



Social Monitoring Report

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Prepared by: National Economy Research Institute
Guangxi Academy of Social Science

For Guangxi Communication Department

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Asian Development Bank

Nanning (Tanluo) – Baise Expressway Project
Guangxi Roads Development Project II

External Monitoring & Evaluation Report on Resettlement

No. 4

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1. Brief Introduction

Nanning(Tanluo) to Baise expressway (hereinafter called Nanbai expressway) starts at Tanluo township in the western suburb of Nanning where connects with Nanning to Tanluo expressway, passes through Long'an county, Pingguo county, Tiandong county, Tianyang county, Shangsong group at Youjiang district in Baise, and ends at Luocunkou village in Baise where links the Baise to Luocunkou village. The total length of Nanbai expressway is 188 km. Total investment of the project is CNY5.3 billion, including USD200 million of ADB fund. The project commenced construction in June 16, 2005, and opened to traffic in December 28, 2007.

Baise – Napo Highway was chosen as the Inter-county Road to be improved, with the total length of 245 km, of which the length from Baise to Kuixu section is 138 km (originally from Baise to Panshui, then extending to Kuixu in Jingxi county). The works were commenced in Sep. 10 2005 and completed in Nov. 2007 when the works were checked, accepted and opened to traffic. Kuixu to Napo section was commenced construction in Nov.1 2005 and completed construction in Jun. 2009, of which 2 contracts section were opened to traffic and 1 contract was still under construction, of which most of subgrade construction was completed. The work of land acquisition and resettlement for Kuixu to Napo section was completed in Sep.2007.

Altogether 70 rural roads leading to the ethnic regions located in Loang'an county, Pingguo county, Tianyang county and Youjiang district were chosen to be improved. Up to the end of 2006, the rural roads with the total length of 500 km were completed improvement at ethnic villages.

2. Land Acquisition

2.1 Completion of Land Acquisition and Resettlement

2.1.1 Land Acquisition

Permanent land acquisition: Up to date, the work of permanent land acquisition was completed on Nanbai expressway. According to the data provided by the Nanning to Baise Expressway Project Construction Office (hereinafter refers to PCO), the area of permanent land acquired for the Project was 24,046 *mu* up to May 31, 2009 (see Table 2.1 for details), which exceeded the figure of 21,392.7 *mu* by 2,653.32 *mu* (see Table 2.2 for details). Comparing with the acquired land area of 23,240 μ m in 2008, extra 806 *mu* was required in 2009, including 55.59 *mu* in Long'an county, 20.29 μ m in Pingguo county, 94.67 μ m in Tiandong county, 546.05 μ m in Tianyang county and 89.44 μ m at Youjiang district. However, the statistic data kept the same as last year at Xixiangtang district in Nanning.

Table 2.1 Area of Permanently Land Acquisition for Nanbai Expressway Unit: *m*

County	Subtotal	Paddy land	Dry land	Vetab le land	Orchard	Forest	Const ruction land	other s	Waste land
Xixiangtang	1237.766		212.321	123.693	682.029	72.614		39.681	107.428
Long'an	5773.480	1524.373	1926.700	44.682	1168.764	217.124		89.502	802.799
Pingguo	3422.799	553.429	2170.037	70.1950	26.825	98.876		37.106	466.3310
Tiandong	6437.911	1867.014	1623.536		1818.192	382.337	57.249	71.435	618.148
Tianyang	4527.559	1463.276	523.691		2318.254	48.139		76.447	97.752
Youjiang	2646.533	622.741	955.912	5.457	755.187	93.646	33.873	168.820	10.896
Total	24046.048	6030.833	7412.197	244.027	6769.251	912.736	91.122	482.991	2103.354

Source: Provided by PCO. The data keeps the same as last year at Xixiangtang district.

Reasons for the increase of permanent land acquisition: (1) the area of permanent land acquisition increases at some individual places because the natural disasters of flood and landslides threaten safety of the expressway; (2) the area of permanent land for construction involved in mining and various types of waver irrigation facilities was not fully statistic yet;(3) statistical standards are inconsistent, resulting some data changes.

Table 2.2 Comparison Planned Area with Actually Area of Permanent Land in 2009

Unit: *mu*

County	compar ison	Sub-total	Paddy land	Dry land	Vegeta ble land	Orchard	Forest	Const ruction land	Waste land and others
Xixiangtang	planed	1148.70		238.40	92.30	652.70	52.90		79.90
	actual	1237.77		212.32	123.69	682.03	72.61		147.11
Long'an	planed	5377.40	1372.90	1761.80		1058.30	151.60		955.60
	actual	5773.48	1524.37	1926.70	44.68	1168.76	217.12		892.30

Pingguo	planned	3394.10	537.40	1938.40	36.90	45.60	106.40		701.50
	actual	3422.80	553.43	2170.04	70.20	26.83	98.88		503.44
Tiandong	planned	5762.80	1980.00	1522.90		1150.80	256.00		796.30
	actual	6437.91	1867.01	1623.54		1818.19	382.34	57.25	689.58
Tianyang	planned	3558.60	1096.90	427.40		1836.00	37.20		103.40
	actual	4527.56	1463.28	523.69		2318.25	48.14		174.20
Youjiang	planned	2150.60	474.10	695.90	17.30	599.60	90.40		228.60
	actual	2646.53	622.74	955.91	5.46	755.19	93.65	33.87	179.72
Total	planned	21392	5461.30	6584.80	146.50	5343.00	694.50	0.00	2865.30
	actual	24046	6030.83	7412.20	244.02	6769.25	912.73	91.12	2586.35

Source: according to Land Acquisition and Resettlement Action Plan of Nanning (Tanluo) to Baise Expressway (hereinafter refers to RAP) and data provided by PCO.

Temporary land acquisition: The temporary land area originally set in RAP was 4,653 mu. Up to May 2009, the actual area of temporary land acquisition was 9,250.4 mu, with an increased rate of 98.81%, which exceeded the planned area by 4,597.4mu (see table 2.3).

Table 2.3 Summary of Temporary Land Area of Nanbai Expressway unit: mu

County	Subtotal	Paddy land	Dry land	Vegetable land	Orchard	Fish pond	Forest	Waste land	others
Xixiangtang	471.5		312.3		64.6	0.5	1.000	93.1	
Long'an	2520.6	345.73	1184.3	246.5	246.2	26.3	400.4	71.2	
Pingguo	1038.3	27.3	540.5		10.1	6.878	352.1	101.4	
Tiandong	2482.4	62.6	1418.7		680.1	19.2	110.4	188.3	3.2
Tianyang	921.3	158.8	150.8		532.9	6.7	10.3	61.8	
Youjiang	1816.4	159.1	575.4	1.6	743.2	85.1	218.2	12.9	20.8
Total	9250.4	753.5	4181.9	248.1	2277.2	144.6	1092.3	528.8	24.0

Source: provided by PCO.

Compared to the figure of 8,701.4mu temporary land acquisition in 2008, the area had increased by 549 mu. The reasons are as follows: (1) the estimated figure in RAP was made according to the data provided in the engineering feasibility study and, therefore, some deviations thus existed; (2) a lot more of the temporary land was required during the construction; (3) some contractor negotiated the temporary land with village collective by themselves, thus, the data were not counted by Nanbai PCO and submitted to Nanbai PCO later.

Table 2.4 Comparison Planned Area with Actual Area of Temporary Land in 2009

unit: mu

Item	Total	Paddy land	Dry land	Vegetable land	Orchard	Fish pond	Forest	Waste land	Others
Planned	4653	277	2430		875		298	773	
Actual	9250	754	4182	248	2277	145	1092	529	24
+ -	4597	477	1752	248	1402	145	794	-244	24
+ - %	98.79	172.2	72.10	0	160.22	0	266.44	-31.57	0

Source: provided by PCO.

For increase of temporary land area, forest, paddy land, orchard and dry land account for great proportion.

2.1.2 Population Affected by Land Acquisition

According to the data provided by PCO, from July 2008 to June 2009, 20,212 households were affected by permanent land acquisition, exceeding more 154 households than the figure estimated in RAP. Total 88,799 persons were affected by the permanent land acquisition, exceeding more 647 persons than estimated figure in RAP. Actual affected households and population see table 2.5.

Table 2.5 Comparison of Actual Population Affected by Project with Estimated Figure in RAP

County	Estimated population in RAP		Actual affected population (up to July 2008)		The latest affected population (up to June 2009)	
	household	person	household	person	household	person
xixiangtang	125	551	1635	6609	1635	6609
Long'an	509	2241	4298	18853	4315	18901
Pingguo	951	4183	3463	14824	3470	14852
Tiandong	803	3533	2906	14124	2923	14207
Tianyang	377	1657	5156	22224	5257	22657
Youjiang	222	976	2600	11518	2612	11573
Total	2987	13141	20058	88152	20212	88799

Note: The estimated figure comes from RAP, while the actually affected population is provided by PCO.

From above table, comparing with the last report, 48 persons in Long'an county, 28 persons in Pingguo county, 83 persons in Tiandong county, 433 persons in Tianyang county and 55 persons at Youjiang district that were affected by permanent land acquisition increased. In addition, the data of households affected by land acquisition in Tiandong county, Tianyang county and Youjiang district were wrongly calculated in No.3 Report, which should be 2,906 households, 5,156 households and 2,600 households in

Tiandong county, Tianyang county and Youjiang district respectively.

Table 2.6 Summary of House Demolition in Nanbai Expressway

(up to the end of July 2009)

County	Household and population affected by house demolition (household/person)			Area of house demolition (m ²)		
	Total household	# Household	Affected person	Total	# living house	others
Tanluo township	14	8	38	2890	2205	685
Long'an	139	67	299	13178	9295	3883
Pingguo	71	71	497	15069	11849	3220
Tiandong	135	97	456	15735	10867	4868
Tianyang	238	212	998	15499	14871	4182
Youjiang	54	52	243	10524	7910	2614
Total	651	507	2531	72895	56997	19452

Source: provided by PCO and sub-offices in counties.

2.2 Policy of Land Acquisition and Resettlement and Payment Procedure

The work of land acquisition and resettlement strictly follows the regulations as stipulated in RAP. Compensation standard of land acquisition and resettlement keeps the same as External Monitoring and Evaluation No.1 Report for Land Acquisition and Resettlement submitted to ADB in 2006. The payment procedure is the same as last year.

3. Resettlement

3.1 Currency Compensation

The budget for land acquisition and resettlement compensation is CNY476.67 million. Up to May 2009, CNY625.93 million was paid, accounting for 131% of the planned compensation. Details of all compensation items refer to following table.

Table 3.1 Summary of Actual Payment for Resettlement Compensation

(up to May 31, 2009)

Unit: CNY10,000

Item	Tanluo township	Long'an	Pingguo	Tiandong	Tianyang	Youjiang	Total
Compensation for permanent land acquisition	3377	7119	4776	9883	8391	4147	37693
Compensation for temporary land acquisition	305	834	271	819	485	795	3509
Compensation for resettlement	431	1613	1788	2699	1094	1559	9184
Compensation for restoring forest and vegetation	103	638	86	953	822	639	3241
Compensation for land reclamation	198	2048	1346	2444	1146	766	7948
Management fee for land acquisition	65	122	77	177	131	51	623
The cost of personal service for land acquisition	17	105	57	101	51	49	380
Compensation for farmland pollution			1	9		3	13
Total	4497	12480	8401	17085	12121	8009	62593

Source: provided by PCO.

3.2 House Reconstruction

According to the statistic data collected by PCO, total 399 households would be demolished their houses in RAP, while 507 household were actually demolished house buildings, exceeding the planned figure by 27.06%. Total 507 households should reconstruct their houses, and 496 household had reconstructed their houses, accounting for 97.83% of total affected households. 11 households did not reconstruct their houses

yet, accounting for 2.17% of total affected households.

Table 3.2 Summary of Resettlement

unit: household

County	House demolition	Reconstruction completed	Not yet built	Remark
Tanluo township	8	7	1	The resettled households had other houses to stay, so they did not want to rebuild the house for the time being.
Long'an	67	65	2	1 household would rebuild his house on dies Faustus determined by the geomancer, while the other one household had other house to stay and, therefore, may not rebuild his house.
Pingguo	71	68	3	78 households were written in the last report, including non-living households. Actually, 71 households were affected. 3 households bought the houses in the county, thus, they will not rebuild their houses anymore.
Tiandong	97	92	5	The resettled households had other houses to stay, so they don't want to rebuild the house for the time being or simply did not want to rebuild the house anymore.
Tianyang	212	212		96 households were concentrated for resettlement, and the rest households were scattered for resettlement.
Youjiang	52	52		
Total	507	496	11	These 11 households have other houses for living, thus, they do not reconstruct their houses.

Source: provided by PCO and sub-offices in counties.

There were some characteristics of house reconstruction.(1) concentrate resettlement. For the points where lots house buildings were demolished and households were resettled, it would acquire the collectively owned land in stretched plot for house relocation, such as the case in Tianyang county where 96 households were relocated at Shangxing village of Napo township and Tiandong County where 18 households, 22 households and 26 household were concentrated for house relocation in Yanpo group of Donglong Village, Tanlang group of Tanle village and Nalu group of Siping village respectively. These new resettled villages were centralized for planning and designing, and provided power and water supply and road access, which will be convenient for local people's living and production. Thus, the local people satisfied with the relocation. (2) Scatter relocation. Since there was difficult for concentrating relocation at some place, for the scattered relocated house buildings, the villagers selected the relocation plot by themselves. The resettled farmer households were also satisfied with this replacement

pattern.

There are two main reasons for the resettled people being not reconstruct their relocated house buildings: (1) Most of such resettled people own other houses to stay, they, therefore, don't want to rebuild their houses in a hurry or they simply don't want to rebuild their houses anymore; (2) The others may or may not rebuild their houses because their houses were originally not located within the route line but due to the consideration on their safety, the Project Office agreed them to relocate their houses at the time. These houses had not yet been demolished and are still available for them to stay, so that they are reluctant to move out. This was why they had not rebuilt their houses or they simply had no intention to rebuild their houses.

3.3 Key Facilities and Enterprise Rehabilitation

In 2008, the demolition works of power cable and communication facility were completed. And the compensation for these facilities was paid as well. Up to date, facilities of power and communication have completed reconstruction and rehabilitation. The compensations for demolition of brick factory, salt station and petrol station in Tiandong county was paid, and relocation plots for these buildings were replaced by other lands, thus, the reconstruction of these buildings were undertaking. The compensation for metallurgical plant at Youjiang district was paid, and the relocation plot was solved out for reconstruction.

3.4 Restore water system and road access

From 2008, water system and road access which were damaged during construction were repaired in project areas. The main method for these facilities reparation was that damaged water system and road access were statistic in each county, then submitted to PCO which approved and paid the fund for construction. Local communications bureau was entrusted to organize local construction team to repair by PCO. For example, there were 8 road to be repaired in Tiandong county, which needed CNY3.2million for repair. Over CNY0.9 million was paid by local government and the rest fund would be paid by PCO. The repair work for these eight roads was organized construction by Tiandong Communications Bureau. Up to date, the reparation was completed. The method for water system reparation was the same as road access repair.

3.5 Real Things Done in Project Areas

According to the survey, from 2008, PCO, contractors and local governments paid more attentions on the problems of difficulties on living and productive activities raised by the affected people. To insist the principle of people foremost, some services were provided to improve affected people's living and productive activities by PCO, contractors and local governments, within their capabilities. The real things were as follows:

- Pingguo government accepted the reasonable requirement from local people, which would be extended 1.8km of class IV highway at No.5 team and No.6 team in Nalao village and Tanbao group, to solve out road access problem for these team/group.
- No.3 contract and No.14 contract, along with sub-office of land acquisition and resettlement under PCO in Long'an county, paid visit to Wubao family and elder people

without family by several times.

- As led by sub-office of land acquisition and resettlement under PCO in Long'an county and PCO, the existing road with mud pavement was improved as 1km road with aggregate pavement by No.14 contract, which was convenient for local villagers.

- A road with asphalt pavement to Baidu Primary School at Xiangzhou township was constructed by No.11 contract in Tiandong county, with total length of 200m. A road with sand and gravel pavement was constructed by No,7 contract and No.9 contract, with total length of 1.1km which connected three natural group in Baidu village. A road with sand and gravel pavement was constructed at Tangpo group of Fulan village in Linfeng township, with total length of 350m, which was convenient for local people's trips.

4. Survey and Analysis on Social and Economic Status

4.1 Sample Selection and Description

The samples of the Nanbai expressway for various survey items were determined with the random draw-out method, according to the sampling rate and the data of land acquisition and resettlement provided by land acquisition and resettlement division of PCO. Based on the principles prescribed in the Terms of Reference for Monitoring and Evaluation, sampling was carried out among the objects affected by the land acquisition and resettlement. Along with the changes and development taking place in the society and local situations, especially frequent moving of labors who result family moving in project areas, thus, the original sample family can not find for survey. The design of the items in the questionnaire form may be adjusted severally. However, the changes thus made would not influence the longitudinal comparison between the years surveyed. The effective household questionnaire forms collected in 2005 were 505 (households); in 2006 were 502 (households), in 2007 were 508 (households) and in 2008 were 509 (households). See the Table below for details:

Table 4.1 Comparison on Effective Sample Size

County	2005	2006	2007	2008	Comparison of 2008 to 2007 (+ / -)
Tanluo	24	34	37	39	+2
Long'an	125	138	95	113	+18
Pingguo	88	83	71	64	-7
Tiandong	143	135	135	130	-5
Tianyang	89	74	114	102	-12
Youjiang	42	38	56	61	+5
Total	511	502	508	509	+1

Source: Summarized from the data of questionnaire done from 2005 to 2008.

4.2 Production and Living Levels of Resettled People

4.2.1 Number and Employment Situation of Resettled Families

The sample size of households in 2008 was 509 with the total population of 2,494. At average, each household had 4.9 persons. Among the total population, women were 1,181, accounting for 47.35%; labors were 1,766, with 3.47 persons per household averagely. Persons had received the education of junior high schools or higher schools were 1,511, accounting for 61.61% of the total population. Among the labors, the percentage of labors engaged in primary, secondary the tertiary industries was 55.30%, 8.78% and 7.96% respectively.

Table 4.2 Comparison of Member and Employment Situation of Family

Item	Unit	Before LAR (2002)	After LAR				
			2005	2006	2007	2008	Comparing 2008 with 2007 (+ / -)
I. Family Members	P / H	4.62	4.71	4.85	5.00	4.9	-0.1
Woman	P / H	2.39	2.28	2.36	2.51	2.32	-0.19
Labor	P / H	2.80	3.62	3.55	3.68	3.47	-0.21
Incl:female labor	P / H	1.38	1.72	1.70	1.74	1.63	-0.11
2. Educational structure							
Under primary school level	P / H	1.29	1.76	1.61	1.94	1.93	-0.01
Junior school and senior school level	P / H	2.56	2.51	2.71	2.82	2.83	0.01
Above junior college level	P / H	0.05	0.10	0.11	0.14	0.14	0
3. Employment structure							
Primary Industry	P / H	2.71	2.99	2.82	2.80	2.71	-0.09
Secondary Industry	P / H	0.02	0.46	0.77	0.52	0.43	-0.09
Tertiary Industry	P / H	0.07	0.31	0.34	0.37	0.39	0.02

*P/H=Person per Household

Source: Sorted out from the data of household sampling survey done in 2002, 2005 to 2008.

From above table, comparing 2008 with 2007, family population and educational structure reduced. Employment structure of primary industry and secondary industry reduced, but employment structure of tertiary industry increased.

The main reason of the change of family population was as follows: there was some change in quantity of sample survey, resulting the change of indices in family population, female population, labor and educational structure. However, these changes was in the normal range.

The main reason of the change of employment structure was as follows: due to the influence of financial crisis, part of the labor came back to their hometown, thus, resulting that the number of labors engaged in secondary industry reduced. There was no great change in primary industry and tertiary industry.

4.2.2 Income and Expenditure of the Resettled Farmer Families

The income of the resettled farmer families was the most important index to measure the restoration of the production and living conditions of the resettled farmer households. Seen from the monitoring, since the commencement of the Project, the life of the resettled farmer families had been preliminarily restored, which had greatly improved to compare with the life before LAR. According to the sample survey, annual net income per capita was CNY3,559 in project areas in 2008, comparing with 2007, which increased 7.82%.

Table 4.3 Comparison on Income and Expenditure of Resettled Farmer Households

Item	Before LAR	After LAR				Comparing 2008 to 2007t (+ / -)
	2002	First year (2005)	Second year (2006)	Third year (2007)	Forth year (2008)	
1. net income per capita	2379	2440	2751	3301	3559	7.82
Agricultural income	1328.3	1399.28	1274.14	1518	1373	-9.55
Income from secondary and tertiary industries	563.83	266	325	400	587	46.75
Salary income	467.52	774.37	1152.2	1382.6	1599	15.62
2. expenditure per capita	1562	1744	1908	2807	4649	65.62
Agricultural expenditure	514	476	450	801	1805	125.34
Expenditure for secondary and tertiary industries	169	186	204	225	441	96.0
Expenditure for living consumption	879	1082	1254	1781	2403	34.92

Source: Sorted out from the data of household sampling survey done in 2002, 2005~2008.

From the above table, the indices of annual net income per capita and total expenditure of resettled families had greatly increased in the project areas in 2008.

The reasons of the change of annual net income were as follows: (1) since the expressway and its counterpart projects was completed and opened to traffic, which created a good condition for labor to go outside for work, thus, the number of people who went outside for work and their salaries increased, resulting the increase of salary income. (2) Some of the farmers transferred to the secondary industry and tertiary industry, thus, the income increased from these two industries. (3) The prices for the agricultural products were dropped, which was affected by the international financial

crisis, thus, the agricultural income reduced in that year.

The reasons of total expenditure increase were as follows: (1) In 2008, Outline of Family Investigation at Village was issued by National Statistic Bureau, which has adjusted the method for household statistic and calculation of net income. For example, some indices was added in family operation expenditure, resulting the agricultural expenditure increased than previous years. (2) The cost of materials for agricultural production, such as fertilizer, pesticide, and transportation was increased in 2008, resulting the increase of agricultural expenditure. For the selling of agricultural products, the agricultural incomes for farmers had greatly increased due to sharply increase of price in the country, which resulted the increase of resettled people's income and their expenditure. (3) The increase of living consumption of resettled family was mainly in food, which meant the increase of farmer's living level.

4.2.3 Quantities of Grains, livestock and Poultry in the Possession of Resettled Families

According to the sampling survey, the grains in the possession of the resettled households in 2008 kept the same level as 2007. Comparing with 2007, the pig possession increased in 2008. However, other poultry possession reduced in 2008. See table 4.4.

The change of these indices indicated the changes taken place in the production structure, commodity rate and consumption level of the resettled farmer households. Firstly, since the farmers considered that the prices of the grains had been not high enough in the recent years to enrich them, therefore, they reduced the area for growing grains spontaneously and plant other crops with high economic benefit, which had led to the sharp decrease of the grains in the possession of the resettled farmer households. But the quantity of 500-gram rice to satisfy one person's daily need was still guaranteed. Second, since the grain possession was reduced and the prices for the poultry in the market were not high, therefore, the farmers would be unwilling to breed chicken and duck, resulting decrease of poultry quantity. Since 2006, along with increase of pork price, resettled families increased pig quantity in 2008.

Table 4.4 Comparison of Grain, Livestock and Poultry Quantity in the Possession of Resettled Families

Item	Unit	Before LAR (2002)	After LAR				Comparing 2008 to 2007 (+ / -)
			2005	2006	2007	2008	
1. Grain	kg/Person	491.06	304.31	257.55	322.91	322.86	-0.05
2. Cattle	Head/HH	缺	0.46	0.37	0.27	0.24	-0.03
3. Pig	Head/HH	缺	2.50	2.08	1.61	2.37	0.76
4. Goat	Head/HH	缺	0.12	0.09	0.08	0.07	-0.01
5. Chicken	No. HH	缺	8.58	6.22	11.42	10.96	-0.46
6. Duck	No. HH	缺	7.00	3.28			

Source: Sorted out from the data of household sampling survey done in 2002, 2005~2008.

4.2.4 Assets in the Possession of Resettled Families

The assets in the possession of the resettled families were an important index to reflect the life restoration of the resettled farmer households. Seen from Table 4.5, after the expressway construction, especially house areas, mobile phone, motorbike, tractor and car increased than last year, showing the increase of fixed assets of resettled families.

Table 4.5 Comparison on Assets in the Possession of Resettled Farmer Households

Item	Unit	Before LAR (2002)	After LAR				
			2005	2006	2007	2008	Comparing to last year (+ / -)
I. Family houses							
House area	m ² /HH	116.64	115.99	118.4	138.41	139.36	0.95
II. Durable articles in families							
1.TV set	set/HH	N/A	0.93	1.01	1.07	1.08	0.01
2.telephone	No./HH	N/A	0.52	0.51	0.58	0.53	-0.05
3.mobile phone	No./HH	N/A	0.40	0.71	1.64	1.68	0.04
4. Refrigerator	No./HH	N/A	0.10	0.14	0.32	0.32	0
5.computer	No./HH	N/A	0.01	0.01	0.01	0.03	0.02
6.washing machine	No./HH	N/A	0.03	0.03	0.08	0.07	-0.01
7.bike	No./HH	N/A	0.36	0.46	0.30	0.31	0.01
8.motorbike	No./HH	N/A	0.41	0.56	0.79	0.81	0.02
9..tractor	No./HH	N/A	0.23	0.25	0.40	0.48	0.08
10.car	No./HH	N/A	0.02	0.02	0.01	0.03	0.02

Source: Sorted out from the data of household sampling survey done in 2002, 2005~2008.

4.2.5 Changes of Production and Living Environment of Resettled Villages

The living environment was an important index to reflect the improvement in production and living conditions of the resettled farmer households. The sampling survey had shown that, after launching the Project, the communities where the resettled farmer households were staying had changed to some extent, which indicated that their living space and environment had been improved. Firstly, the changes in roads were greater. Compared to 2007, 2 roads with concrete pavement and 12 road with asphalt pavement increased. 16 roads with sand and gravel pavement and 10 tractor road reduced, indicating that the improvement of the rural roads was advancing compatibly along with the development of the expressway. Next, the medical conditions in the communities accommodating the resettled farmers gained preliminarily improvement. Compared to the situations in the previous years, the number of the rural clinics had increased

remarkably. The frequency for the resettled farmers to see their doctors at the county-level hospitals and the village-level clinics increased. Especially, the resettled farmers had gone more frequently to see their doctors at the city/county level hospital, indicating that resettled people can go to the nearby city and come back to home within 1 day after the expressway opening to traffic, which provided more convenient for them to see doctor.

Table 4.6 Comparison of Environment Changes Taken Place in Relocated Villages

Item	Unit	Before LAR (2002)	After LAR				
			2005	2006	2007	2008	Comparing to last year(+/-)
Concrete Pavement road	No.	N/A	57	58	60	62	2
Asphalt Pavement road	No.	N/A	46	46	58	77	19
Sand & Gravel Pavement road	No.	N/A	178	291	298	282	-16
Rods for farm machines	No.	N/A	218	110	100	90	-10
Paths or bigger roads	No.	N/A	9	1	1	0	-1
With clinic	No.	N/A	328	289	440	444	4
Without clinic	No.	N/A	181	212	68	65	-3
Seeing doctors at village clinics	No.	N/A	135	147	198	205	7
Seeing doctors at township clinics	No.	N/A	184	199	188	173	-15
Seeing doctors at county hospitals	No.	N/A	100	76	78	96	18
With primary schools	No.	N/A	389	367	357	365	8
Without primary schools	No.	N/A	115	134	137	140	3

Source: Sorted out from the data of household sampling survey done in 2002, 2005~2008.

4.3 Views of Resettled Farmers on Impacts Caused by Project

The attitude of the resettled farmers towards both positive and negative impacts caused by Project was positive and objective. Compared to their attitude in 2007, there was some changes of their appraisal in positive and negative impacts.

4.3.1 Views on Positive Impact

The items listed in the sampling questionnaire of 2007 differed from the previous ones to some extent, but *Improving Traffic Conditions* was still on the ranking top of the positive impacts, similar to that in 2006 and 2007. The quantities of increase of employment and income chance had greatly increased than the last two years, showing that the completion of Nanbai expressway played a promotion role in economic development at project areas. See Table 4.7 for details.

Table 4.7 Ranking of Positive Impacts Caused by Project (2006)

Item	2006		2007		2008	
	household	rank	household	rank	household	rank
Improve traffic condition	384	1	328	1	347	1
Stimulate other industries	248	2				
Shorten regional distance	166	3	254	2	41	6
Promote tourism	105	4				
Receive compensation	95	5	108	5	252	2
Improve investment environment	71	6				
Increase income	63	7				
Increase employment and income	39	9	56	6	151	3
Reduce transport cost			200	3	136	5
Rise the price of agricultural products			148	4	141	4
Others	42	8	1	7	6	7

Source: Sorted out from the data of household sampling survey done in 2006~2008.

4.3.2 Views on Negative Impacts

The construction of the highway was hard to avoid some negative impacts. Learnt from the survey carried out in 2008 that the first place in the ranking of negative impacts was land reduced and income decreased,; the second was unreasonable road facility and causing inconvenience to traveling; the third place was irrigation damaged which affected agricultural development. Details refers to Table4.8.

Table 4.8 Ranking of Negative Impacts Caused by Project (2006)

Item	2006		2007		2008	
	household	rank	household	rank	household	rank
Land reduced and income decreased	401	1	155	8	378	1
Unreasonable design and inconvenient trip	237	2	319	6	198	2
Difficult employment and gray future	208	3				
Noise, and worse qualities in air and water	173	4	375	4	166	4
Irrigation facility damaged	161	5	460	2	189	3
Damaged and polluted roads in communities	99	6	364	5	107	5

Agricultural crop damaged	63	7	432	3	62	6
Houses damaged by construction	30	8	293	7	32	7
Temporary land was not reclaimed and handed over.			461	1	55	8
others	3	9	10	9	12	9

Data Source: Sorted out from the data of household sampling survey done in 2008

From the survey, the opinion of resettled people in land reduced and income decreased showed the trend of increasing. The rest indices showed the trend of reducing.

5. Grievance and Complaint

5.1 Settlement on Grievance and Complaint of Previous Year

5.1.1 Settled Grievance and Complaint of Previous Year

The employer, the Governments at all levels and the Contractors had been attaching importance to the grievance and complaint lodged by the resettled farmer households. They had arranged specified personnel to make investigation and verification and earnestly settle the grievances and complaints. Up to now, most of the grievances had been settled (see Table 7.1 for details).

1. The grievance lodged about the compensation for demolished house buildings and ground attachments. Some resettled farmers considered that the compensation standards were too low. Upon the request mad by part of the resettled farmers of Xingcheng VillageTianzhou Township, Tianyang County for increasing the compensation standards, the People's Government of Tianyang County consulted with the concerned resettled farmers. Both sides had reached the agreement on the standards and the resettled farmers had cashed the compensation fees in succession. For 133 households who required to increase the compensation of land acquisition in last year, they had given up their original requirement.

2. Most of damaged road system and irrigation system was solved out. 104 households, who thought difficulty in traveling at last year, accounted for 20.8% of total sampling households. 32 households raising that the silt blocked the trip in culvert for long term, accounted for 6.3% of total sampling households. 66 household reflecting irrigation system was damaged, accounted for 12.99% of total sampling households. Since this year, local government and PCO tried their hard to solve out these problems. Most of them dispelled their grievances.

3. Problem of environmental pollution was solved out. 22 households reflected the blasting damaged the houses during construction in last year, resulting leaking during raining. PCO organized related department to solve out this problem after receiving. Local people satisfied.

4. Difficulty of local people's living was solved out. 23 household reflected living level decreased after land acquisition at last year. 26 households hoped that the local government can help resettled people to seek a way for living to increase income. 6 households hoped the local government helped training to increase resettled people's qualities. In 2008, local government provided certain support for 49 households, making them increased income and improved their living level. The 6 resettled person who required to be trained, was provided training by local government.

5. 11 households required to solve out tap water in last year. 7 households hoped to be provided power supply. 2 household raised to establish dump. And 2 households hoped to be provided wired television to the new village. The construction unit and local government tried their best to improve local infrastructure facilities. Relative work was under implementing, which was to solve out the problem of water supply and power supply as soon as possible.

6. For some temporary land, where the problem was not solved out for long time, it made new progress. For example, there was 1,816mu of temporary land should be handed over at Youjiang district, and 1,614mu of 1,816mu had been handed over, accounting for 90% of total. There were 46 places with 2,498.116mu of temporary in Long'an county, including 14 places with 1,127.029mu of borrow pits, 27 places with 1,297.451mu of

waste pits and 5 places of 73.636mu of mixing plants and precast yards. 25 places with area of 1,055.251mu were already handed over by the efforts of PCO, local governments in county level, township level and village level and contractors, accounting for 42.24% of total area of temporary land.

5.2 The Prominent Problems Involved in Grievances and Complaints at Present

The data obtained from the sampling survey made in 2008 had shown that, according to the preliminary statistic, there were 53 problems involving grievances and complaints (the individual problem might be counted repeatedly). These prominent problems were divided into 5 kinds:

1. **Problem of reclaiming for temporary land.** The handover progress of temporary land reclaimed was slow, which affected local people's living, productive activity and social stabilization along alignment.
 - Waste pit for emergency project was not leveled yet. In Aug.2008, a large landslide occurred at the left side of K103+700, which was resulted by heavy rainstorm. A construction team rushed to deal with the emergency by PCO. 15.5mu land was temporarily rented as waste pit at Nawa group, Baoqun village, Tiandong county in K105+600~800. After the completion of emergency project, the construction unit did not follow the requirement as listed in the agreement to reclaim the waste pit. Thus, soil was stored too high at the waste pit with uncovered rock. Thus, local people had great complaint.
 - There were 46 places of 2,498.116mu of temporary land in Long'an county. Up to Dec.31, 2008, there were still 21 places of 1,442.865mu of temporary land where were not handed over, accounting for 57.76%. Thereinto, 4 places of 322.327mu was in No.1 contract, accounting for 57.26%; 11 places of 962.971mu was in No.2 contract, accounting for 75.23%; 2 places of 66.352mu was in No.3 contract, accounting for 16.29%; 4 places of 91.215mu was in No.4 contract, accounting for 36.77%; and 1 place of 70mu was in No.13 contract, accounting for 100%.
2. **Problem of road access.** There was no underpass at some villages after the completion of the expressway due to design problem. Farmers who went out for farming and to market had to walk a long way. The slope grade in culvert was too high at some villages, where water always ponded with silt to affect villagers' trip and transportation.
 - The problem of road access was not solved out at Naliu group, Tanle village, Silin township in Tiandong county. The road to Nalilu group of Tanle village was blocked due to the underpass on the expressway, which greatly affected local villagers' trip. A class IV highway to Silin toll station was planned to construct at the right side of underpass in K96+980, which would solve out the problem of road access at Naliu group. Measurement and design was charged by No.7 contract office. But this work was not done by No.7 contract office yet. Thus, up to date, the highway was not commenced construction yet. Since the expressway opened to traffic, local people from Naliu group demolish the protected fence in Silin interchange. They walked along with the drainage, which was dangerous to traffic safety.
3. **Problem of water system.** Since water seeping during the rainy season in 2008, water system was cracked, landslided, faulted and seeped at some sections on Nanbai expressway (detail data were statistic by each county). Because water

system was not repaired in time, which resulted hard irrigation for farmland or seepage in farmland and flooding on road, the farmers sharply reflected this problem. For example, from the survey in May 26,2008, Irrigation Bureaus in Pingguo county thought that way for rain converging in 12 administrative villages was changed in project areas after the completion of Nanbai expressway, which changed from natural division and flood discharge by sections to concentrate flood discharge. Rainy water drained to drainage through culvert on the expressway after converging, which relatively speeded up the time of rainy water converging and increased the frequency of forming internal flood.

4. **Farmland Pollution.** Some resettled households reflected that soil and stone slid to farmland from the expressway after the expressway opened to traffic, because landscaping along the both sides of the expressway was not constructed well, which polluted farmland. Soil was stored too high at waste pit where was temporarily acquired by the construction unit. The land was with large slope grade, where natural drainage was easy to form at slope toe. The floated soil rushed to nearby farmland from the drainage. Local village required to solved out these problems and should receive relative compensation.
5. **Compensation problem.** 18 households reflected that they did not receive the compensation. The reasons are: (1) due to various history reasons, land right involved compensation had dispute, which should be paid after confirming its right and need to confirm its right as soon as possible; (2) after reclaiming for some temporary land, households thought the compensation was too low, thus , they were unwilling to transact the procedure to receive compensation, and required to increase compensation.

5.3 Measures Adopted by Employer and Contractors to deal with the grievances and complaints

The PCO, the Governments and Resettlement Office along the expressway alignment at all levels had attached high importance to handling the grievances and complaints lodged by the resettled farmer households. For the problems involving the road and water systems, which were relating to the people's wellbeing, would be settled as soon as possible, while for the long-term problems involving the environment pollution and the livelihood of the resettled farmer households, it would make the investigation and validate first and then set forth a variety of settling measures. Since the construction of the expressway was completed, the construction units left. Some remained problems should transfer to local government for organization. Thus, there needed some time to solve out these new problems.

6. Conclusions and Suggestions

8.1 Conclusions

Since 2008, local government, PCO and construction units paid more attentions on the work of land acquisition and resettlement, and constantly solved out the problems raised by resettled people. At present, the expressway was to be accepted, but there were still some problems. The outstanding problems were as follows: (1) the progress of handover for temporary land was slow; (2) water system and road access were not solved out completely. Local people reflected greatly; (3) individual resettled person did not reconstruct his new house yet; and (4) individual person did not receive his compensation.

6.2 Suggestions

Departments in various levels should pay attention for the work of land acquisition and resettlement at later stage as before, and try their best to do a good job in resettlement. Problems should not remain after construction completion.

Firstly, the work of land acquisition and resettlement should be done with well start and end. Problem of handover of temporary land reclaim and restoration of water system and road access should be solved out without any legacy.

Secondly, a working group to conduct comprehensive survey for all legacies of the resettled people along alignment should be established, raised the time limit to solve out these problems and completed the work for expressway acceptance.