



Social Monitoring Report

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PRC: SHANXI ROAD DEVELOPMENT II PROJECT Resettlement Completion Report

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For Shanxi Hou-yu Expressway Construction Co. Ltd.

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Asian Development Bank

Shanxi Road Development Project II

Resettlement Completion Report

Shanxi Houyu Expressway Construction Co., Ltd

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Content

1. Project Introduction	3
1.1. Houma-Yumenkou Expressway	3
1.2. Local Road	4
1.3. Preparation Review	4
2. Land Acquisition and Resettlement	9
2.1 Influence scope of Land Acquisition and Resettlement	9
2.2 Quantity of land acquisition and resettlement	10
3. Economic Recovering of Affected People along Alignment.....	16
3.1. Rehabilitation of production infrastructure facilities	16
3.2. Implementation of Economic Recovering	22
4. Conclusion	28

Shanxi Road Development Project II

Resettlement Completion Report

Shanxi Road Development Project II, viz. Houma-Yumenkou expressway, was completed in January 2007 and open to traffic. At present, the resettlement has been completed, and this is the completion report.

1. Project Introduction

1.1. Houma-Yumenkou Expressway

Shanxi Road Development Project II, viz. Houma-Yumenkou expressway, is a part of China National Trunk Highway GZ40, and was constructed by Shanxi Houyu Expressway Construction Co., Ltd (SHEC). This project was financed by Asian Development Bank (ADB) loan.

Houyu Expressway starts from Diantou village in Xinjiang county, bridges the Yellow River in Cangtuo village in Hejin city, and ends at Daqian village in Hancheng city, Shaanxi Province. The total length is 66.84 km. The subgrade works was divided into 7 contract packages, and constructed by 6 contractors, such as Zhong Tie Major Bridge Engineering Group Co., Ltd, Jilin Provincial Communications Construction Group, Ltd, Daqing Oilfield Highway & Bridge Engineering Co., Ltd and so on; and the pavement works was divided into 4 contract packages, and constructed by 4 contractors, such as Taiyuan Road and Bridge Construction Ltd. Company, Shanxi Road and Bridge the First Engineering Co., Ltd, Shanxi Yuncheng Road Bridge Co., Ltd and so on. The project was completed in January 2007 and open to the traffic.



The completed Yellow River Bridge

The project influence area is distributed in Yuncheng in south of Shanxi Province, including Xinjiang, Jishan and Hejin. A part of 3.5 km (including part of Yellow River Bridge and the west bridge approaching road) is located in Daqian village in Hancheng city, Shaanxi Province, which is the conjunct influence area of National Trunk Highway

GZ40 Shaanxi project and this project.

1.2. Local Road

The construction of Houma-Yumenkou expressway will promote the economic and social development in south of Shanxi Province, and play an important role on connect north, northwest and southwest of China; shorten the transportation distance; improve high quality transportation; and promote western China development. To drive the poverty alleviation in project area (mostly in Yuncheng city) and speed up the



poverty alleviation, at the same time of expressway construction, Shanxi Province Communication Department (SCD) arranged to improve a batch of provincial, county, town and village roads in Xinjiang, Jishan, and Hejin, where the expressway passes through, to improve the local traffic situation, connect the project expressway and the national highway better, and form the all-weather highway network.



The local roads of Shanxi Road Development Project II includes 3 roads (4 sections) financed by ADB loan, the length is 46.4 km (Class II); 3 roads financed by local governments, the length is 51.6 km (Class III); and total length is 98 km. The estimated cost is 66.35 million RMB Yuan, including 2 million

US dollar from ADB.

The local roads are distributed in 9 towns and 43 villages of the 3 county, Xinjiang, Jishan and Hejin. The local roads were continuously commenced in 2003, and completed in 2006.

1.3. Preparation Review

1.3.1. In July 2001, Yuncheng city government established the Construction coordination leaders group of Houyu Expressway with the subordinate department of resettlement office, and the resettlement department of SHEC took charge of the specific works.

1.3.2. In November 2001, SHEC engaged the specialist group from Shaanxi Province Social Science Academy to investigate the economic situation in affected county/city along the alignment generally, investigate the seriously affected villages emphatically, and wholly investigate the related situation in influence area. The prophase investigation data laid good foundation for land acquisition,

resettlement, and the follow-up investigation to economic resuming along the alignment.

1.3.3. In January and April 2002, the SHEC staff companied the officers of ADB mission to conduct the field visit to governments and villages along the alignment and solicit the opinions and suggestions of Houyu expressway construction from government officers and villagers, and gained good effect.



ADB mission visited the Yellow River bridge site.



ADB specialist met the representatives from the county/city governments.



Ms. Ma Xiaoying visited Yellow River Wetland Natural Reserve.



Mr. Ferguson, ADB specialist, visited Shangbai village in Jishan county.



Mr. Ferguson visited Fanjiazhuang in Hejin city.



Mr. Ferguson visited Xiaolingzhuang in Xinjiang county.



ADB specialist visited the local roads in Hejin and Xinjiang.

1.3.4. Action plan preparation: SHEC prepared the *Houyu Expressway Resettlement Action Plan* with the direction of specialists in April 2002, and the plan was submitted to ADB after approval of Shanxi Communication Department (SCD) in December 2004. (photo: Resettlement Action Plan)

1.3.5. Exterior supervision agreement: SHEC signed a *Resettlement Exterior Supervision Service Technical Consultation Contract* with Shaanxi Kexin Consulting Company in September 2003.

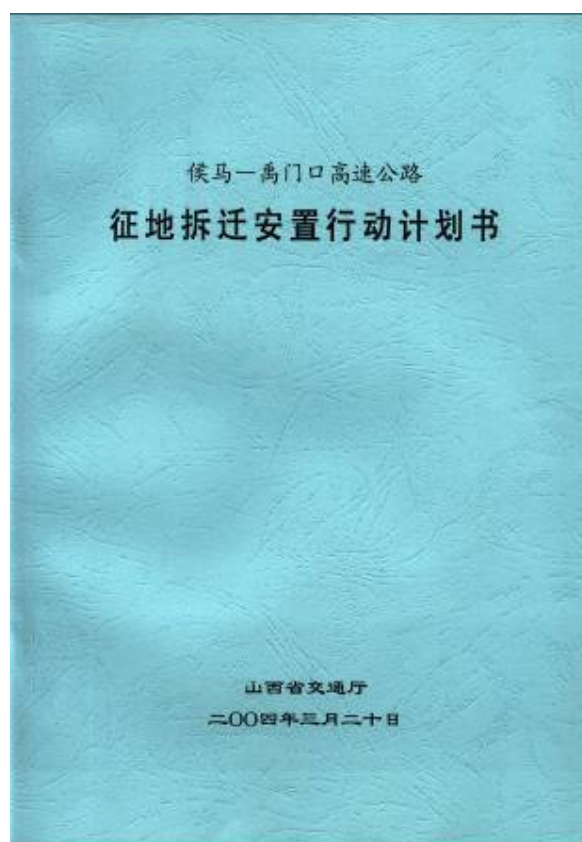
1.3.6. Documents reported:

A. In March 2003, the land administration department approved the Houyu expressway construction land initial examination report with GTT No. (2003) 42 Document.

B. In April 2003, the Ministry of Land and Resource approved the land for construction formally.

C. In June 2004, the State Forestry Administration Bureau approved the use and cutting license of Yellow River protection forest area.

D. In October 2004, SHEC signed the Yellow River wetland protection work agreement with Yuncheng wetland protection station, and the protection monitoring station was established and went into operation.



- E. In December 2003, SHEC signed the cultural relics prospecting and archaeological excavation protection agreement with the provincial archaeology research institute, the cultural relics prospecting and excavation was completed in March 2004, and the completion report and commence license were received.

1.3.7. Resettlement implementation:

- A. Resettlement training organization: In September 2003, SHEC organized the resettlement staffs from the county/city and town/village resettlement offices to hold the Training Conference for Houyu Expressway Land Acquisition and Resettlement. The specialists from Shaanxi Province Social Science Academy and the officials from land administration department gave the training about project influence degree, ADB's resettlement policy, present land law, resettlement action plan, compensation, registration, economic resuming after construction and so on. These made a good foundation for resettlement implementation. (photo)



- B. In October 2003, the land acquisition and resettlement registering groups composed of staff at all levels (including representatives from SHEC, county resettlement office, land administration departments, towns and village committees) carried out registration by stages. (photo)



Resettlement staff at all levels work together.



Checking of fruit tree.



Installation of boundary piles



In Junling village of Hejin city, the checking group and the village representatives signed on registration sheet after checking.



Greenhouses in Quanzhang village in Xinjiang county.



Resettlement principals from SHEC work in site.

C. In November 2003, SHEC summarized the registration data and conducted the compensation checking, signed total compensation and resettlement agreements with county/city governments on basis of compensation check result, and paid compensation according to the total agreements.

1.3.8. Public participation

SHEC paid great attention to the publicity and mobilization. In April 2002, SHEC publicized the information, including the laws and regulations related to expressway construction, present government policies, compensation standards of resettlement and so on, through the news and economic channel of Yuncheng TV station and broadcasting station, and handed out the resettlement handbooks to the villages along alignment.

On 18 December 2002, the leaders from provincial Party committee and government participated in the Houyu expressway breaking ground ceremony held in Hejin, and the activities were publicized and reported through Shanxi TV station, Yuncheng TV station and Yuncheng Daily.

During the four ADB mission in January, February, April and August 2002, we cooperated actively, provided information, and companied ADB specialists to hold conferences with the representatives from counties, towns and villages to solicit their suggestions for Houyu expressway construction.

2. Land Acquisition and Resettlement

2.1 Influence scope of Land Acquisition and Resettlement

The influence area includes 60 villages in 13 townships of 4 counties, such as Xinjiang, Jishan, Hejin and Hancheng.

Table 2-1 Project Influence Area

County	Township	Village
Xinjiang	Sanquan	Leli, Beipingyuan, Fuyouzhuang, Jizhuang, Xiaoling, Shuixi, Xicun
	Longxing	Shicun, Wangzhuang
	Quanzhang	Yongfeng, Yonghua
	Gujiao	Liujianzhuang, Dongxueguo, Xixueguo, Donghan, Quanzhang
Jishan	Jifeng	Xiaodu, Taidu, Shangbai, Jiayu, Taoliang, Xinzhuang, Yaocun
	Xishe	Zhongshe, Xishe, Dongzhuang, Renyi, Xuejiazhuang
	Huayu	Fujiazhuang, Xingjiazhuang, Xingjiabao, Huayu, Huayu town, Lucun, Huayuxibao, Ningzhai, Ningzhaibao, Weilin
Hejin	Cenglou	Guozhuang, Hejiazhuang, Beiwangbao
	Zhaojiazhuang	Fubo, Guanzhuang, Yitang, Fanjiazhuang, Dongzhuang
	Qingjian	Xizhuang
	City zone	Mijiawan*, Xiguan, Xiyaotou, Dongyaotou, Yangjiaxiang
	Yangcun	Dongxinfeng, Xixinfeng, Taiyang, Sanqian, Yong'an, Junling, Cangtou
Hancheng	Longmen	Daqian

**Mijiawan was merged into Xiguancun in 2005.*

According to the field survey, during the construction of this project, in the original

plan, there were 20472 people of 4760 households to be affected by the land acquisition, in which 870 people of 207 households were affected by land acquisition and house removing, but only 20 people of 5 households need to be resettled, the other removing buildings include wall, shelter, orchard house, temporary house for product and the other fixed asset. For the affected enterprise, there was no removing, and only part of field was affected. Actually, the villagers affected by land acquisition were 15187 people of 3532 households, 25.8% less than plan, in which 1664 people of 387 households were affected by land acquisition and removing, 87% more than plan, and there was no change of 20 people of 5 households resettled.

2.2 Quantity of land acquisition and resettlement

2.2.1 Quantity of land acquisition and resettlement for expressway

Originally, it was planned to acquire 5851.77 mu of land. Actually, 6060 mu of land was acquired, 3.57% more than plan. It was planned to acquire 1901 mu of temporary land, and 1380 mu of land was actually acquired, 27% less than plan. It was planned to remove 5467.1 m² of building, and 8783 m² of building was removed, 60.65% more than plan.

The affected special facilities includes: green house, well, ditches, power pole, electric wire, transformer, telecommunication wire pole, telecommunication wire, and telecommunication optical cable.

Table 2-2 Statistics of Land acquisition and resettlement for expressway

County	Area of land acquisition (mu)								Temporary acquired land *	Household affected by land acquisition
	Total	Irrigated land	Vegetable land	Orchard	Dry land	Woodland	Waste land	Others		
Xinjiang	1639	1089	103	425	22	-	-	-	675	1161
Jishan	2041	1792	63	158	6	-	22	-	208	917
Hejin	2349	1451	161	433	125	142	21	16	370	1437
Hancheng	31	5	-	-	-	-	26	-	127	17
Total	6060	4337	327	1016	153	142	69	16	1380	3532

**All of the temporary land was dry land.*

Table 2-3 Statistics of Building Removing Progress for Expressway

County	Area of house removing (m ²)					Attachment building		Number of household affected	Number of household removed
	Total	Brick and concrete	Brick and wood	Earth and wood	Simple	Fencing wall (m)	Doorcase		
Xinjiang	2201	1167	526	391	117	1695	3	111	-
Jishan	2308	851	348	541	568	4734	-	86	3
Hejin	4206	1947	1495	578	186	908	2	190	2
Hancheng	68	-	68	-	-	-	-	-	-
Total	8783	3965	2387	1510	871	7337		387	5

** No. of affected household means the household with all types of buildings be removed including the simple buildings in orchard.*

2.2.2 Quantity of land acquisition for local roads

In the 6 local roads, there was no land acquisition and resettlement in 5 local roads. All of these local roads are located in the exit area of coal out-transporting, and many large transportation vehicles pass there. To meet the demands of coal transporting, the subgrade was built wide and the width of pavement reached 12 m in the original construction. Due to the dust pollution from the coal transportation vehicles, the 3~5m wide waste land belt at the both sides of the local road couldn't be used for farming, tree planting or the business houses building. In this local roads improvement according to the Class II highway standard, the original road width could meet the improving requests, so there was no land acquisition, removing of attachment or resettlement of villagers.

In these 6 local roads, only the Zhaojiazhuang-Chaijia needed to acquire land and remove the attachments. In the primary design of this road, 180 mu land needed to be acquired, including 36 mu of irrigable land, 90 mu of dry land and 54 mu of orchard, all of the acquired land was distributed in 2 towns and 6 villages in Hejin city. To reduce the acquired land, the actual acquired land was waste land and ravine after optimizing the design. The total acquired land was 50 mu, including 27 mu of irrigable land and 23 mu of waste land, and there were no houses to be removed.

2.3 Compensation for land acquisition and resettlement

2.3.1 Compensation standard

According to the economic development level in project influence area and China Land Law, the Shanxi Province government approved the compensation standard of land acquisition and resettlement in this project. This standard also was approved by ADB. Same standard was adopted in local roads construction. The standards are shown as follows:

Table 2—4 Compensation Rates for Houses Unit: Yuan/m²

Brick and concrete	Brick and wood	Earth and wood	Simple
200-350	150-200	100-150	80-100

Table 2—5 Compensation Rates for Construction Land Unit: Yuan/mu

Category	Vegetable land	Irrigated land	Dry land	Orchard	House foundation land
Compensation for land	11290	4320	6140	2160	4320
Subsidy for resettlement	7060	2700	3830	1350	2700
Total	18350	7020	9970	3510	7020

Table 2—6 Compensation Rate for Young Crop Unit: Yuan/mu

Category	Vegetable land	Others
Rates	600-1000	500

Table 2—7**Compensation Rate for Auxiliary Facilities****Unit: Yuan**

Fruit tree not in large area (Nos.)	Without fruit tree not in large area (Nos.)	Can used tree (Nos.)	No used tree (Nos.)	Green house (mu)	Brick fencing wall (m²)	Earth fencing wall (m²)	Tomb
50-120	8-20	10-20	5-10	9000-13000	30	15	350-600

2.3.2 Implementation Achievement of Plan

During the project implementation, we had an interview with the implementation of above compensation rates, and we knew that the compensation that the affected people obtained was agreed with the standards stipulated in RAP. The survey data was recorded in the No. 3 Monitoring Report of Resettlement.

Up to February 28 2007, a total amount of 166.67 million RMB Yuan has been paid in terms of Land Acquisition and Resettlement compensation, accounting for 64.55% of 258.20 million RMB Yuan, the total amount budgeted, of which, the amount paid to villagers and village collectives for various compensations and resettlement costs are 116.34 million RMB Yuan, accounting for 73.8% of total budgeted (contingency included). In comparison, the items to which expenses occurred are less than the budgeted include: (a) compensation to new cultivated land, only 5.5854 million RMB Y, 13.61% of the budgeted 41.03 million RMB Y, the reason for this is the regulation of the Shanxi provincial government, according to which the rate of compensation to new cultivated land is 1000 RMB Yuan per Mu; (b) expenses of contingency, only 12.83 million RMB Y, 20.56% of the budgeted, over sized budget for this item is the reason.

Compensation payment progress of land acquisition and resettlement is shown as follows:

**Table 2-8 Statistics of Compensation payment progress
of land acquisition and resettlement (2007.2)**

Unit: 10000 RMB Y

Item	RAP	Completed
A. Basic fee	17,830.0	14,735.30
1. Compensation for land acquisition	2,642.0	3,144.64
2. Subsidy for resettlement	1,650.0	2,228.58
3. Subsidy for land reclamation	4,103.0	558.54
4. Farmland use tax	615.0	519.00
5. Compensation for soil and water loss	205.0	75.71
6. Compensation for temporary occupied land	1,198.0	557.60
7. Compensation for houses	96.0	237.60
8. Compensation for other structures	74.0	1,264.96
9. Compensation for crops and trees	2,390.0	2,215.04
10. Compensation for power and communication facilities	1,889.0	2,433.02
11. Restoring of irrigation pipes and ditches	2,670.0	1,258.86
12. Subsidy for villagers resettlement	1.0	0.00
13. Transition fee for affected villagers	2.0	1.75
14. Moving expense for enterprises	45.0	0.00
15. Cultural relics exploring fee	250.0	240.00
B. Overhead (3% of basic fee)	530.0	257.20
C. Service fee (3% of basic fee)	530.0	178.66
D. Supervision and evaluation fee (0.5% of basic fee)	90.0	149.93
E. Contingencies (30% of basic fee)	6,240.0	1,283.41
F. Others	600.0	62.69
Total	25,820.0	16,667.19

2.4 Resettlement Method

2.4.1 Land resettlement

Two types of land resettlement mode includes: (a) those villages with land reservation will redistribute reserved land to the villages that lost lands. The number of the villages took this mode is 34, accounting for 58.6% of total affected villages; and villages without land reservation will not be able to redistribution for the moment since land contracts signed with the villagers have not yet expired. Therefore the villages will pay compensation money in certain amount to the villagers every year during the years left to contract expiration. The number of the villages took this mode is 24, accounting for 41.38% of total affected villages. The resettlement data of 58 villages were shown in No.4 Monitoring Report of Resettlement.

The investment proportion of the land compensation funds of all affected villages are shown as follows: 58.11% are allocated to villagers for production and daily life expenditures; 11.1% are invested in water conservation facilities; 20.48% are invested in road harden; 10.02% are in school construction or maintenance and; 0.29% in skill training of villagers. From allocation proportion, it is observed that almost all villages attached great importance to improvement of water conservancy and transportation infrastructure, while paid less attention to the skill training, and before 2004 only 6 villages had fund arrangement for this purpose. By 2005, 16 Villages arranged skill training fund with the amount increased by 51%, because at that time, land compensation fees are fully paid to the villages. Small amount invested in training does not always mean small scale of the training. At present, the influence area provides training to villagers by two modes: One is the regular lectures at villages organized by townships and given by the experts from county level agencies of agricultural science and technology, or concentration training at township for villagers to come. Normally it is free of charge from trainees, but the village is responsible for provision of training space. The purchase of training materials is either organized by village committees or done by individual villagers themselves. Each household expends about 50 RMB Yuan on training material yearly. The other mode is that the individual farmers select by themselves the vocational training of technology intensive skills, such as automobile driving, machinery fixing, hair cutting and cooking. Normally it costs 1000 - 2000 RMB Yuan per person to be trained, and almost every trainee gets income higher than that before training.

2.4.2 House resettlement

For the reason of very small quantity of house replacing (only 5households), on-spot-resettlement mode is taken. Namely : The villager committee takes charge to redistribute the land at proper position within the village to resettle households for their housing foundation land (about 200 square meters per household). Up to now, 3 affected households have already built new tenement with a floor area larger than





the area of the houses demolished and with quality better than before. For instance : Villager Huang Yanrong living in Fujiazhuang village of Huayu township, Jishan County had his tenement demolished with a floor area of 150 square meters and built new house of his household with an area of 200 square meters. Another example refers to villager Wang Youfa in same village. He had his house with an area of 150 square meter demolished, but his

new house is 180 square meter large, of which 80 square meter is brick/concrete structured and 70 square meter is brick/wood structured. For example, Wang Yongli, a head of a 4 person family in Cangtuo village of Hejin County, built a new house with 160 m² after the demolition of original one with only 46 m². Chai Maohu is the only one who has been affected but not built new house yet after resettlement, because he is the only affected one of this household. And that his son has 2 Houses, one is in the village, the other in county seat. Chai Maohu now stays in his son's house and intends not to build a new house of his own for the moment. Village has already distributed a house foundation to him for a new house to be built later. (Photos: the new houses of affected people)

2.4.3 Enterprise resettlement

There will be only one enterprise to be affected, i.e. the Jinyuan (Gaoyi) Coking Factory in Xingjiang County with an area of 10 Mu to be resettled. It is an enterprise creating badly pollution and closed by municipal government in light of national regulation before Land acquisition in 2001. Therefore, payment will be made in compliance with RAP to compensate for temporary structures in the factory yard and acquired land, and there is no demand to restore production and worker resettlement.

2.5 Organization of land acquisition and resettlement

The construction coordination group for Houma-Yumenkou expressway setup by Yuncheng Municipal Government (the city leader group) is the leader and coordination organization. The responsibility of the office under the leader group is to organize and coordinate the land acquisition and resettlement work according to the decision-making of leader group.

(i) The land acquisition and resettlement coordination leader groups and office at country level take charge to check the quantity of acquired land, house removed, infrastructure and attachments in their own county according to the mission and requests of city leader group; evaluation and compensation rate preparation for the removed special facilities value; sign land acquisition and resettlement agreements with affected enterprises and individuals; pay compensation; carry out their own implementation of land acquisition and resettlement to ensure timely construction of new houses and timely resettlement progress; and report to the city leader group and submit related statistics data regularly.

(ii) The affected towns and village committees appointed a special coordinator to take charge of land acquisition and resettlement.

The implementation in several years shows that the above operation mode adapted the local land acquisition and resettlement, the organization setup was reasonable, and these ensured the smooth completion of related mission effectively.

3. Economic Recovering of Affected People along Alignment

3.1.Rehabilitation of production infrastructure facilities

3.1.1. Rehabilitation of temporary land

SHEC paid great attention to the rehabilitation of temporary land. In the anaphase of engineering, SHEC organized inspection once a month, and took compulsory measures to ensure that all of the 1380 mu temporary land had been recultivated by the end of May 2007. In addition, 150 mu of land was reclaimed with the utilization of waste earth in the waste valleys in Dongxinfeng village of Hejin city, and the activity gained the praise from government and villagers. (Photo: temporary land rehabilitation and land reclamation)

Group a – temporary land rehabilitation of slurry pond under bridges



Group b – land reclamation and rehabilitation of waste and borrow pits



Group c – rehabilitation of asphalt concrete mixing plant





Group d – rehabilitation of contractors' project offices and precast yard



3.1.2. Rehabilitation of irrigation facilities

From December 2004, SHEC started the irrigation facilities rehabilitation. Under the subgrade, the steel tubes were installed for the broken water pipes and channels, and the PVC pipes were inward adopted to resume connection. Along the alignment, 206

steel pipes, 11330 m long, were installed with investment of 9 million Yuan. Various plastic pipes, 19000 m, were installed with investment of 190000 Yuan. For the area where could not be connected with the original water source, 20 power-operated wells were sunk with investment of 2.5889 million Yuan. 12070 m irrigation channels were resumed with investment of 809700 Yuan. Total cost of irrigation facilities rehabilitation reached 12.5886 million Yuan.

Photo a – Power-operated wells for villages



Photo b – Bridge gutter, water channel, and water tower



3.1.3. Flood prevention facilities

For the villages and farmland along the alignment, SHEC paid great attention to defense capability against of flood-control and disaster-relief. To prevent the villages and farmland to be flooded, 71 evaporation ponds were built for flood discharge and water storage with investment of 36 million Yuan, and the storage capacity reached 202776 m³.

Photo – Evaporation ponds along the alignment



3.1.4. Rehabilitation of production roads

For the influence degree to production roads, SHEC conducted inspection 5 times, including the programming and rehabilitation compensation of relocated roads. The 109875 m long rehabilitated production roads have been put into service, and the cost reached 2.3887 million Yuan totally.

Photo – rehabilitated production roads



3.2. Implementation of Economic Recovering

In order to make life rehabilitation perfect and to minimize the loss resulting from land decrease, the affected villages timely redistributed farmland so that the villagers with land acquired got land again with an area generally equal to others. Then, the

county authorities did works guiding affected villages to make economic rehabilitation plan to ensure a life standard at least not below the standard before resettlement. When making the plans, deep discussion by villagers were encouraged on how to restructure village economy and to add more value to farming products based on existing condition of the villages such as villages' geographic situations and resources.

In the process of livelihood rehabilitation plan implementation, the offices particularly responsible for land acquisition and resettlement at county and township level gave direction by two types.

The first type is for the 34 villages redistributed lands after land acquisition, mainly focus on the measures to restructure their industries, including (i) enlarging planting area of cash crops, vegetables and fruits; (ii) developing aquatic breeding. Large amount of land compensation fees are invested in improvement of irrigation facilities, which raised greatly the average output value of farmland. According to statistics from 34 villages redistributed land, 2,990,000 RMB Yuan were invested in irrigation facilities, making up 12 % total sum of compensation. Owing to the improvement of irrigation conditions, the average output value per mu reached above 1600 RMB Y, increasing by 67 % than 2001. After industry restructuring, plant production, livestock breeding and household based sideline in Xishe and Huayu villages of Jishan county experienced coordinated development. The annual average gross income per capita there in 2006 reached 29000 and 13200 RMB Yuan respectively, of which one third was made by each of said third industry. In Xizhuang village of Hejin, 149 mu of land was acquired, and this made 26 households lost part of land. The village committee uses the remained mobile land to adjust to keep the affected people's land without reduction. At present, the main living resource of this village is farmland work, and half of the land is used to plant apple, and the other half is used to plant grain crops. To improve the income of villagers as soon as possible, on the one hand, the village organized 400 people to work in the near factories and arranged 150 people to participate the expressway construction; and on the other hand, the village has started the land development plan: at first, financed funds from public to repair and harden the village roads, and built a 3 km long out-village road to connect the city zone; at second, programmed a industrial park with 8 km long, built green belt, planned to attract the trade and investment promotion in 2007, and make the village become a part of city.

Photo: Xizhuang village: programmed industrial park and roads, village roads hardening, and new construction material factory.



The second type is for the villages which are unable to do land redistribution because they have no land reserved after land acquisition. They are mostly the villages with small average farmland area per capita. Therefore, except measures same to said villages to raise output value of land, the major measures here concentrate to the development of process industry, trade and sideline so as to increase as more persons working as labor as possible. Cangtuo village, Hejin county for example, the farmers here plant asparagus (a sort of vegetable) in the wasteland of Yellow River bank for processing and then sale, at same time they expand trucking trade and work as labors, which make their income increasing very soon. The area of asparagus planting enlarged from 1000 mu in 2001 to 4000 mu in 2006 with a net income of 2000 RMB Yuan per mu. The income increase resulting from only this measure reaches 6 million RMB Yuan each year for the village, 3000RMB Yuan per person in average. The number of motor vehicles the village has increases from 30 in 2001 to 50 now, and each contributes 10,000 RMB Yuan to annual income, transport materials for the construction of the Yellow River Bridge. In order to raise villagers' technology capability, 50,000 RMB Yuan

were expended on skill training with 300 persons trained. In 2006, the average income per capital of the village reached 4300 RMB Yuan, which is 3 times of 1400 RMB Yuan in 2001.

Photo: Cangtou village: asparagus planting, village road hardening, and new school.



The result of implementation of the economy rehabilitation program is very satisfactory. The net income per capita of 58 villages rose from 1950 RMB Yuan 2001 to 3002 RMB Yuan. The gross income in 2006 reckoned based on said net income increased by 96.50 million RMB Yuan, about 6 times of anticipated increase of 17.32 million RMB Yuan.

The analysis of data collected from 5 villages with heavy loss of lands also witnesses the success in economic rehabilitation. Listed in the table below are the comparison of primary indicator of 5 villages between 2001 and 2006. The data in the table indicate that the margin of gross income increase in 2006 exceed the anticipated. It is observed too that income from working as labor becomes a key contribution to income increase.

Table 3-4 Main Indicators Comparison in Village of Land Reducing Heavily (2001-2006)

Village	Xishe	Dongzhuang	Huayu	Xiyaotou	Junling
Population increase%	2.7	3.8	14.2	3.4	0.8
Farmland reduce%	10.4	23.7	8.1	6.1	20.0
Farmland reduce per capita%	21.4	25.92	33.33	28.6	20.0
Average output value increase per mu %	130	144	150	50	129
Net income increase per capita %	121.4	72.5	63.3	20.4	160
No. of persons working as labor in 2006	200	300	150	330	300
Income from working as labor in 2006 (10000 RMB Y)	200	180	60	198	210
Gross income increase in 2006 (10000 RMB Y)	279	206	94	156	424
Anticipated increase (10000 RMB Y)	260	200	20	20	20

Xiyaotou village in Hejin was one of the villages which the average farmland per capita reduced most, and the average farmland per capita of this village was only 0.5 mu after land acquisition. If only relying on crop planting, calculated with the highest production value 2500 RMB Yuan per mu in influence area, the average income per capita is 1225 RMB Yuan only, and the net income per capital is about 800 RMB Yuan after cost. This village utilized the convenient condition that the village is close to the city industrial park to setup 5 small enterprises, 60 transportation specialized households, 10 shops, 10 restaurant, and feed about 900 people to the nearby factories. The average monthly wage per capital was about 800 RMB Yuan, only on this aspect, the income of the village gained 864 million RMB Yuan every year, and the average income per capita was more than 3000 RMB Yuan. Added the income from enterprise and land, the average net income per capital of the village reached 5300 RMB Yuan in 2006, increased 84% than 2875 RMB Yuan in 2001. Now, in this village, 80 households purchased cars, the number of motorcycle and motor tricycle reaches 500, the mobile phone reaches 700, 100% of households have color televisions, 90% of the households have washers and fixed-line telephones, 50% of the households have the drinking-water machines and stereos, 30% of households have iceboxes, and 10% of households have air-condition.

Xinjiang county has the experience of traditional green house vegetable planting, the villagers along the line used the resettlement compensation to develop and enlarge the planting and sale, and the income of villagers was increased largely.

Photo: Vegetable wholesale market in Xinjiang county, and new built green house.



In Jishan county, the production of Chinese date and grape has taken shape. The government called the villagers along the line to plant Chinese date and grape, and built market.

Photo: wholesale market of Chinese date and grape in Jishan county, Chinese date sale, and Chinese date tree planting.





4. Conclusion

The land acquisition and resettlement of Houyu expressway has the following characters:

1) Resettlement organization was established reasonably. The project was implemented by the client and the city/county governments in project area in a model of division of labor with individual responsibility. The efficient work system included sufficient staffs with high work capacity. The related organization and operation procedures met the actual requirement.

2) Shaanxi Kexin Consulting Company was engaged as the supervision agency of resettlement. The chief consultant and the team composed of high-quality members gave the timely guidance and consulting service to the land acquisition and resettlement, compensation, economic recovering and so on, and their work promoted the project smooth proceeding greatly.

3) The work in prophase was carried out effectively. We did lots of basic investigation during prophase. We also cooperated with ADB officials to conduct field visit to local governments and villages, and solicited their comments and suggestions.

4) Public participated extensively. The prepared Resettlement Action Plan and Resettlement Information Booklet were publicized through TV, broadcast and other media. Meetings were held to publicize the related project expressway information to the local people.

5) Go through various formalities. Such as the report and approval of land for construction, approval of occupied forest, wetland protection, and cultural relic protection, these legal and timely formalities laid a good foundation for the resettlement.

6) Resettlement was implemented strictly. The trainings to the resettlement staff were organized. The site registration was conducted strictly, and the representatives

from all parts participated in the site checking, summarization, signing, and confirmation. The registration data was complete, and was summarized and calculated timely. The compensation was paid on basis of contracts timely.

7) Methods of resettlement and compensation were proper. The land was adjusted timely, the compensation fund was put in the right place timely, and the house resettlement for affected villagers was satisfactory.

8) Production and infrastructure facilities were recovered. The temporary occupied land has been reclaimed to the culture condition, 150 mu land was reclaimed with waste earth in waste valley, the irrigation facilities were recovered, the flood prevention and control facilities were installed, the production roads were recovered with high standards, and the villagers along the line were all satisfied.

9) Economic rehabilitation is in order. The economic rehabilitation plan was prepared comprehensively. The local governments could give guidance timely. The rehabilitation effect of key villages is distinct. The county/city governments established characteristic farm produce market, which provided employment opportunities to the affected people. The agriculture leading industry played an important role in economic rehabilitation along the alignment. The general economic rehabilitation gained a much better result than original forecast.

10) Resettlement department of SHEC worked hard according to the regulations, submitted the related reports and documents to ADB timely, and provided good guidance for land acquisition, resettlement and rehabilitation. Their work gained good result.