project preparatory technical assistance, prepared resettlement plans (RPs) for the Project and its eight components that had land acquisition and resettlement impacts. The RPs were based on the revised Land Administration Law (1999) and ADB's Involuntary Resettlement (IR) Policy. The EA set up a Project Preparation Department, which was responsible for overall resettlement management, coordination, and internal monitoring. District- and township-level implementation agencies were responsible for resettlement activities, including providing affected persons (APs) with information about the RP and entitlements, within their jurisdictions.

2. Scope of Land Acquisition and Resettlement

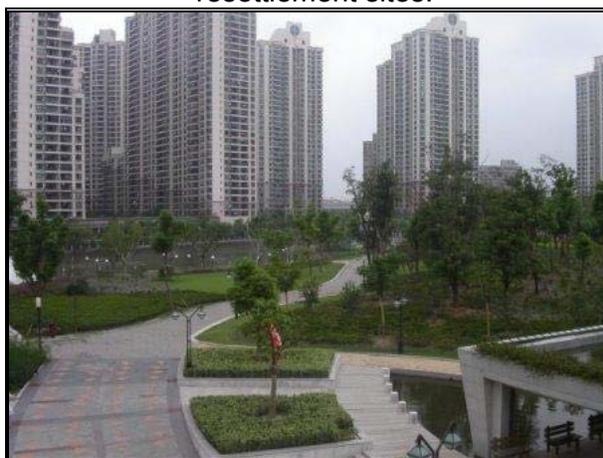
138. The project design attempted to minimize land acquisition and resettlement impacts. For people unavoidably affected, the resettlement objective was to ensure that they attained equal or better livelihood and living standards. The following criteria were to be followed: (i) the amount of compensation for all assets should be equal to the restoration price excluding depreciation; (ii) compensation should be paid before resettlement activities began; and (iii) the living standards of the APs will at least be restored to their levels prior to resettlement.

139. The following procedures for resettlement were generally followed:

- (i) **Preparation work.** This included setting up the working group consisting of government officials and technicians from different government line bureaus; conducting training for the working group; preparing and revising the RP; reviewing the implementation plan and identifying the areas and targeting households; and formulating an action plan.

Gang and Yangpu Gang, and (iii) Shidongkou wastewater treatment plant; Part B (water resources management) included: (i) locks and gates on Mudu Gang and six tributaries, (ii) integrated low-flow augmentation, (iii) rehabilitation of Hongkou Gang system, (iv) sediment dredging and disposal, and (v) re-aeration; and Part C (environmental sanitation and urban renewal) included: (i) removal and relocation of nightsoil and solid waste collection wharves, and (ii) embankment reconstruction. During implementation, Part B (iv), sediment dredging, was cancelled as water quality improvement targets were achieved via other components.

- (ii) **Publicizing policy and regulations.** This included preparing and laying out policy regulations, using the tri-media⁶⁰ to inform affected households, and holding resettlers' meetings to explain importance of project and policy regulations.
- (iii) **Sample household survey.** This involved the collection of information on family sizes, housing situation, and likely compensation rates.
- (iv) **Evaluation.** This involved professional evaluation firms who conducted evaluation of houses and other assets and producing detailed lists of compensation recommendations.
- (v) **Other Incentives.** Based on the RP and other resources available local authorities at district and township levels decided on the final compensation packages, including creating incentive provisions encouraging APs to move as soon as possible by offering a cash bonus.
- (vi) **Actual implementation.** Each village was assigned a pre-determined deadline to complete the relocation of affected households according to the construction schedule. As soon as the APs accepted the offered compensation package, a written agreement was signed and the APs may relocate to their new resettlement sites.



Suzhou Creek park created



Where there were often flooded slums before...

140. Land acquisition and resettlement were carried out from 1999 to 2002, according to the schedules of the Project components' civil works construction. The total permanent land acquisition of the Project was 2,372 mu (158 hectares), 39% higher than the estimated 1,706 mu (114 hectares) in the RPs. Total temporary land occupation increased by 130% to 4,303 mu (87 hectares) compared to the estimated 1,868 mu (124 hectares). The affected houses can be divided into two categories: (i) dwellings and (ii) other structures such as factories or public institutions. Total demolished dwellings covered 584,244 square meters. A total of 6,581 households were relocated - 514 households were partially affected and were not relocated—an increase of 168% compared with the 2,647 affected households estimated at appraisal. Total demolished structures owned by factories and public institutions covered 976,921 square meters. A total of 33 factories or public institutions were relocated and 845 were only partially affected and were not relocated. The increases in the resettlement impacts were attributed to technical design changes and larger than anticipated land acquisition and house

⁶⁰ Print, television, and radio.

relocation per Project component. The areas affected by land acquisition and resettlement covered 11 districts of Shanghai Municipality. Table 33 shows the Project's scope of resettlement impacts.

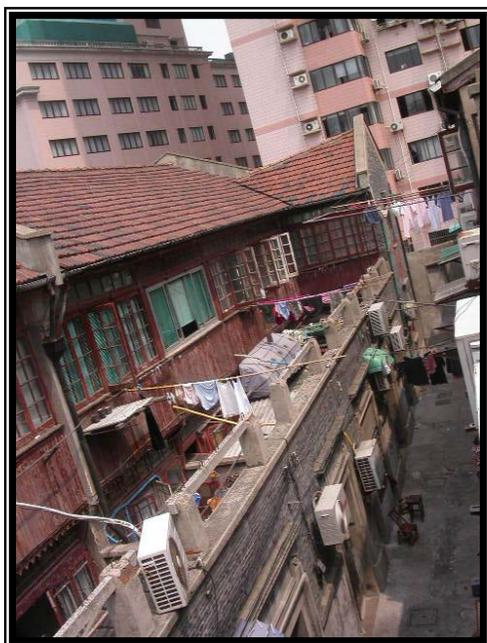
Table 33: Scope of Resettlement Impacts, by Project Component

Component	Land Acquisition			Land Borrowing			Affected Households			Affected Factories		
	RP Mu	Actual Mu	Change %	RP Mu	Actual Mu	Change %	RP No.	Actual No.	Change %	RP No.	Actual No.	Change %
1	91.60	71.50	(21.94)		119.00		2	30	1,400	2	4	100.00
2	225.64	77.43	(65.68)	1,367.99	1,727.89	26.31	624	809	29.65	314	429	36.62
3	261.27	384.30	47.09		2,446.90		168	435	158.93	72	93	29.17
4	951.79	1,117.50	17.41				226	408	80.53	12	8	(33.33)
5	56.55	119.98	112.19		4.58		1,181	2,598	119.98	47	87	85.11
6	66.00	92.28	39.82	500		(100.00)	139	320	130.22	3	17	466.67
7	53.10	364.65	586.73		4.5		269	1,504	459.11	15	219	1,360
8		144.42						991			21	
9	0.45		(100.00)				38		(100.00)			
Total	1,706.40	2,372.07	39.01	1,867.99	4,302.87	130.35	2,647	7,095	168.04	465	878	88.82

RP = resettlement plan.

Notes: (i) In the RP for the whole Project, land acquisition was as follows: Component 2 (1,279.15), Component 3 (262.77) and Component 6 (566); and land borrowing for Component 2 was 1,093.99. Table 67 figures have been revised according to the breakdown and context of the RPs for the related components; (ii) The RPs did not provide all the data for the demolished areas of the dwellings and factories or public institutions, so they cannot be compared with the corresponding ones actually affected.

Source: Shanghai Suzhou Creek Rehabilitation and Construction Company.



What Shanghai was like before

141. The RP estimated that land acquisition and resettlement, including monitoring and evaluation would cost CNY1,864.5 million (\$225 million). Actual land acquisition and resettlement cost amounted to CNY2,769.2 million⁶¹ (\$334 million), 48% higher than estimated. ADB's project completion report (PCR) attributed this to the increased amount of land acquisition and housing relocation. The EA allocated resettlement funds to the district resettlement agencies. The district resettlement agencies were responsible for distributing the funds to village committees, APs, and other agencies involved in resettlement management and administration. Some funds were paid directly to APs, and some were paid through townships and administrative villages.

⁶¹ The Shanghai municipal government covered two-thirds of the resettlement cost and the urban districts the remaining one-third. Lower-level governments (county, township, and village) provided non-cash support in the forms of social welfare benefits to certain resettlers, infrastructure improvement, and sometimes price-discounted land for farming or housing.

3. Compensation and Entitlements

142. The Project's land acquisition and resettlement were implemented based on the following laws and regulations:

- (i) The Law of Land Administration of PRC;
- (ii) Implementation Regulations of Shanghai on the Management of Housing Resettlement;
- (iii) Compensation Standards of Using Land for State Construction in Shanghai;
- (iv) Methodology of Using Land for State Construction in Shanghai;
- (v) Measurement of Shanghai Concerning Resettlement and Compensation for Dismantling Business Site of Self-Employed Entrepreneur;
- (vi) Interim Method of Housing Appraisal in Shanghai.

143. **Compensation for land loss.** According to the RP, the compensation fee for cultivated land is six to 10 times the AOV of the land in the previous three years. In Shanghai, the average AOV of agricultural land was CNY500 (or \$60 equivalent⁶²) per mu⁶³ for paddy fields and dry land and CNY1,500–1,700 (\$181–205) per mu of vegetable fields.

144. The findings of the PCR indicated that in addition to land compensation, certain villagers were awarded with urban citizenship in proportion to the acquired land area. Affected laborers were provided with new jobs and affected seniors (males over 55 and females over 45) were given pensions. Affected laborers who opted for self-resettlement received CNY10,000–15,000 (\$1,205–1,807) plus two social security benefits (i.e., pension and medical fund would be paid until they reached eligibility age). Pensions normally amount to CNY400 (\$48) per person per month. Some 1,062 people were provided with new jobs or special subsidies for self-resettlement (1.53% higher than the estimate of 1,046 in the RPs) and 618 people were provided with pensions (61% higher than the RPs' estimate of 385).

145. **Compensation for demolished houses.** According to the PCR, only five households affected by dwelling demolition in rural areas opted to build their new houses near their original locations. They were provided with household compensation and a new house plot to build their new houses themselves. Other households affected by house demolition chose either replacement houses or cash compensation. Replacement houses were usually six-floor apartments in suburban areas, located in six districts of Shanghai. A lump-sum cash compensation was provided based on the household population and the area of demolished houses, which were usually equal to market prices of similar houses. Since cash compensation provided more freedom to choose or build new houses, about 80% of affected households chose this option.

146. Based on a number of interviews, the project case study by Rural Development Institute assumes that the satisfaction level of APs who previously were urban residents is considerably higher than that of APs who were previously farmers. This is because prior to resettlement, these urban APs lived in rather poor housing conditions.⁶⁴ After resettlement, the interviewees lived in larger apartments with better amenities. Their new apartments were about five

⁶² Exchange Rate used: CNY8.3 = \$1.0.

⁶³ 1 mu = 1/15 hectare.

⁶⁴ Their old houses were several-decades-old flats with no running water or bathroom and the house size for a three-member household typically ranged from 12 to 20 square meters.

kilometers away from their previous homes and were further away from the city center. However, due to the rapid urbanization in Shanghai, the APs had little or no complaint about their location (partly because the value of their new apartments had risen by more than 50% during the past 5 or 6 years).

147. Rural APs used to live in relatively spacious houses⁶⁵ because the supply of land was not a problem in the countryside at that time. Moreover, many farmers built a number of housing structures that did not comply with the building codes. These illegal housing structures were leased to migrant workers or were used by farmers as shops or as pens for domestic animals. Among the interviewees, these structures provided about 10%–30% of their total household income. Rural APs generally received greater compensation compared to their urban counterparts but they moved into urban-style apartments that were generally smaller than their previous homes. Illegal or squatter houses were prohibited to be built after resettlement.

148. The project case study found that the compensation for squatter houses or shacks was based on the original cost of construction, not the loss of income due to renting. This caused some dissatisfaction for rural APs who previously derived significant income from this source. The laws and regulations did not, in principle, provide for these circumstances. According to the project case study, the EA and the local government should realize that this is not a legal dilemma as the rules do not prohibit compensating for such loss of sources of income. It was recommended to provide for a reasonable compensation for such losses as long as it would include a clear cut-off date and eligibility standard that would discourage the construction of squatter houses.

149. **Compensation for demolished factories and public institutions.** A compensation fee for demolished houses owned by factories or public institutions was provided, through consultation, to the affected factories or public institutions. The fee included compensation for affected structures and attachments, moving cost, replacement land cost, and other losses. Most affected factories or public institutions (96%) were only partially affected and were not relocated so their operations continued. Other affected factories or public institutions (4%) were mainly small township or village enterprises, which preferred to receive cash compensation because they could start more suitable businesses.

150. **Compensation for relocation expenses.** According to the findings of the project case study, relocation subsidy included: (i) CNY400–CNY800 (\$48–\$96) per person as moving expense, and (ii) CNY150–CNY500 (\$18–\$60) per month to reimburse APs for their rental expenses incurred after the APs moved out of their old homes and before they moved to their new houses. Eight APs interviewed on this aspect reported that the amount provided as reimbursement for the rental of houses was not enough to cover the expenses if they rented a place of comparable size and condition as their old houses. Thus, they just opted to either live with relatives or rent a smaller house.

151. **Survey results on compensation.** Among eight APs randomly interviewed, none obtained less than CNY50,000 (\$6,024). One AP interviewed had received over \$50,000. The compensation was delivered to the APs but a certain portion of the total compensation was retained by the village/township/county governments.

⁶⁵ House sizes ranged from 200 to 300 square meters.

152. When asked about their levels of satisfaction regarding the amount of compensation they received, 6 out of 8 APs interviewed indicated that they were satisfied or even very satisfied. Most had spent the amount on housing.

4. Income/Livelihood Restoration

153. As per the PCR, 92% of APs lived in houses of more than 20 square meters after resettlement. Before resettlement 82% had lived in houses of less than 15 square meters. Of the 1,680 people who lost jobs due to land acquisition, 1,062 received cash compensation and assistance in searching for new employment, including employment information and vocational training. The remaining 618 people who had reached or were reaching retirement age chose retirement or early retirement and were provided with pensions. The affected factories and/or public institutions were compensated in cash for the demolished buildings, interruption of business, suspension of operations, and removal of equipment. In addition, subsidies were provided for the affected enterprises to help them continue or even expand their business.

154. According to the PCR, the affected laborers in rural areas usually worked in foreign-invested, state-owned, collective, or private enterprises—after land acquisition—with an average salary of CNY1,000 (\$120) per person per month. Seniors (males over 55 years old and females over 45 years old) were entitled to monthly pensions of about CNY400 (\$48) per person. The affected persons' per capita income increased substantially in recent years compared with about CNY5,000 (\$602 or roughly \$50 monthly) before land acquisition, according to the related statistical yearbooks. This canceled any negative effects of land acquisition. The check performed during the project case study confirmed the positive findings as to income restoration.

155. The EA paid special attention to some disadvantaged groups such as the elderly, the disabled, and the single-parent households. A female farmer aged 45 years old or older, or a male farmer aged 50 years old or older received a stipend of about CNY375 (\$45) per month, which was comparable to the monthly unemployment subsidy⁶⁶ received by urban workers. In addition, the disabled received an extra CNY10,000 (\$1,205) when they needed to resettle.

156. Some APs were asked to compare their income sources before and after resettlement. Most of the interviewed APs indicated that their major source of income prior to resettlement was in agriculture, followed by non-agricultural sources such as jobs in the urban areas. After resettlement, APs still indicated that their household incomes mainly came from agriculture sources but they also indicated that the proportion of non-agricultural income sources (such as retail trade, urban jobs) had increased. Most APs interviewed stated that their situation had improved over the years.

5. Consultation and Information Disclosure

157. The RP stipulated that APs were to be consulted about the land acquisition and resettlement impacts through: (i) a social survey on the Project's impacts on affected households, enterprises and infrastructure; and (ii) resettlement meetings with the APs, arranged in collaboration with the local officials before construction began in order to publicize

⁶⁶ The unemployment subsidy was CNY380 or \$46 per month from 1997 to 1999 when the resettlement project was carried out.

resettlement policies and entitlements. This way, each household had the opportunity to negotiate on the valuation of the contract to be signed with the resettlement agency.

158. Prior to resettlement implementation of each Project component, information dissemination meetings were held in affected villages and households. At implementation, job creation programs were established through consultation with APs. The affected residents were also given the right to choose new homes in their areas of preference. Compensation amounts and resettlement methods for affected factories and public institutions were decided on a consultative basis.

159. The results of the survey conducted for the project case study revealed that APs learned of the resettlement plan and compensation policies from a combination of sources although most indicated that their sources of information were their cadres who met with them individually (Table 34). Other sources of information included publicity bulletins, village meetings, and newspapers.

Table 34: Sources of Information on Resettlement Plan and Compensation Standards

Information Source	Number of Respondents
Village meeting	3
Conveyed individually by cadres	8
Newspaper	1
Radio broadcast	
TV	
Publicity bulletin	4
Conveyed by acquaintance	

Source: Suzhou Creek Rehabilitation Project Case Study, Rural Development Institute (2006).

160. Out of eight respondents, four said that the government had given them sufficient opportunity to express their views on the resettlement plan and compensation standards and that their opinions were taken into account, and two said no, while one respondent was unsure.

A. Grievance Redress Mechanism and Benefit Monitoring and Evaluation

161. The RP prescribed that APs would lodge their complaints and grievances to the closest resettlement office and the issue would need to be resolved within 15 days. If the complainant was not satisfied with the decision, the complaint could be elevated to the District House and Land Administration Bureau. If the complainant was still unsatisfied with the decision, the complaint could be lodged to the Land Acquisition and Resettlement Agency. The final redress could be sought, when necessary, in the civil courts in accordance with the Civil Procedure Act within 15 days of receiving the Land Acquisition and Resettlement Agency's decision.

162. The EA conducted periodic assessments of the progress of the resettlement agencies as part of its internal monitoring activities. The EA likewise monitored the agencies' data collection, database maintenance, and conducted field visits. The EA engaged the services of SASS as the independent monitoring agency responsible for external resettlement monitoring. The goal of external resettlement monitoring is to ascertain whether the Project met the resettlement objectives.

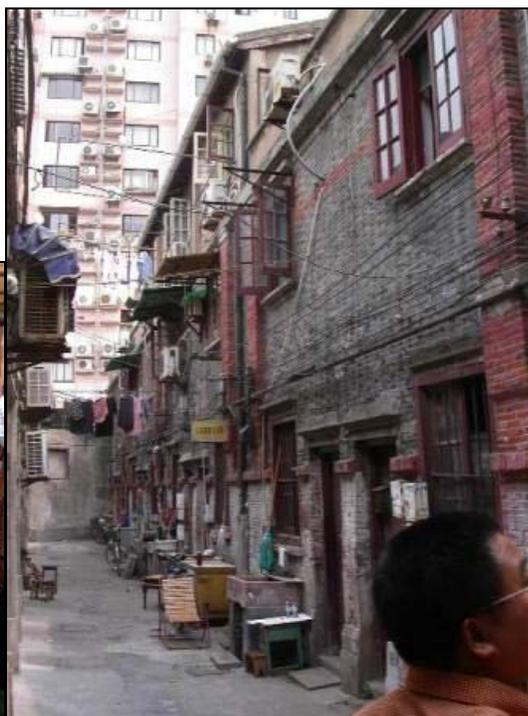
6. Issues

163. Land acquisition and resettlement activities were implemented according to the RPs and the RP's objectives have been achieved. The PCR, the SASS, and the project case study all assessed that the Project's resettlement implementation was successful. However, several issues remained to be resolved, as noted by the PCR and the project case study.

164. **Consultation deficiencies.** The consultation and participation process occurred mostly after decisions on compensation and resettlement options had already been made.

165. **Project schedule.** The *Evaluation of Land Acquisition and Resettlement Activities* of the PCR stated that "Land acquisition and house relocation were mainly carried out 1999–2000 according to the components' civil construction schedules." It is a common practice that civil construction schedules dictate the pace of implementation in development projects when money and efficiency are the pivotal concerns. However, such an artificial timeframe fails to take into account various interests and claims of the APs in terms of land acquisition and relocation.

166. **Land compensation.** The project case study noted an issue on land compensation in one village that they surveyed. The village collective owned all agricultural land but did not allocate or "contract" the land to households for farming, which violated the Land Management Law and the Rural Land Contracting Law of 2002 mandating that farmland be distributed and contracted to individual households. Consequently, the compensation for land acquisition (about CNY55,000 or \$6,626 per mu) was paid to and retained by the village collective. The village officials reported that the compensation was used for public-purpose projects such as building apartments and allocating them to village households at prices considerably lower than market rates; establishing village-owned enterprises; and building public facilities.



Cramped housing, now to be demolished

G. LOAN 1835-PRC: YELLOW RIVER FLOOD MANAGEMENT (SECTOR)⁶⁷

1. Background

167. The Yellow River is the second largest river in PRC. Its basin spans 800,000 square kilometers and is home to 107 million people. For centuries, people who lived along the Yellow River had suffered from periodic floods resulting in tremendous economic and social losses. However, constructing flood control facilities was a formidable work because the river is suspended at the lower reaches due to the heavy sediment load from upstream.

168. The Yellow River Flood Management (Sector) Project aimed to reduce the incidence and damage of flooding in the lower reaches of the basin through improved flood management. The Project also aimed to help to enhance the environment and protect the poor and near-poor by strengthening/improving protection against floods that could push them further into poverty through the loss of crops, incomes, and assets. The project area⁶⁸ was the lower reach of the Yellow River from downstream of Xiaolangdi Dam to the Bohai Sea, a distance of some 800 km. It covered 3,956 square kilometers where 1.731 million people lived in 2,071 villages. The area included the inner floodplain, the main embankments and the adjacent land in the outer floodplain.



169. The Ministry of Water Resources (MWR) was the Executing Agency but the Yellow River Conservancy Commission (YRCC), which was under the administrative control of MWR, had the overall responsibility for project implementation. The total project cost was estimated at \$404.7 million equivalent, comprising \$150.27 million in foreign exchange and \$254.43 million equivalent in local currency including taxes and duties. ADB approved a loan amounting to \$150.0 million in 28 August 2001 to finance 37% of the total project cost.⁶⁹ The Project was still ongoing at the time of the case study

in April 2006, and will be completed by June 2008.

⁶⁷ The data for this summary are drawn from the project case study conducted for this SES from March to April 2006 by the National Research Center for Resettlement (NRCR), Hohai University, Nanjing, PRC. Complementary data is drawn from: (i) Aide Memoire for the Operations Evaluation Mission conducted for this SES in March 2006 and (ii) the Project's Report and Recommendation of the President (ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Yellow River Flood Management Sector Project*. Manila).

⁶⁸ Due to the nature of the suspended river, the project area is smaller than the benefit area. The project benefit area covered 113 counties covering 117,900 square kilometers with an estimated population of 85 million, although topographic features ensured that not all areas were directly or equally affected by flood damage. The high-risk flood area covered 78 counties in Henan, Shandon, Anhui, and Jiangsu provinces.

⁶⁹ The Government of Denmark agreed to finance the consultancy costs amounting to \$300,000. Local currency costs were shouldered by the Government (\$224.3 million) and local governments and beneficiaries (\$30.1 million).

2. Scope of Land Acquisition and Resettlement

170. Resettlement in this sector project was to be implemented through a resettlement policy framework (RPF) and resettlement procedural guidelines.⁷⁰ The main principles of the RPF were: (i) minimize negative impacts as much as possible, (ii) carry out resettlement and compensation so as to improve or at least restore the pre-project living standards of the affected people (AP), (iii) fully inform and consult closely with APs on compensation options and resettlement plan (RP) design, (iv) provide asset compensation at replacement rates, and (v) provide compensation for lost assets and resettlement subsidies in full prior to ground leveling and demolition. Specific resettlement procedural guidelines were established for other eligible subprojects to provide a model approach according to the magnitude of the resettlement impact in each subproject. After subproject identification and completion of preliminary technical design, YRCC would carry out an impact survey to determine the magnitude of impacts. If subproject impacts were significant, YRCC would prepare a full RP; if the initial screening concluded that subproject impacts would be less than significant, YRCC would prepare a short RP.

171. Four types of subprojects were being implemented at the time of the project case study, namely: (i) consolidating embankment subprojects, (ii) floodplain safety development subprojects, (iii) the Dongping Dam rehabilitation subproject, and (iv) dangerous section rehabilitation subprojects. The subprojects were implemented in nine municipalities and 19 counties.⁷¹ Twenty-eight structural subprojects had been implemented including land acquisition and resettlement activities at the time of the field visit.

172. Core subproject RPs were initially prepared for the Kaifeng, Chongyuan, and Dongping subprojects. These served as models for preparing the RPs of the other proposed subprojects. A suitable policy and legal framework was required for land acquisition and resettlement, as necessary, to ensure that APs would equal or surpass their previous living standards.

173. MWR had overall responsibility for acquiring land and resettling people for the Project, in coordination with YRCC and the provincial governments of Henan and Shandong. Field tasks such as the payment of entitlements, selection of replacement land, the provision of livelihood support, and monitoring, were the responsibility of township officers. RPs were carried out in accordance with the Land Administration Law of 1998 and ADB's Involuntary Resettlement (IR) Policy (1995). The cost of land acquisition and resettlement for the three core subprojects was estimated to be \$7.21 million. The amount included asset compensation (including land and resettlement), income restoration assistance, management costs, monitoring and evaluation, and taxes.

⁷⁰ Resettlement policy framework and resettlement procedural guidelines terms and conditions apply to all subprojects that were prepared and approved for inclusion in the sector project.

⁷¹ They are located in Xinxiang, Zhengzhou, Kaifeng, Puyang Municipal in Henan Province, Heze, Jining, Taian, Jinan, Liaocheng Municipal in Shandong Province.



Village along the embankment



village children

174. There were both involuntary resettlers and voluntary resettlers. Involuntary resettlers were entitled to compensation and resettlement subsidy, while voluntary resettlers were not entitled to compensation because the government would provide their resettlement site with a higher platform for the foundation of their new houses. Construction of infrastructure facilities for the resettlement sites was funded by the local government. However, a number of voluntary resettlers, some of whom were either very poor or economically well off, were not willing to voluntarily relocate to the resettlement site. Farmers who were better off were reluctant to leave because they would lose the investments they had put into their old houses. On the other hand, poor farmers were reluctant to move to the resettlement site because it meant they had to cover the construction costs of their new houses.

175. The RP estimated that the 28 subprojects would have to permanently acquire 19,036 mu (or 1,269 hectares⁷²), including 11,820 mu (788 hectares) of arable land affecting 186 villages. Temporary land borrowing would cover 51,245 mu (3,146 hectares), including 29,915 mu (1,994 hectares) of arable land, affecting 218 villages. According to the Resettlement Implementation Scheme, the subprojects required 19,251 mu (or 1,283 hectares) of land for permanent acquisition in 214 villages and 52,408 mu (or 3,494 hectares) of land for temporary use in 213 villages. The actual land acquired for permanent use was 17,444 mu (1,163 hectares) or 91.6% of the estimated amount in the RP, and affecting 214 villages. Land acquired for temporary use totaled 25,150 mu (1,677 hectares) or 49.1% of the estimated total in the RP, with 164 villages affected. Table 35 provides the status of land acquisition of the 28 subprojects currently being implemented.

Table 35: Land acquisition Impacts in Subprojects

No.	Subproject Type	Stage	Permanent Acquisition			Temporary Use		
			Number of Villages	Total (mu)	Arable Land (mu)	Number of Villages	Total (mu)	Arable Land (mu)
1	Consolidating Embankment	RP	112	13,885	8,335	168	37,484	22,536
		RIS	121	13,901	8,484	163	38,673	27,375
		Current Progress	124	12,325	12,325	109	17,650	7,212
	Yuanyang	RP	29	2,361	822	2	11,622	7,821

⁷² 1 mu = 1/15 hectare.

		RIS	34	2,315	995	2	12,304	10,283
		Current						
		Progress	34	1,446	1,446	10	1,044	765
		RP	32	6,370	4,235	118	13,026	5,478
	Dongming	RIS	34	6,353	3,87	118	13,026	5,478
		Current						
		Progress	38	6,091	6,091	70	10,159	
		RP	12	2	2	12	328	328
2	Dongping Dam	RIS	31	166	99	12	314	
	Rehabilitation	Current						
		Progress	38	158	92		325	325
	Floodplain	RP	39	4,679	3,281	34	9,071	2,853
3	Safety	RIS	39	4,679	3,281	34	9,071	2,853
	Development	Current						
	or Platform	Progress	31					
	Construction	RP	4	634	634	6	1,422	
	Changyuan	RIS	4	634	634	6	1,422	
	Miaozhai	Current						
		Progress	4	554	554	4	578	43
		RP	3	597	597	5	759	
	Changtyuan	RIS	3	597	597	5	759	
	Wuqiu	Current						
		Progress	3	592	592	5	662	217
		RP	11	1,080	1,047	11	2,089	1,472
	Dongming	RIS	11	1,080	1,04	11	2,089	1,472
		Current						
		Progress	6	1,055	1,055	6	765	535
		RP	23	469	201	4	4,362	4,198
4	Dangerous	RIS	23	504	433	4	4,350	4,222
	Section	Current						
	Rehabilitation	Progress	21	388	260	8	2,698	2,145
		RP	186	19,036	11,819	218	51,245	29,915
	Total	RIS	214	19,251	12,297	213	52,408	34,451
		Current						
		Progress	214	17,444	14,879	164	25,149	10,478

mu = 1/15th hectare, RIS = Resettlement Implementation Scheme, RP = Resettlement Plan.

Source: Yellow River Flood Control Project Case Study, National Research Center for Resettlement, (2006).

176. The RP estimated that the 28 subprojects required the relocation of 2,854 affected persons (APs) in 686 households from 39 villages, near to their original locations. So far, the subprojects have affected 1,751 APs in 427 households in 38 villages, among which 365 households (1,497 APs) need to be relocated while 62 households (254 APs) did not need to be relocated. Among the households that required relocation, 350 households have already been resettled and 15 households were waiting to be resettled. So far, 245 new houses have been built in the resettlement site, 66 houses are under construction and 39 are yet to be constructed. Currently, 224 households moved to their new houses. Compared with the area and structure of the old houses, the new houses were bigger and of better quality than the old houses. Among the 62 households with no need for relocation, 16 obtained property compensation and 46 were granted temporary rental subsidy. The resettlement sites had been provided with basic infrastructure such as roads, electricity, water supply, and communication facilities.

177. The RP estimated that 15 village platforms in the four floodplains safety development subprojects would have to be built in Changyuan Miaozhai, Changyuan Wuqiu Fanxian, Dongming, Pingyin. This would involved the relocation of 37,065 APs (9,028 households) in 39 villages. During implementation, the number of village platforms was reduced to 13 in

accordance with actual needs. The earthwork of the village platforms is almost completed, with land occupation 4,573 mu (305 hectares).

178. Several schools that were located in the Project area were affected. The Project provided compensation for the demolition of LiuZhang in KaiFeng, DongLou in PuYang, YanTan in DongMing and 4 schools in XuJi, except DongLou elementary school. So far, the demolition of LiuZhuang and YanTan schools and the construction of a school building for XuJi have been completed.



Relocated school



road built on protective dyke

3. Compensation and Entitlements

179. The RPF stipulated eligibility and entitlement provisions for land losses, house losses, crop losses, and loss of other assets. Land losses were compensated as follows: (i) APs losing agricultural and residential land were compensated through land-for-land arrangements, or land reallocation within village domains; (ii) if land-for-land arrangements were not feasible, the APs losing agricultural land were reclassified and provided with job opportunities; (iii) cash compensation for lost land were paid at the rates stipulated by the 1998 Land Law to the villages which, in turn, use the funds received for infrastructure and services directly benefiting the affected communities. Resettlement subsidies for land acquired were directly paid to the APs in cash through the village offices. Compensation for house losses was to be paid directly to the APs in cash at replacement cost free of demolition costs and salvaged materials. Compensation for crop losses was paid directly to the AP in cash at current market prices. Vulnerable households received assistance for house relocation and reconstruction, which were organized by the Village Committees.

180. At implementation, APs were entitled to a compensation/resettlement package amounting to around CNY10,000 (or \$1,205 equivalent⁷³) per mu.⁷⁴ Compensation for standing crops was available for temporary land acquisition, but not available for permanent expropriation of land for the project.⁷⁵ Announcements were made in advance that no crops should be

⁷³ Exchange rate used: CNY8.3 = \$1.00.

⁷⁴ A figure arrived at by the following calculation: 6 times the Annual Output Value (AOV) for loss of land and 4 times AOV (at CNY1,000/mu) for resettlement subsidy.

⁷⁵ According to the Yellow River Conservancy Commission, the National Development and Reform Commission (NDRC) did not approve compensation for standing crops for permanent takings on the grounds that this project

planted with impending construction activities. The actual land and resettlement compensation received by APs was lower than the rates stipulated in the RP since the resettlement standards used were based on the compensation policies of county governments (Table 36). The compensation levels were the minimum allowable rates as provided under the 1998 Land Administration Law.

Table 36: Comparison of Compensation Rates

Subproject	Location	Category	Compensation Rates		
			RP	Actual	Difference
Kaifeng Embankment Construction	Kaifeng Liuzhuang	Irrigated Land	11,600	10,144	-1,456
		Brick Structure	-	-	-
		Brick Wall	-	-	-
		Irrigated Land	11,000	9,050	-1,950
Yuanyang Reinforcement	Yuanyang Guanchang Huansi	Brick Structure	-	-	-
		Brick wall	220	220	0
		Irrigated Land	1,1330	9,050	-2,280
Kaifeng Reinforcement	Dongming Liulou Fanzhuang	Brick Structure	260	220	-40
		Brick wall	220	160	-60

RP = resettlement plan.

Source: Yellow River Flood Control Project Case Study, National Research Center for Resettlement (2006).

181. Now that policies have tightened in recent years, higher values for compensation (up to 30 times AOV for crops) can in principle be provided. This was according to the stipulations of Decree No. 28 of the State Council issued in 2004. However, according to YRCC, the compensation principles set under Decree No. 28 would not have an impact on the compensation levels for ongoing or later expropriations under the Project because the budget for compensation and resettlement subsidy had already been approved.

182. Moreover, land compensation and resettlement subsidies were provided to the village collective in around 80% of villages in which involuntary resettlement was to take place. The village collective, in turn conducted land redistribution among all members of the collectives. In 20% of the cases, individual compensation was provided, in coordination with the collectives. Since 1999, land redistribution within collectives was no longer mandatory. Land redistribution amongst village groups within collectives can be decided upon by the village collective. In 2003, a new state policy forbade land readjustment within village collectives in cases of losses of land of individuals and individual compensation was provided instead.

4. Income/Livelihood Restoration

183. The majority of the APs in the Project area were engaged in agriculture production. Some members of the community were also engaged in non-agricultural sources of income, i.e. some had their own businesses and some were employed in factories outside of their villages.

had adopted the compensation/resettlement standards (10 times AOV) under the 1998 Land Management Law, which was already higher than the standards for water projects under the 1991 resettlement regulations. The 1991 regulations capped the compensation and resettlement subsidies at 7 times AOV.

YRCC did not carry out a separate income restoration/rehabilitation program, but several provincial offices provided assistance through trainings/briefings on the improvement of agricultural production.

184. The survey conducted by the National Research Center for Resettlement (NRCR) for the project case study showed that 84% of the 49 household heads interviewed indicated that their household incomes had not changed after resettlement while 10% indicated that their incomes increased after resettlement. Six percent stated that their incomes had decreased after resettlement. These APs stated that they could not work while their new houses were being built and while they were preparing for their transfer to the resettlement site.

Table 37: Post-Resettlement Income Levels of Affected Households

Income Level	Number of Households	%
Decreased	3	6
Same as before	41	84
Increased	5	10
Increased significantly	0	0
Total	49	100

Source: Guangxi Project Case Study, National Research Center for Resettlement (2006).

185. Table 38 shows the changes in the number of households in different income levels in during pre- and post-resettlement periods. The table demonstrates that at the minimum, the average income of households affected by land acquisition for the embankment construction and the village platform construction have been restored. This may be attributed to more job opportunities brought about by the Project, among other things.

Table 38: Comparison of Estimated Average Annual Household Incomes

Annual Income (CNY)	Pre-Project (Number of HHs)	%	Post-Project (Number of HHs)	%
1,000–1,875	3	6	3	6
1,875–2,500	9	18	10	20
2,500–4,000	16	33	15	31
4,000–6,000	13	27	14	29
6,000–12,000	4	8	5	10
12,000–18,000	3	6	2	4
18,000–24,000	1	2	0	0
More than 24,000	0	0	0	0
Total	49	100	49	100

CNY = Chinese Yuan (around CNY8=\$1), HH = household.

Source: Yellow River Flood Control Project Case Study, National Research Center for Resettlement (2006).

186. The survey confirmed the findings of the monitoring report. The impact of land acquisition on households was, on average, less than anticipated. According to the monitoring report, the negative impact of the consolidating embankment subprojects and land occupation on 204 households in the area was minimal. The average income in 2003 was CNY959 (\$115), of which 33% came from agricultural sources, 63% came from non-agricultural sources, and 4% came from other sources. Average incomes increased by 24% to CNY1,192 (\$144) in 2004, of which 32% came from agriculture sources, 65% came from non-agricultural sources and 4% came from other sources. On the other hand, the net incomes of APs in the village platform construction subprojects decreased, although gross income increased slightly. The average annual income in 2003 was CNY1,097 (\$132), of which 43% came from agriculture, 57% from non-agricultural sources, and 0.1% from other sources. This grew by 7% to CNY1,181 (\$142), wherein 28% came from agricultural sources, 71% came from non-agricultural sources, and

1.3% came from other sources. This may be due to the fact that the land occupation of platform was in the plains and affected only a minority of farmers.

5. Consultation and Information Disclosure

187. The 1998 Land Administration Law provides for disclosure and consultation with APs. YRCC agreed to ensure that Chinese language copies of the RP were to be placed in the township offices so that APs could easily access them. The temporary resettlement offices and township governments were responsible for receiving the comments of the APs and in addressing their concerns. Intensive consultation with all APs during asset inventory and valuation were also intended.

188. According to the findings of the project case study by NRCR, YRCC held various consultation meetings with APs and presented the pertinent project design information as well as the elements of the RP. Further consultations with APs were done at the implementation stage and YRCC presented the principles of the Project's programming and design, policies and related legislation, compensation rates, complaints and appeals channels, and livelihood rehabilitation measures to be undertaken. It was noted, however, that no resettlement information handbook was available for distribution to APs. Nevertheless APs interviewed for the case study regard the consultation process satisfactory.

6. Grievance Redress and Monitoring and Evaluation

189. According to the RPF, complaints and grievance procedures should be established in each RP. Grievances were to be lodged first with the village committee. If no settlement was reached within two weeks of filing, the complainant would have one month to elevate the grievance to the County Land Management Bureau. If the issue remained unresolved within two weeks, the case could be sent to the corresponding departments of other government agencies or the resettlement office. Final appeal should be taken to civil courts per the Regulations for Administrative Redress. YRCC did not set up an independent Grievance Redress Committee. During implementation, all complaints and grievances were lodged with individual village committees, then to the township governments, and then to the county governments. According to a recent monitoring and evaluation report where 663 APs were interviewed, 70 APs (11%) had lodged complaints. Most of these complaints were related to disruption of everyday activities due to construction works in the area and land acquisition. There were also a few complaints on the compensation standards provided. However, YRCC stated they had no outstanding complaints from APs.

190. YRCC engaged the services of an independent monitoring agency, Henan Huanghe Resettler Economic Development Company, to conduct resettlement implementation reviews. The Henan Huanghe Resettler Economic Development Company had already conducted a baseline survey and submitted four monitoring and evaluation reports to YRCC and to ADB.

7. Issues

191. NRCR and the field visit of the OEM noted several issues.

192. **Resettlement funds.** Compensation for land acquisition was payable to village committees who in turn, used the funds received for infrastructure and services for the affected

communities. The specific rates used were based on those stipulated in the 1998 Land Administration Law.⁷⁶ However, there appeared to be a large difference in the resettlement funds provided to village collectives and townships, and the amount received by individuals. Thus, arrangements between project authorities, village collectives, and individuals needed to be reviewed.

193. **Inadequate compensation rates.** The compensation standards stipulated in the RP and the rates that were used during implementation were different. This could be due to discrepancies in the compensation policies of various government departments. Such inconsistencies could not be resolved by the implementing agencies alone since decisions should come from the national government. Thus, as the OEM observed, the compensation rates provided were not among the highest, as compared to the rates used in the other projects under review for this SES. YRCC called the attention of the National Development and Planning Committee regarding the compensation standards set at the project preparation stage since these rates were no longer sufficient to match the new compensation regulations. While no changes had been made at the time of the project case study, plans were underway to standardize the compensation rate to a “unified regional price,” which is higher than the existing compensation rates.

194. **Relocation of voluntary resettlers.** The relocation of voluntary resettlers could not be completed within the estimated period due to the following issues: (i) delay in the distribution of resettlement funds to village collectives; (ii) the difference in the amounts of the resettlement funds estimated by the government and the actual amount provided to village collectives and townships; (iii) land adjustment issues in the village collectives; (iv) the allocated house plots⁷⁷ for the APs in the resettlement site were smaller than their original house plots, so there was no longer space for vegetable plots (a source of income), animal pens, or storage room for farming implements; and (v) the actual number of APs that need to be relocated could not be determined due to inconsistencies in the population information in some villages and some subprojects had not started yet.

195. **Capacity development.** Institutional capacity building plays an important role in project implementation. It was determined early on in the project that training programs were to be conducted for staff of YRCC and selected local government officials and working groups involved in implementing resettlement in the proposed subprojects. The findings of the project case study revealed that there is a need to widen the scope of the training among the local institutions. For instance, the implementation unit’s management officers at the county and township levels requested for training/briefing sessions on ADB’s social safeguards policy.

196. **Monitoring and evaluation report.** The monitoring and evaluation report should be improved. Representatives from ADB and the county and township governments could provide insights on how to improve the report to determine the actual magnitude of resettlement impacts. The distribution list of the report should also be reviewed since some government institutions and local government officials had not received copies of the report.

⁷⁶ The Ministry of Water Resources (MWR) is reviewing and processing the revision of the 1991 MWR Guidelines for Implementing Medium to Large Hydropower Projects, to reflect recent developments and the recent changes in the Land Administration Law (1998).

⁷⁷ The size of the house plots in the original sites was 120 square meters per capita but this was reduced to an average of 60 square meters in the resettlement site.

8. Attitudes to Resettlement

197. An attitudinal survey among 49 household heads was conducted in relation to the project case study for this SES. The goal of the survey was not merely to gauge the “satisfaction” of APs with the resettlement implementation but also to evaluate the level of success of the resettlement implementation against the objectives set at the beginning of the Project from the point of view of APs. In general, the results of the survey indicated that APs assessed the overall resettlement implementation as “successful.” Table 39 provides a summary of the results of the survey.

Table 39: Attitudes to Resettlement

Item	Number of responses	% Share
A. Perception of Success of Resettlement Implementation		
Very successful	3	6
Successful	21	43
Neither Success nor Failure	19	39
Unsuccessful	4	8
Very unsuccessful	2	4
Total	49	100
B. Perception of Effectiveness of Consultation Process		
Very satisfied	12	24
Satisfied	28	57
Neither satisfied nor unsatisfied	0	0
Unsatisfied	6	12
Very unsatisfied	3	6
Total	49	100
C. Perception of Effectiveness of Grievance Resolution		
Very satisfied	8	16
Satisfied	11	22
Neither satisfied nor unsatisfied	26	53
Unsatisfied	4	8
Very unsatisfied	0	0
Total	49	100
D. Restoration of Income		
Very satisfied	6	12
Satisfied	16	33
Neither satisfied nor unsatisfied	1	2
Unsatisfied	1	2
Very unsatisfied	0	0
No response	25	51
Total	49	100
E. Comparison of Household Income Levels (Pre-project vs. Post-project)		
Definitely Better-off	0	0
Better than before	0	0
Slightly better than before	5	10
Same	41	84
Worse than before	3	6
Total	49	100
F. Overall Satisfaction on Resettlement Operations		
Very satisfied	7	14
Satisfied	40	82
Neither satisfied nor unsatisfied	0	0
Unsatisfied	0	0
Very unsatisfied	2	4
Total	49	100

Source: Yellow River Flood Management Project Case Study, National Research Center for Resettlement (2006).

9. Field Visits

198. An operations evaluation mission (OEM) was organized in early 2006 for this SES to assess the application of the social safeguard policy in the Project. Following are the findings of the OEM field visit in a resettlement village in the Kaifeng area.

199. The project site expropriated a total of 1,000 mu (66.7 hectares) involving ten villages. The compensation/resettlement package provided to APs was 10 times AOV at CNY1,160 per mu (\$139.8) for irrigated arable land, CNY670 per mu (\$80.7) for dry land, CNY250 per mu (\$30.1) for forestland (including standing trees, and CNY1,600 per mu (\$192.8) for ponds. Some of local officials admitted that under such compensation standards, farmers' livelihood could not be restored. APs were said to be not satisfied with such level of compensation. They wished to be compensated based on a standard similar with land expropriation for highways at the annual average output value level of CNY3,000–5,000 per mu (or \$361.4–602.4 per mu). Moreover, 4% of the compensation/resettlement package was retained with the local land administration as management fee. The remaining portion was provided to the township government. It is not clear whether the township government had been provided a share of the compensation/resettlement package.

200. The OEM conducted interviews with APs and local authorities regarding the status of resettlement implementation in the area. The farmer APs felt more protected from floods after the dike was constructed. According to them, a major benefit was that they were able to build better houses. The OEM also visited a rebuilt school and school children acknowledged that their new school building is much better than before.



School children in front of relocated school

H. LOAN 1851-PRC: GUANGXI ROADS DEVELOPMENT⁷⁸

10. Background

201. The Guangxi Roads Development Project, for which ADB approved a loan of \$150 million on 30 October 2001, was implemented in Guangxi Zhuang Autonomous Region (GZAR), a relatively poor southwestern region of PRC. The project constructed 136 km expressway and 43 km highway from Nanning to Youyiguan at the Viet Nam border across flat and hilly terrain. The project also constructed 49 km of connector roads to county towns, improved local roads servicing poor villages, and provided consulting services and training. The expressway and connector and link roads affected 21 townships, 61 administrative villages, and 187 village groups in six counties.⁷⁹ The executing agency (EA) for the project was the Guangxi Communication Department (GCD). The Project cost was estimated at \$455.2 million; final cost was not yet known at the time of the case study, as the Project was still ongoing. The Project is expected to be completed by October 2006.

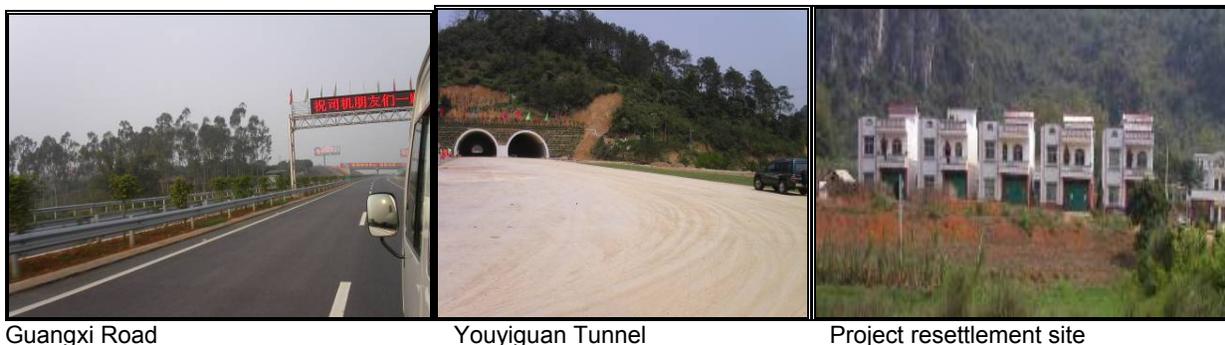


202. The need for resettlement was foreseen early on in the Project. Xi'an Highway University prepared a resettlement plan (RP) in February 2000, based on the preliminary technical design and the results of a village census and socioeconomic survey. The RP was updated in February 2001 to deal with subsequent Project design modifications. GZAR government assumed responsibility for implementing the RP. GCD established a PMU and took charge of planning, implementation, financing, and reporting of land acquisition and resettlement for the expressway and connector roads. GCD was responsible for any land acquisition

and resettlement for the complementary roads. By early April 2001, leading groups for resettlement, each comprising 20 staff, were established within the affected counties. The county offices were primarily responsible for the resettlement consultation, implementation, and timely delivery of compensation and entitlements to affected persons (APs).

⁷⁸ The data for this summary are drawn from the project case study conducted for this SES from March to April 2006 by the National Research Center for Resettlement, (NRCR), Hohai University, Nanjing, PRC (April 2006). Complimentary data is drawn from: (i) the Project's Progress Report by the Project Management Office of Guangxi Communication Department (January 2006); (ii) the Project's External Monitoring and Evaluation Report by the Ethnic Economic and Research Institute, Guangxi Academy of Social Sciences, PRC (October 2004); (iii) the Project's Report and Recommendation of the President (ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China on the Guangxi Roads Development Project*. Manila); and (iv) the Operations Evaluation Mission Aide Memoire conducted for this SES in April 2006.

⁷⁹ Chongzuo, Fushui, Longzhou, Ningming, Pingxiang and Yongning.



Guangxi Road

Youyiguan Tunnel

Project resettlement site

11. Scope of Land Acquisition and Resettlement

203. The objective of the resettlement operation was to achieve equal or better income and living standards for APs, in line with PRC's 1998 Land Law and ADB's IR Policy. GCD ensured that any person losing land, housing, other assets or income were assisted to restore their income and living standards. GZAR issued a directive in 2000 to implement the 1998 Land Law in the context of large infrastructure projects. The land compensation was set at seven times the annual average output value (AOV) for cultivated land, and the resettlement subsidy at 5–14 times, depending on the average per capita farmland.

204. According to the initial survey, nearly 18,000 mu⁸⁰ of land (or 1,200 hectares) would have to be permanently acquired and about 3,000 mu of land (or 200 hectares) would be borrowed temporarily. The estimated number of affected households was 8,671 (33,540 people). By December 2005, 21,539 mu (1,436 hectares) had been acquired or about 20.3% more than the estimate, while more than the double the area (6,352 mu or 423.5 hectares) had been temporarily borrowed. According to the case study conducted in 2006 by the NRCCR, the significant increase in permanent and temporary land acquisition (though still less compared to other similar projects) was due to: (i) the increase in demand for land due to unforeseen factors such as land destroyed by construction activities caused by blasting work, the need to change temporary land requirement to permanent land acquisition, and triangle plots; (ii) the results of the detailed measurement survey brought about by the enlarged scope of the project; (iii) the addition of overpasses and service stations in some places in the project area; (iv) the abrupt change in the slope of the land that required additional land acquisition; (v) Additional land had to be acquired to meet the demand for local socio-economic development; and (vi) the additional land requirement in Pingxian. With the increase in land requirement, the affected population increased by 37.2% from the estimated 33,540 APs to 46,021 people. More data on changes to the RP are in Table 40. Resettlement was implemented on time. Local governments allowed the APs to choose from several resettlement sites. Farmers losing agricultural land were given the opportunity to consider suitable income replacement alternatives. The resettlement sites were provided with roads, electricity, water systems, and telephone lines. APs who built their own houses on contracted land were paid compensation for land.

⁸⁰ 1 mu = 1/15th hectare

Table 40: Planned versus Actual Land Acquisition and Resettlement Impacts

County/ City	Permanent Land Acquisition		Temporary Land Borrowing		Estimated APs		Actual APs	
	Planned	Actual	Planned	Actual	Household	Persons	Household	Persons
Zining	1,696	3,196	NA	198	503	2,796	1,338	6,154
Fusui	4,532	5,653	1,260	1,496	3,611	16,825	3,611	16,258
Jiangzhou	2,620	3,193	NA	1,114	862	4,258	1,156	5,317
Ningming	4,102	4,875	NA	2,364	1,920	7,680	1,856	8,723
Pingxiang	3,724	3,623	NA	851	968	4,065	1,386	6,377
Longzhou	1,233	998	NA	329	807	3,886	694	3,192
Total	17,907	21,539	2,934	6,352	8,671	33,540	10,041	46,021

AP = affected person, NA = not available

Source: Nanning Youyiguan Highway Construction Office.

205. At appraisal, it was estimated that about 14,000 square meters of structures, including houses needed to be demolished and about 200 households or 632 people needed to be relocated. By the end of 2005, about 32,000 square meters of residential structures were demolished, 133.5% more than estimated, and 649 people were relocated. On the other hand, about 21,000 square meters of non-residential structures were demolished which partially affected 89 people who did not require relocation. According to the report by the external monitor, the increase in the area of demolished structures was mainly due to project design changes. Table 41 shows the impacts of the planned and actual demolition of structures as of December 2005.

Table 41: Planned versus Actual Demolition Impacts

(as of December 2005)

County	Plan demolition		Actual demolition		Actual Demolition of Non-Residential Structures	
	APs	Area (m ²)	APs	Area (m ²)	APs	Area (m ²)
Zining	54	1,561	67	2,689	1	6,705
Fusui	20	2,457	109	12,859		11,253
Jiangzhou	81	1,074	30	2,205		1,951
Ningming	12	706	101	3,476	26	381
Pingxiang	278	7,274	284	8,555	62	870
Longzhou	187	803	147	2,620		70
Total	632	13,875	649	32,404	89	21,230

AP = affected person, m² = square meter.

Source: Project Case Study, National Research Center for Resettlement (2006).

12. Budget and Implementation Schedule

206. The RP estimated that land acquisition and resettlement would cost CNY321.7 million (or \$38.8 million⁸¹), for all costs including compensation, resettlement subsidy, payments for assets such as housing, fees, and monitoring and evaluation. According to the case study findings by NRCR, the resettlement compensation budget was CNY331.5 million (or \$39.9 million). According to the RP, the land acquisition and resettlement were estimated to cover seven months of implementation from April to October 2001. However, land acquisition and resettlement were completed in 2003.

⁸¹ Exchange rate used: CNY8.3 = \$1.0.

13. Compensation and Entitlements

207. The RP stipulated the total compensation for land and resettlement subsidy (Table 42). People losing land temporarily for borrowed sites were to receive payment equivalent to foregone production value for the period of loss, usually expected to be 1–2 years. Temporary land use was to be restored to the owner in the original condition or funds were provided to the owner to restore the land to its original condition. For structures lost, replacement value was to be provided to the affected households. Those losing housing were to be provided with a new housing site for free. Roads, electricity, and water were provided within their own administrative village. People were allowed to salvage materials from their old houses.

Table 42: Total Compensation Rates for Land and Resettlement

Item	Compensation Range (CNY/hectare)
Riceland	185,000–225,000
Vegetable land	60,000–540,000
Dryland	150,000–170,000
Fish pond	550,000–630,000
Sugarcane	170,000–220,000

CNY = Chinese Yuan.

Source: Resettlement Plan for Guangxi Roads Project.

208. GZAR promulgated a number of decrees⁸² in 2000, 2002, and 2005 as reference for the compensation. These contained compensation standards different from those stipulated in the RP. GZAR had made some changes in policies and the decrees contained production values based on actual values or price levels.



Guangxi landscape, village, and highway



Rebuilt houses in village

209. **Compensation for Land Loss.** Over 95% of APs lost agricultural land and most of them were either re-absorbed back into agriculture, with the affected villages carrying out some

⁸² Guilin Government (2000) No. 39: Interim Measures of Guangxi Zhuangzu Autonomous Region on Infrastructure Construction Land Acquisition; Guilin Regulation (2000) No. 501: Annual Production Radix and Demolition Compensation Standard of Infrastructure Construction Land in Guangxi Zhuangzu Autonomous Region; and Guilin Planning (2002) No. 274: Notice of Publicizing of Annual Production Radix; Guilin Planning (2005) No. 190: Demolition Compensation Standard of Infrastructures Construction Land in Guangxi Zhuangzu Autonomous Region.

village land adjustment to ensure village members have sufficient land to farm, or provided with cash compensation to engage in planting trees and other non-farm activities. The compensation standards for land were formulated according to the Land Administration Law of PRC. The principles behind the land compensation standards were as follows:

- (i) APs are to be compensated according to the standard of the original function of the acquired land;
- (ii) The whole procedure of determination of compensation standards shall be freely participated by APs;
- (iii) The land area of the new house shall be the same size as that of the original. The site selection shall be discussed with the displaced people and the new site dwellers. The decision shall be made after confirmation of both parties;
- (iv) Housing and special purpose structures shall be demolished by the owners, the reason for which is to restore them to their original function.

210. The compensation standards for permanent land acquisition used are in Table 43. The compensation rates for the six counties were different depending on land type (Tables 44 and 45). These compensation rates were mostly higher than those stipulated in the RP, proof of the rapidly improving land compensation and resettlement subsidy conditions.

Table 43: Land Compensation Standard⁸³
(CNY/mu)

Project		Paddy	Dryland	Vegetable Plot	Fish Pond/ Lotus Pond	Sugar-cane	Waste-land	Woods		Orchard/ Economic Forest	
								Harvested	Not Harvested		
Product per mu	First class	1,245	1,030	3,268	3,811	1,317	1,030	1,030	1,030	3,020	
	Second class	1,054	918	2,189	3,328	1,067	918	918	918	2,334	
Land Compensation	Multiplier	7	6	6	6	6	1	4	2	5	
	Unit Price class	1st class	8,715	6,180	19,608	22,866	7,902	1,030	4,120	2,060	5,150
Resettlement Subsidy	2nd class	7,378	5,508	13,134	19,968	6,402	918	3,672	1,836	4,590	
	Multiplier	5	5	5	5	5	0	4	2	4	
	Unit Price class	1st class	6,225	6,180	16,340	19,055	6,585	0	4,120	2,060	4×1030
	2nd class	5,270	4,590	10,945	16,640	5,335	0	3,672	1,836	4×918	
Total	1st Class	14,940	11,330	35,948	41,921	14,487	1,030	8,240	4,120	22,240	
	2nd Class	12,648	10,098	24,079	36,608	11,737	918	7,344	3,672	17,676	

CNY = Chinese Yuan, mu = 1/15th hectare.

Source: District Planning Committee, The Notice of Publicizing of Annual Production Radix and Demolition Compensation Standard of Infrastructures Construction Land in Guangxi Zhuang Autonomous Region. June 14, 2002, Guilin Regulation [2002]274.

⁸³ Nanning suburb and Zining belong to first class, Fusui, Chongzuo, Ningming and Longzhou are second class; others are third class.

Table 44: Permanent Land Acquisition Compensation Standard for Zining County
(CNY/mu)

Land type	Land Compensation		Resettlement Compensation		Young Crop Compensation
	Collective	State-Owned	Collective	State-Owned	
Paddy Field	9,079	6,354	6,484	4,539	648
Dryland	6,210	4,347	5,175	3,622	518
Sugar Cane	7,814	5,470	6,512	4,558	1,302
Vegetable plot	20,382	14,266	16,984	11,888	1,698
Orchard	18,994	13,296	4,140	2,898	3,165
Wasteland	1,035	725	0	0	0
Woods	2,070–9,315	1,449–6,521	3,764	2,634	175–4,084

CNY = Chinese Yuan, mu = 1/15th hectare.

Source: District Planning Committee, The Notice of Publicizing of Annual Production Radix and Demolition Compensation Standard of Infrastructures Construction Land in Guangxi Zhuang Autonomous Region. June 14, 2002, Guilin Regulation [2002]274.

Table 45: Permanent Land Acquisition Compensation Standard
(Fusui County, Jiangzhou County, Ningming County,
Pingxiang County, and Longzhou County)
(CNY/mu)

Land type	Land Compensation		Resettlement Compensation		Young Crop Compensation
	Collective	State-Owned	Collective	State-Owned	
Paddy Field	6,783	4,748	4,845	3,391	485
Dryland	4,968	3,477	4,140	2,898	414
Sugar cane	5,826	4,078	4,855	3,398	971
Vegetable Plot	12,648	8,853	10,540	7,378	1,054
Orchard	19,230	13,461	16,025	11,217	3,205
Wasteland	828	9,450	0	0	0
Woods	1,745–7,452	1,159–5,216	3,312	2,318	175–4,084

CNY = Chinese Yuan, mu = 1/15th hectare.

Source: District Planning Committee, The Notice of Publicizing of Annual Production Radix and Demolition Compensation Standard of Infrastructures Construction Land in Guangxi Zhuang Autonomous Region. June, 14, 2002, Guilin Regulation [2002]274.

211. The Project also required borrowing land temporarily to be used for earth pit excavations, pavements, storage area for construction materials, work site, and as a site for living facilities of staff of the contractors. The compensation for temporary land (which is often computed as equivalent to one year) included compensation for damaged young crops, land compensation, and compensation for land re-cultivation. The compensation for temporary land use was equivalent to the average production value of the past 3 years before land acquisition. If the duration of use was more than 1 year but less than 2 years, the compensation was twice the amount (Table 46 and Table 47 for the different compensation standards in the different counties).

**Table 46: Compensation Standard for Temporary Land Acquisition
(Zining County)
(CNY/mu/Year)**

	Paddy Field	Dryland	Sugar-cane	Vegetable Plot	Fish Pond	Orchard	Wasteland	Woods
Amount	1,297	1,035	1,302	3,396	3,977	3,165	200	175–4,084

CNY = Chinese Yuan, mu = 1/15th hectare.

Source: District Planning Committee, The Notice of Publicizing the Annual Production Radix and Demolition Compensation Standard of Infrastructure Construction Land in Guangxi Zhuang Autonomous Region. June, 14, 2002, Guilin Regulation [2002]274.

**Table 47: Compensation Standard for Temporary Land Acquisition
(Fusui County, Jiangzhou County, Ningming County, Pingxiang County,
and Longzhou County)
(CNY/mu/Year)**

	Paddy Field	Dryland	Sugar-cane	Vegetable Plot	Fish Pond	Orchard	Wasteland	Woods
Amount	969	828	971	2,108	3,205	2,250	200	175–4,084

CNY = Chinese Yuan, mu = 1/15th hectare.

Source: District Planning Committee, The Notice of Publicizing the Annual Production Radix and Demolition Compensation Standard of Infrastructure Construction Land in Guangxi Zhuang Autonomous Region. June 14, 2002, Guilin Regulation [2002]274.

212. By 2005, total compensation for permanent land acquisition of CNY247.7 (or \$29.8 million) was paid to 46,021 APs affected by land acquisition or an average of CNY5,382 (or \$648) per AP. Total compensation for temporary land borrowing amounted to CNY14.2 million. Table 48 shows the land compensation payment by land type per area. Local governments and the project did not keep data for actual receipts of compensation by APs.

**Table 48: Actual Land Compensation
(CNY million)**

County/City	Town	Village	Permanent Land	Paddy Field	Dryland	Economic Forest	Temporary Land
Yongning	2	3	48.1	9.5	20.1	0.6	0.4
Fusui	4	28	65.1	2.1	9.1		4.1
Jiangzhou	2	8	34.6	3.5	4.1	5.4	2.8
Ningming	3	32	50.8	10.2	28.5	2.1	4.3
Pingxiang	4	16	37.4	9.9	4.9	3.4	1.7
Longzhou	4	8	11.7	2.5	1.7	1.3	0.9
Total	19	95	247.7	37.7	68.4	12.8	14.2

CNY = Chinese Yuan.

Source: Nanning Youyiguan Highway Construction Office.

213. **Compensation for Demolished Buildings and Resettlement Subsidy.** Compensation was provided for structures demolished as a result of the Project. Table 49 summarizes the planned and actual compensation rates used for demolished buildings. According to the report of the external monitor, the rates were different than those in the RP because of the following: (i) frame structure buildings and brick-concrete buildings were classified into two grades in the RP however, these two types but no distinction was necessary based on Guilin Regulation No. 274 (2002); (ii) brick-timber building is classified into two grades in the RP but was regarded as one grade per Guilin Regulation No. 274 (2002); and (iii) all earth walls were regarded as the same grade but two grades were set for them according to Guilin Regulation No. 501.

Table 49: RP versus Actual Compensation Standards for Demolished Buildings

Building Type	RP Compensation Standard (CNY/m ²)	Actual Compensation Standard (CNY/m ²)	Difference (+/-)	Notes
Brick-concrete structure	250	300	50	
Brick wall-timber structure	200	210	10	
Earth wall structure	140	80	-60	Earth wall with asphalt roof
Others	100	30-50	-70-50	Simple earth wall with grass roof

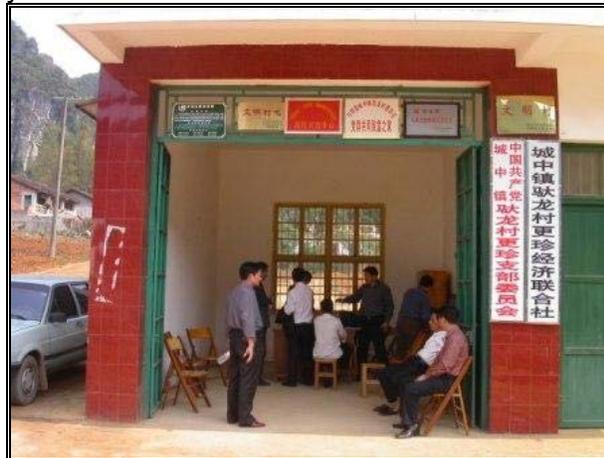
CNY = Chinese Yuan, m² = square meter.

Source: Nanning Youyiguan Highway Construction Office.

214. The relocation sites were nearly 100–200 meters away from APs original locations and were still part of the original village. Thus, the village economy and culture have not been disturbed. The GZAR government provided some APs with new residential lots free of charge. Lot sizes were equal to the size of the APs' previous lots and land titles were issued to them. APs were allowed to build their houses in the areas where they had lots in 2000. Compensation was provided to APs if they built their houses in contracted land. According to a report from the external monitoring agency, the house area was about 11.22 square meters per person before land acquisition. This increased to 17.44 square meters per person after a year and further increased to 23.17 square meters per person a year later.



Posting of compensation rates



Where the compensation was paid

215. A total of CNY7.6 million (\$0.92 million) in compensation was paid in December 2005 to 649 APs affected by house demolition or CNY11,710 (\$1,411) per AP (Table 50). According to the results of the survey conducted by the external monitor among APs, the cost of a newly built house was about CNY350–480 (\$42–58) per square meter with a minimum of CNY300 (\$36) per square meter and a maximum of CNY500 (\$60) per square meter. The compensation for building loss was usually at par with the cost of building a new house with the same area and the same structure as the old one. However, most of the resettled families wanted the quality and structure of their new houses to be better than their old one, requiring an average of CNY10,000 (\$1,205) in additional funds. Thus, APs used their own savings in addition to the compensation they received or borrowed money from friends or relatives. However, based on the report by the Guangxi National Economy Institute, most APs were satisfied with their new houses. On the other hand, farmers affected by land acquisition indicated that they were also satisfied with the replacement land provided for them.

Table 50: Actual House Compensation, by County
(CNY million)

County	Town	Village	Demolition Compensation	House Compensation	Brick-Concrete and Brick-Wood Structure	Moving Subsidy	Attachments Compensation	Non-residential House Compensation
Yongning	2	3	2.49	0.75	0.75	0.01	0.50	1.23
Fusui	4	28	1.88	1.08	1.01	0.01	0.10	0.68
Jiangzhou	2	8	0.72	0.47	0.45	0.11	0.09	0.05
Ningming	3	32	0.78	0.71	0.71	0.01	0.01	0.04
Pingxiang	4	16	1.08	1.01	0.90	0.02	0.01	0.04
Longzhou	4	8	0.66	0.65	0.65			0.01
Total	19	95	7.61	4.67	4.47	0.16	0.71	2.05

CNY = Chinese Yuan. Source: Nanning Youyiguan Highway Construction Office.

216. Structures attached to buildings that were likewise demolished as a result of the Project were compensated accordingly. Compensation standards used for demolished building attachments are shown in Table 51.

Table 51: Compensation Standard for Building Attachments
(CNY/unit)

Project	Structure Types	Unit	Compensation Standard
Kilns and tombs	Brick-tile kilns	each	3,000
	Tombs with owners	each	40
Electricity, Telegraph, Broadcast and CATV	>10 Kv electricity pole	each	2000
	< 380v electricity pole	each	120
	Long-distance telecom pole	each	480
	County, urban telecom pole	each	240
	Broadcast pole	each	60
	CATV pole	each	60
Other ground attachments	Valve of Φ 50cm and less	each	1,000
	Valve of Φ 50cm and over	each	1,500
	Pool	each	1,500
	Well	each	1,500
	Irrigation waterwheel	each	5,000
	Food processing water mill	each	5,000
Water Conservation	Earth ditch	m	3 ~ 5
	Concrete mortar channel	m ²	5 ~ 8
	Masonry- mortar- brick structure	m ²	30 ~ 35
Walls	Cleft stone	m ²	15
	Earth wall	m ²	7
	Red brick concrete wall	m ²	20
Field Water Tank	≥ 120 m ³	m ³	50
	<120 m ³	m ³	40
Simple House	Earth wall and grass surface	m ²	40
	Earth wall and tile surface	m ²	60
	Brick-wood structure	m ²	90
	Brick-concrete and frame structure	m ²	120
	Grass/bamboo wall, grass or asphalt felt, asbestos tile surface	m ²	10
Bleachery	Tabia	m ²	6
	Concrete	m ²	15
Marsh Gas Tank	<10m ³	each	1,500
	>10m ³	each	1,800
Manure pit		m ³	20
Abamurus		m ²	15

CNY = Chinese Yuan, m² = square meter, m³ = cubic meter.
Source: Nanning Youyiguan Highway Construction Office.

217. **Compensation for Damaged Crops.** Compensation was provided to APs for trees and crops damaged by the Project. Table 52 compares the compensation standards in the RP and the actual rates used in the Project.



Table 52: Compensation Standards for Damaged Trees and Crops⁸⁴
(CNY/unit)

Item		Unit	RP Compensation Standard	Actual Compensation Standard	
Fruit Trees	Longan, Lychee	Young tree and seedlings	One tree	8	5-20
		5cm>D.3cm	One tree	20	30/120
		10cm>D>5cm	One tree	50	183/64
		D>10cm	One tree	250	230–300
	Mango, hesperidium, orange, wampee, Sanhua plum, chestnut, grapefruit, olive, pimenta officinalis	Young tree and seedlings	One tree	8	0.5-2.5
		5cm>D>3cm	One tree	12	40
		10cm>D>5cm	One tree	30	70–100
		D>10cm	One tree	80	100–150
	Peach, Carambola, guava, megrante lemon, pear	Young tree and seedlings	One tree	8	2
		5cm>D>4cm	One tree	10	40
0cm>D>5cm		One tree	35	70	
D>10cm		One tree	45	100–150	
Banana, papaya	5cm>D>3cm	One tree	5	5	
	10cm>D>5cm	One tree	10	8–15	
	D>10cm	One tree	25	20–25	
Timber Tree	China fir, Tung	5cm>D>3cm	One tree	10	10
		10cm>D>5cm	One tree	15	15
		D>10cm	One tree	20	20
Bamboo	Pine, eucalyptus and other trees	5cm>D>3cm	One tree	5	5
		10cm>D>5cm	One tree	7	7
		D>10cm	One tree	10	5–20
		4cm>D	One tree	5	2–5
		D>4cm	One tree	8	15

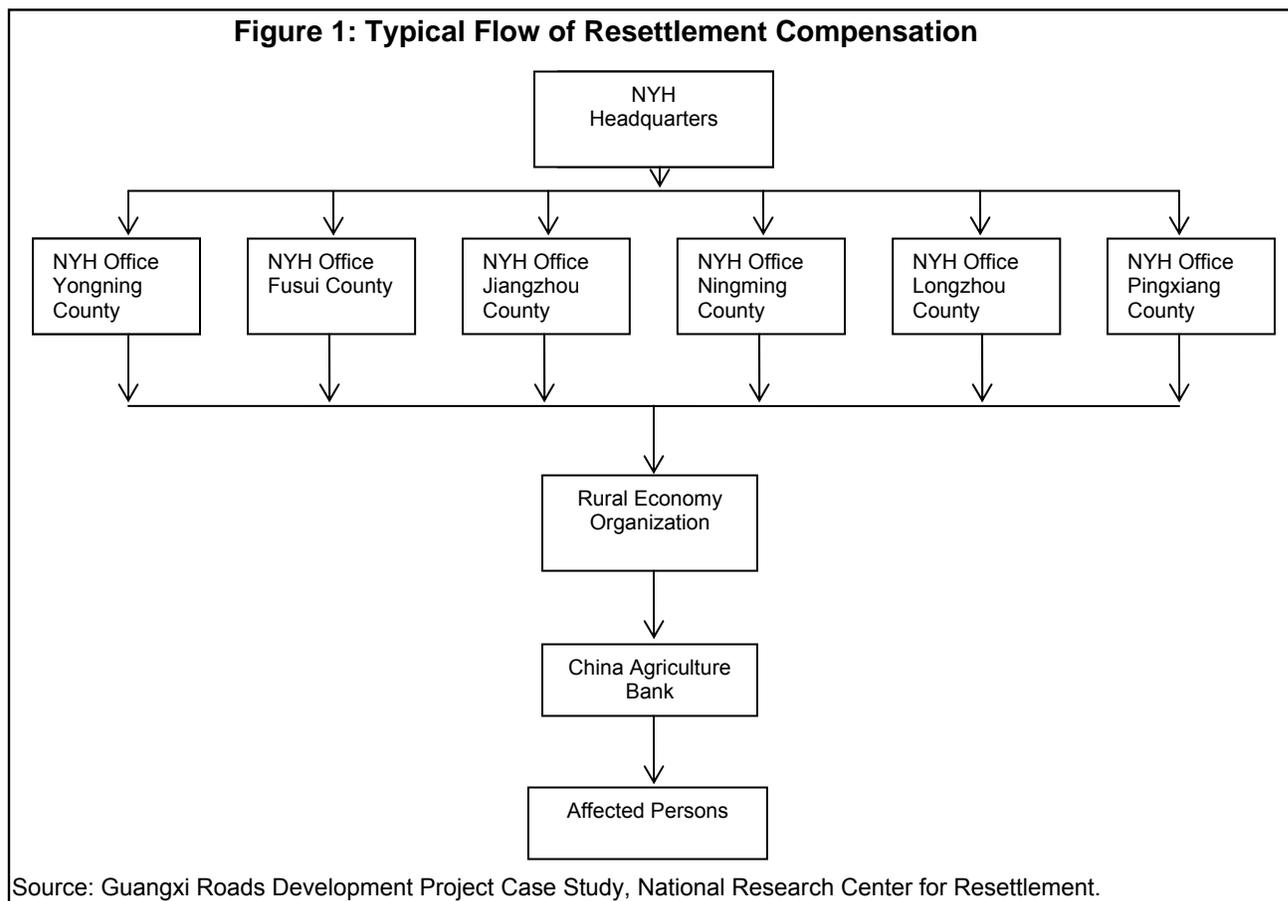
CNY = Chinese Yuan, D = diameter of tree trunk.

Source: Nanning Youyiguan Highway Construction Office.

218. **Flow of Compensation Payments.** The survey conducted for the case study by NRCR showed that compensation for land loss, resettlement subsidy, and compensation for damaged crops were usually paid directly to APs (through individual accounts in the China Agriculture Bank) in most counties. In the case of Pingxiang County, the NYH office paid the land

⁸⁴ The tree species not in the table were compensated as similar species and not as a new one.

compensation to APs with no deduction for the rural economic union.⁸⁵ On the other hand, the NYH office in Yongning County paid land compensation to the village collective but resettlement subsidy and compensation for crop loss were paid directly to APs. If the land taken was collective wasteland, then 80% of land compensation was paid directly to APs, and the remaining 20% was paid to village brigades, economic unions, and village committees. The typical flow of compensation payment to APs followed the sequence below (Figure 1).



14. Income and Livelihood Restoration

219. The survey conducted by NRCR for the project case study found that villagers owned more land after land acquisition than before. This was because APs were cultivating more dryland that used to be just wasteland.

220. The GZAR government provided affected farmers with the following assistance in order to help restore their livelihoods and standards of living:

⁸⁵ The economic union is a village collective and is similar in concept with a village brigade. This is different from other organizations in rural China.

- (i) Additional employment opportunities by hiring some of the APs to assist in the construction of the highway;
- (ii) Providing vocational training to farmers that had 25% or more of their farmland expropriated (sugarcane planting, raising livestock, etc.);
- (iii) Providing or improving irrigation systems;
- (iv) Tapping the services of the Department of Technology and the Department of Agriculture to provide training on improved agricultural production;
- (v) Building or repairing roads in order to facilitate farm-to-market access; and
- (vi) Restoring water conservation facilities.

221. In 2002, before land acquisition, the average income was CNY2,180 (\$263) per person. This decreased to CNY2,123 (\$256) per person in 2003 because production conditions of affected farmers had not been fully restored. However, incomes increased to CNY2,589 (\$312) per person in 2004. The report of the monitoring agency gave the following reasons for the increase in family incomes: (i) labor transfer income filled the gap of income lost after land acquisition; (ii) engaging in other income-generating activities such as crop rotation, livestock raising, transport business,⁸⁶ knitting and other cottage industries; and (iii) improved market conditions for farm produce and livestock. Moreover, farmer incomes have been positively influenced by the planting of more sugarcane on dryland which later on was sold at good prices. Data on incomes for 2005 (for which a survey has already been done according to GCD) and for 2006 is expected to rise further mainly due to good market conditions. The rehabilitation program also included various trainings for APs with courses ranging from livestock breeding, cash crops production, and skills training. About 1,023 farmers benefited from the training programs. The trainings were administered by the Labor Bureau and the Employment Training Center.

222. The result of the survey conducted for the project case study by NRCR revealed that of the 42 household heads interviewed, 85% indicated that their household incomes have increased after resettlement while 15% indicated that their incomes did not change after resettlement (Table 53).

Table 53: Post-Resettlement Income Levels of Affected Households

Income Level	Number of Households	%
Decreased		
Same as before	6	15
Increased	36	85
Increased significantly		
Total	42	100

Source: Guangxi Project Case Study, National Research Center for Resettlement (2006).

223. Table 54 shows the changes in the number of households in different income levels in during pre- and post-resettlement periods. The number of households in the income brackets between CNY6,000–12,000 (\$723–1,446) and CNY12,000–18,000 (\$1,446–2,168) increased by 100%. These clearly showed that at the minimum, affected households have improved their annual income levels after resettlement implementation. This can be attributed to, among others, more opportunities for non-agriculture employment.

⁸⁶ Transport business involved renting out tractors to transport farm products from one county to another.

Table 54: Comparison of Estimated Average Annual Household Incomes

Annual Income (CNY)	Pre-Project (Number of HHs)	%	Post-Project (Number of HHs)	%
Less than 1,000	0	0	0	0
1,000–1,875	1	2	0	0
1,875–2,500	2	5	2	5
2,500–4,000	12	28	11	26
4,000–6,000	23	55	21	50
6,000–12,000	2	5	4	10
12,000–18,000	0	0	2	5
More than 18,000	2	5	2	5
Total	42	100	42	100

CNY = Chinese Yuan, HH = household.

Source: Guangxi Roads Project Case Study, National Research Center for Resettlement (2006).

224. Five percent of the APs were regarded as part of the vulnerable group⁸⁷ of the community. Measures were taken to ensure that these families' livelihood and incomes were not worse off after the project. These measures included the provision of jobs in the construction of the highway; providing loans for production inputs; provision of state pension (including medical insurance and burial subsidy); and provision of skills training.

15. Consultation and Information Disclosure

225. The 1998 Land Law requires disclosure of information to and consultation with APs. As a result of this, the township and village officials conducted consultation meetings with APs. In early April 2001, an information booklet about the RP was distributed to all affected townships through the farmer collectives. The information booklet contained key information such as the resettlement scope; expected time frame for resettlement; compensation rates for land and other assets; other assistance to replace assets, housing, and incomes; and the grievance redress mechanisms. Information regarding the progress of the progress and the LAR implementation were disclosed through the tri-media.⁸⁸

16. Grievance Redress and Benefit Monitoring and Reporting

226. The EA had set up a grievance redress mechanism to address complaints lodged by APs regarding land acquisition and resettlement. Consultations with APs have been conducted often particularly when sensitive issues (such as the necessity to acquire more farmland) needed to be discussed, the government of GZAR dealt with just a few grievances. In 2005, 270 letters of complaints had been sent to Project authorities, and 53 complaints were so far lodged this year. The more common complaints submitted were: (i) damages to farmland; (ii) damaged irrigation systems that impeded agricultural production; and (iii) the closure of some roads that hindered their farm-to-market trade. Some complaints were regarded by Project authorities as unreasonable. Responses to grievances were often not formalized instead, visits were made to villages to address complaints. These complaints were subsequently addressed by the local governments.

⁸⁷ Vulnerable households refer to the elderly, disabled persons, or households with people suffering from chronic diseases, with unskilled labor, or with widowed people and those who are extremely poor. Also included in this group are those families regarded as "five guarantee families" or households that are extremely poor and are therefore assured to be provided with food, housing, clothing, medical treatment, and burial expenses by the government.

⁸⁸ Print, radio, and television.

227. A monthly reporting system was established in the PMU. The EA engaged an independent social research agency⁸⁹ with experience in resettlement assessments, in order to assess whether the APs received their entitlements and ascertain whether the resettlement objectives of full restoration of incomes and living standards have been achieved.

17. Issues

228. In general, the external monitor regarded the implementation of the Project's land acquisition and resettlement activities as highly effective and successful. However, based on the project case study findings by NRCR, there are a number of issues that need to be resolved.

229. **Some families have not moved to resettlement sites.** Eight families in Chongzuo in Jlangzhou district have not decided on a resettlement site where they are going to relocate. They are currently staying temporarily in Naliang farm. The houses of these eight families were not included in the urban construction area and since Chongzuo became a district of the new municipality, these families could not obtain urban residency.

230. **Indebtedness of APs.** Most of the resettled families wanted the quality and structure of their new houses to be better than their old one. The compensation provided for demolished houses appeared to be insufficient in building a bigger and better house which required an average of CNY10,000 (\$1,205) in additional funds. Thus, APs used their own savings in addition to the compensation they received or borrowed money from friends or relatives.

18. Attitudes to Resettlement

231. The project case study conducted an attitudinal survey among 42 APs in order to evaluate the level of success of the resettlement implementation against the objectives set at the beginning of the Project from the point of view of APs. Table 55 provides a summary table on the results of this survey.

232. About 82% of the respondent APs agreed that the resettlement activities had been strongly successful and 18% said that this was a success. In terms of the consultation process, 79% of respondents strongly agreed that adequate consultation with APs had been carried out during resettlement planning and implementation, 14% of respondents agreed, 5% neither agreed nor disagreed, while 2% disagreed that the consultation process was effective. Sixty-nine percent of respondent APs said they strongly agreed that the grievance mechanism was effective, 24% agreed, 5% neither agreed nor disagreed, and 2% disagreed. Sixty-four percent of the respondents said they strongly agreed that their household incomes have been restored, 29% agreed, 7% neither agreed nor disagreed. Half of the 42 respondents stated they were definitely better off than before, 29% said their economic situation is better than before resettlement, 7% said they were slightly better off, and 14% said they had the same income levels as before the project commenced. In terms of general satisfaction to the resettlement operations, 82% of the respondents said they were very satisfied and 18% said they were generally satisfied.

⁸⁹ National Economic Institute of the Guangxi Academy of Social Sciences.

Table 55: Attitudes to Resettlement

Item	Number of responses	% Share
A. Perception of Success of Resettlement Implementation		
Strongly Successful	34	82
Success	8	18
Neither Success nor Failure	0	0
Failure	0	0
Total	42	100
B. Perception of Effectiveness of Consultation Process		
Strongly agree	33	79
Agree	6	14
Neither agree nor disagree	2	5
Strongly disagree	0	0
Disagree	1	2
Total	42	100
C. Perception of Effectiveness of Grievance Resolution		
Strongly agree	29	69
Agree	10	24
Item		
Number of responses		
% Share		
Neither agree or disagree	2	5
Strongly disagree	0	0
Disagree	1	2
Total	42	100
D. Restoration of Income		
Strongly agree	27	64
Agree	12	29
Neither agree or disagree	3	7
Strongly disagree	0	0
Disagree	0	0
Total	42	100
E. Comparison of Household Income Levels (Pre-project vs Post-project)		
Definitely Better off	21	50
Better than before	12	29
Slightly better than before	3	7
Same	6	14
Poorer than before	0	0
Total	42	100
F. Overall Satisfaction on Resettlement Operations		
Very satisfied	34	82
Generally satisfied	8	18
Better than having nothing	0	0
Dissatisfied	0	0
Extremely dissatisfied	0	0
Total	42	100

Source: Guangxi Roads Development Project Case Study.

19. Field Visits

a. Field Visit to Chulin Village

233. An operations evaluation mission (OEM) was organized in early 2006 for this SES to assess the application of the social safeguard policy in the Project. Following are the findings of the OEM field visits in a resettlement site in Chulin Village.

234. Chulin Village had 105 families (500 persons). Ten affected households were relocated in Chulin Village. The new houses were built by APs themselves. The Project paid the Village Collective for replacement land and the Village Collective provided 4.2 mu (or 0.28 hectare) of land where all ten houses were to be built according to the Project's specifications. An office for the village collective was also built in the land and a basketball court had been donated by the contractors. Land acquisition took one month to implement and leveling of the slope took three months. There was no readjustment or consolidation after the land acquisition process.

235. Affected farmers were individually compensated by cash (7x annual AOV for land only and 5x annual AOV if APs needed to be relocated). Three people were employed by the expressway as gardeners, for which they were paid by the Project at CNY400/month (or \$48/month). The villagers reported that the selling of land to other members in the collective was allowed. The OEM interviewed one AP and she said she received CNY90,000 (or \$10,843) representing compensation for her demolished house, the loss of 4 mu (or 0.27 hectare) of land, and resettlement subsidy. Her new house had cost CNY70,000 (or \$8,434) to build. She was satisfied with the process.



Resettlement site in a village

b. Meeting with local government of PingXiang City

236. The OEM held a meeting with the officials of the local government of PingXiang City, one of the areas affected by the Project. According to the local officials, four towns had been involved in the land acquisition exercise, including ten villages with 21 village groups. A total of 111 structures had been demolished where 51 families have yet to rebuild their house, 45 households had rebuilt their house, two houses were still under construction, and 4 decided not to build a new house since they still have another house. Some of the households decided to delay the construction of their new house until they have enough funds to do so. Most of the new structures were made of cement and concrete whereas their old houses were made of mud. The area had 3,600 APs and all of them have received compensation on time and that all complaints and grievances have been resolved.

237. About 87% of the total population was of ethnic origin (80% were Ajang while others were Yao, Tong, and Tai, Jing minorities). In the past ten years, when the Ethnic Minority Bureau and Poverty Bureau were set up, the focus was the provision of roads to mountain areas so that ethnic minorities could easily bring their produce to the markets. Those affected by resettlement were allowed to follow their own customs in the rebuilding process. Adequate infrastructure, like water systems, electricity, and road access were provided

238. The Poverty Bureau was responsible for providing assistance to the poor members of the community, such as providing free piglets and training courses. Last year, 180 laborers (2/3 of which were female since most young men were already working outside the village) had been trained. Eighty percent of those trained have found employment.