

CHINA: Huainan Coal Mining Subsidence Area
Rehabilitation Project

Social Assessment
Report Summary

Project Management Office of Huainan Municipality

October, 2014

1 Brief Project Description

1. In order to control and rehabilitate the area with ground subsidence and environmental degradation caused by long-term coal mining, and to promote sustainable development, Huai’nan municipal government proposed the “World Bank (WB) Financed Huainan Mining Area Rehabilitation Project (hereinafter referred to as Huai’nan WB Project).”

2. The Huai’nan WB Project is located in the Jiulonggang-Datong (or JiuDa) coal mining subsidence area of Datong District, Huai’nan City, Anhui Province, covering the area of 9.3 km², and comprising 3 subprojects, respectively: (1) Environmental remediation and water system treatment; (2) infrastructure improvement and development and utilization of the project area; (3) project management and technical assistance. Please refer to Table 1 for content introductions in detail.

Table 1. Project Profiles

Subproject Name	Construction Content	Objective
1. Environmental Remediation and Water System Treatment	1) Environmental remediation: environmental remediation of the mining wasteland and re-vegetation of the project area	1) Halt the further deterioration of ecological environment, make every effort to restore the complete plant community system, biologic chain system and the local nature ecosystem within the region; 2) Create the landscape elements such as nursery and forest into an integrated green space of leisure, recreation, fitness and science demonstration through integration and improvement of the greenway to promote the blending development of the old and now urban areas.
	2) Water system treatment: repair the water system in the project area and meet the 30-year return anti-external flash flood and 30-year return drainage requirements	Reaching the 30-year return anti-external flash flood and 30-year return drainage requirements through the water system treatment of the subsidence area, control the water quality to reach Class V Standards.
	3) Closure of old garbage dump in Datong: close Datong Garbage Dump to prevent water, soil and air pollution of this region	Thoroughly solve the problem of environmental pollution in the surrounding area of the old garbage dump to reduce the impact on the surrounding environment exerted by the leachate and the landfill gas from the old garbage dump.
2. Infrastructure Improvement and Project Area Exploitation	1) Improve and build the necessary road and the related water supply and drainage infrastructure in the project area, restore the original functions and connect them to the other part of the city.	The infrastructure is mainly based on the construction of the 4 road and the pipeline project under the road in the project area, setting a zoned separation sewage system of rain water and sewage in order to accelerate the formation of the arterial road network and to improve the traffic conditions, water supply and drainage conditions and the investment environment.

	2) Project area exploitation: support the facilities construction and activities in the project area after rehabilitation, integrate resources for local development services	Construction of redevelopment project: bonsai garden, nursery, flower trading market to make it a financial sustainable project.
3. Project Management and Technical Assistance	1) Technical research 2) Project technology management 3) Personnel technical training 4) Guidance and counseling service	In the process of establishing executing body, developing quality management system of the project, the experts of the World Bank project can provide constructive suggestions and personnel training. Amplify the leverage effect of the World Bank loan and Government financial fund.

2 Methods of Social Assessment

3. Social assessment was carried out through desk review and field visits including consultation with various stakeholders. The consultation was carried out through focused group discussions and individual interviews. Focused group discussions (FGDs) were organized in all 7 communities and three villages within project and surrounding areas. More than 100 people participated in the consultation sessions and more than 60 % of them are women. The social consultant individually interviewed about 40 persons randomly selected, including the persons who were affected by land acquisition of the mining development activities. The time, location and consultation methods are shown in Table below.

Time	Location	Consultation methods
April 27, 2013	Xinjian community	Individual interview and FGDs
April 28, 2013	Hongqi community	
April 28, 2013	Jiulonggang village	
June 22, 2013	Zhonghua community	
June 23, 2013	Zhanhou community	Individual interview and FGDs
June 23, 2013	Kuangnan community	Individual interview and FGDs
June 24, 2013	Chengang village	
October 13, 2013	Longhu park	Individual interview and FGDs
October 14, 2013	Haotai hotel	
October 15, 2013	Other project area	
November 7, 2013	Renmin village	FGDs
November 8, 2013	Taoyuan community	

4. A questionnaire survey was also carried out. 180 questionnaires were distributed in the communities and villages within and surrounding the project areas. 155 valid questionnaires were received.

5. At the same time the social consultant also carried out consultation with local government officials from relevant agencies including Huai'nan Education Bureau, Human Resources and Social Security Bureau, Statistics Bureau, Finance Bureau, Ethic and Religious Committee, Women's Federation, Datong District Government, Jiulonggang Town of Datong District, and Datong sub-district office

3. Socioeconomic Baseline Information in the Project Area

6. The project is located in Datong District of Huainan City in Anhui Province. The total project area is about 9.3 km² (13950 mu) consisting of 11182 mu (15 mu = 1 ha) of state-owned land and 2768 mu of collectively owned land.

7. A significant area subsided due to coal mining in the past. Most people in the project area have been relocated by local government and the Mining Group. However, there are still some individual who rented the state-owned land in the project area to operate some small scale enterprises.

8. The users of the state-owned land are complicated, involving both Huai'nan Mining Group Company and municipal government of Huai'nan City and government of Datong District. The main coal mining closed completely in 1982. However, some small scales of enterprises, which were developed in the past associated with the operation coal mine operation, are still operating.

9. The collectively owned land in the project area mainly belongs to two administrative villages: Chenxiang Village and Jiulonggang Village in Jiulonggang Town. All the rural residents in these two villages have been relocated in the past, but some part of their farmland is still in the project area.

10. All people live in the project area are urban residents in the four communities, including i) Chonghua; ii) Hongqi; iii) Zhanhou, and iv) Kuangnan. There are 1928 people in total in these four communities. Most of the residents in these four communities are employees in the small enterprises and public units which are still operating. The distribution of the population in the four communities is shown in see Table 2.

Table 2: Population living in the project area

No.	Resident site	Community	Town or Subdistrict	Households	Population
1	Chongwen	Hongqi Community	Jiulonggang Town	22	60
2	Kuangbei	Chonghua Community	Jiulonggang Town	60	212
3	East side of Cement Plant Road	Kuangnan Community	Datong Street	368	1500
4	Kuangnan	Kuangnan Community	Datong Street	38	130
5	Zhanqian	Zhanqian Community	Datong Street	6	26
Total				494	1928

11. There are six communities and three villages in surrounding area adjacent to the project area, including i) Hongqi community; ii) Huaishun Community; iii) Chonghua community; iv) Xinjian Community; v) Zhanhou community; vi) Kuangnan community; vii) Jiulonggang village; viii) Qingfeng villange, and ix) Lvying village. The total population is 26312 in these surrounding communities and villages, including local residents, employees in enterprises and public units, and students. The

distribution of population is shown in Table 3.

Table 3: Residents living in the surrounding area

No.	Name of the village or community	Name of the township or Street Office	Number of households	Number of people	Remarks
1	Hongqi community	Jiulonggang town	250	4850	
2	Huaishun community	Jiulonggang town		3400	Including 2200 students of technical school
3	Chonghua community	Jiulonggang town		2407	Including students in one school and employees in one hospital.
4	Xinjian community	Jiulonggang town		7858	
5	Jiulonggang villiage	Jiulonggang town		2737	
6	Qingfeng village	Jiulonggang town		338	
7	Zhanhou community	Datong street	10	40	
8	Kuangnan community	Datong street		3932	
9	Lvying Village	Datong tree farm	150	750	North of tree farm road

12. There are seven small enterprises which are still in operation in the project area. These enterprises have 494 employees¹ in total. The details of these seven enterprises are shown in Table 4.

Table 4: Information on enterprises located in the project area

No.	Name of the enterprises	Location of the enterprises	Number of people	Remarks
1	Huai' nan Industrial Boiler Accessories Factory	Chenxian village of Jiulonggang town	27	This enterprise will be affected by land acquisition and will need to be

¹ All of them are already included in the total population in Table 2.

				relocated.
2	Garbage Dump	Chenxian village of Jiulonggang town	7	
3	Huai' nan City Manhan Construction Material Co., Ltd.	Kuangnan community of Datong street	75	
4	Huai' nan City Zongjian New Construction Material Co., Ltd.		85	
5	Huai' nan City Tianjie Commercial Concrete Co., Ltd.	Hongqi community of Jiulonggang town	135	
6	Huai' nan Branch of Beijing Zhongdian Environmental Engineering Material Co., Ltd.	Hongqi community of Jiulonggang town	35	
7	Huai' nan Qiancheng New Construction Material Co., Ltd.	Kuangnan community of Datong street	130	

13. There are 6 service units, including schools and hospitals in the project area. There are 2771 people in these public units including 1556 students. The details are shown in Table 5.

Table 5: Public units located in the project area

No.	Name of the public units	Location	Number of people	Remarks
1	Fourteenth Middle School	Hongqi Community of Jiulonggang town	1305	There are 105 teachers and 1200 students in the school
2	Jiuyi Primary School	Hongqi Community of Jiulonggang town	384	There are 28 teachers and 356 students.
3	Wanrenkeng Education Center	Kuangnan community of Datong street	5	
4	Anhui Province Huai' nan City Qishanji Garden Spot	Kuangnan community of Datong street	620	Including 500 drug personnel and 120 workers and 30 personnel in duty every day.
5	Huaian City Datong Funeral House	Kuangnan community of Datong street	57	
6	Christian Church	Kuangnan community of Datong street	400	400 people are engaged in religious activists, they only come when religious rites are performed.

14. There are two enterprises which are in operation in the surrounding area. There are 155 employees in these two enterprises. Please see the details in Table 6.

Table 6: Enterprises located in the surrounding area

No.	Name of the enterprises	Location of the enterprises	Number of people	Remarks
1	Dongfang Construction Equipment Rental Co., Ltd. (south of Fifteenth Middle School)	Zhanhou community of Datong street	30	
2	Shenghe Machinery Branch	Zhanhou community of Datong street	125	

15. There are seven public units in the surrounding area. There are 460 employees in

total in these units. Please see the details in Table 7.

Table 7: Public units located in the surrounding communities

No.	Name of the public units	Location	Number of people	Remarks
1	Imperial Bank of China	Huaishun community	20	
2	Mental Hospital Kuangdong Group	Chonghua community	60	
3	Jiuer Primary School	Xinjian community		
4	Shengang Primary School	Jiulonggang village	96	
5	Huai' nan City Datong District Funeral House	Kuangnan community	57	
6	Social Welfare Institute in Datong District	Kuangnan community of Datongstreet	410	Including 300 adopted children and 110 workers
7	Qishanji Culture Cemetery	Kuangnan community	18	

4. Social Impacts and Risks

16. Overall the project will have significant positive impacts on local people in the project area and the communities in the surrounding areas through environmental improvement, improved road conditions, water supply and sanitation systems and networks, and generation of employment opportunities. The main negative social impacts are associated with the land acquisition. The consultations with the people affected by land acquisition associated with the mining development activities in the past do not reveal any legacy issues.

4.1 Positive social impacts

17. *Potential positive impacts on local economic development.* This project will bring innovation to the comprehensive environmental treatment in coal mining subsidence area in Huai' nan City. After the completion of the project, it will create a good investment environment and promote the development of real estate and tourism: this project will make surrounding areas of real estate increase in value by 15%-30% and promote the development of real estate and tourism.

18. *Creation of employment opportunities.* The developed and utilized items of this project include floral trade market, garden displaying potted landscape and nursery garden, which can provide a large quantity of jobs besides its considerable economic

benefits. The flower market can provide 37 managerial positions, the Bonzai garden can provide 27 positions and tree nursery can provide 54, the flower market can also provide more than 4,000 booths, which can serve as a good platform for the local households who are willing to set up their own businesses. The skill training plan of the project will effectively help the affected residents, especially to realize the reemployment goal of women: based on sufficient market research, the project office has set up a practical five-year employment training plan for the staff who need to be trained of the project and surrounding areas. All the training occupations are carefully selected through the market research, among which the garment making is specially designed for women who are willing to accept the training, and flora selling in the flora trade market is very suitable for women to run.

19. Reduction of deceases born from the pollutant emissions from the closed dump site.

The closure treatment of the old waste yard can solve the pollution problem rising from exposed garbage and effectively control the influence of garbage on the surrounding environment, which will directly improve the quality of life and living environment of the surrounding residents. It will also effectively control the pollution on underground water, clear environment that breeds flies and mosquitoes and reduce morbidity, which can directly reduce the residents' medical expenses.

20. Improved access to various service facilities and water supply. After the completion of the project, it will enhance the road network and other infrastructures within the project area. This will contribute to saving of travel time and to improve the quality of life of residents. The infrastructures are mainly improved through construction of the four roads within the area and the water supply pipeline engineering under the road, which makes diversion of rain and sewage and speeds up the formation of main street network, so as to improve the transportation, water supply and drainage conditions and investment environment in the area. The economic benefits generated by road construction include to save vehicle operating cost, travel time, and cut traffic and accident loss.

4.2 Negative Social Impacts

21. *Land acquisition.* Project implementation will involve some permanent land expropriation and house demolition and relocation. The construction of the project will inevitably require permanently expropriating or temporarily occupying some land. In terms of the present design result, although each subproject has been optimized and modified in order to reduce land expropriation and demolition, some of the subprojects will still occupy some state-owned land and land owned by some villagers.

- *Relocation of six households.* Six households in Zhanhou community will need to be relocated.
- *Acquisition of collectively owned land.* The project needs to expropriate 177.7 Mu collective lands in Jiulonggang town of Datong District. Affected farmers have 33 households with 122 people. All expropriated lands are cultivated lands, which are used as flower market.
- *Long term land leasing.* The project needs to rent and transfer use rights of 1533 mu of collectively owned land of Chenxiang Village, which would be used as tree nursery development and environmental remediation under the project. This involves 1,042 people from 306 households.
- *Relocation of one enterprise which is still in operation.* Tianhe Boiler Accessories Factory, which has 27 employees, will need to be relocated.
- *Acquisition of state owned land.* The project will need to acquire 1056 mu of state owned land. The land using right currently belong to four small enterprises. These four enterprises were closed long time ago and *no people will be affected* by this land acquisition, but they will need to be compensated. These four enterprises are listed in Table 8.

Table 8. Closed enterprises to be affected by the project

Name	Current state
Datong Third Coal Mining Co., Ltd	Shut down
Datong First Coal Mining Co., Ltd	Shut down
Huangjian Coating Factory	Shut down
Huainan Oil Mixture Factory	Shut down

23. *Impacts on people's normal life during construction.* During the construction period the project will disturb the normal life of the residents. The construction of the project will inevitably have noise, dusts, potential hazard of traffic safety, etc. All these may negatively affect normal life of local people.

4.3 Potential social risks

24. The main social risks are related to land acquisition and long terms land leasing:

- With regards to land acquisition, there is a potential risk that affected residential households and enterprises cannot reach agreement on the compensation package, as a result the project implementation could be delayed.
- With regard to the land leasing for the tree nursery development and operation. There are two potential risks: First, the process of negotiating and signing the lease agreement may take longer time than expected, which will delay the project implementation. Second, farmers may not receive sufficient rent or cannot receive rent on time if the project entity is not managed properly.

4.4 Key Findings of Social Consultation

25. Consultations were carried out with various stakeholders as part of the social assessment. The key findings of the consultation are the following:

- *Local residents are very supportive to the project.* Residents in project area and the surrounding area adjacent to the project site are very supportive of the project. The SA reveals that the local residents have been suffered from air pollution, water pollution, rubbish and solid waste impacts. All local resident consulted with are eager to have the project to help with reduction of environmental pollution and damages as mentioned above, to improve quality of life, and to have a healthy and safe living environment through the environmental governance project.
- *Enterprises affected require reasonable compensation.* All the enterprises require reasonable compensation for the land and plant no matter they have been shut down or are still operating, and the workers in enterprises which are still operating need to be properly resettled.
- *People affected by land acquisition welcome the project but require transparent resettlement policies.* The project will inevitably expropriate some land and demolish some houses. The affected persons are very much in favor of this environment improvement project, while they also hope that:
 - a) The standard and policy of compensation for land expropriation and demolition shall be notified as soon as possible, and shall be in an open, fair and transparent way;
 - b) The resettlement plan of land compensation shall be reasonable;
 - c) Compensation fees shall be released in full and on time.

- *Women will equally benefit from the project as men.* The social assessment was carried out in a gender sensitive approach and a detailed gender analysis was carried out as part of the social assessment. The 155 questionnaires are involving 506 population, among which 259 are male who account for 51.19% and 247 are female who account for 48.81%. More than 100 people participated in the consultation sessions and more than 60 % of them are women. The results of the analysis indicated that the average education level of women is lower than men. For instance, 47% men received middle school education but on only 33% for women. Although women undertake almost all family chaos but most families rely on men for family cash income. Men earn over 75% of total family cash income for over 90% of families in the project area. However, women will have equal opportunity to benefit from the project in terms of improved environment and access to job opportunities. However, the land acquisition may result in reduction of income generated by women who mainly rely on land for income generation activities.

5. Mitigation Measures

26. In order to mitigate the negative social impacts associated with land acquisition and manage the potential social risks, a resettlement action plan (RAP) and environmental management plan (covering social part) have been prepared and disclosed. More specifically, the following measures are included in these plans.

- To mitigate the negative social impacts associated with land acquisition and resettlement, the following measures have been taken in the process of the resettlement planning:
 - a) *Participation of and consultation with affected people.* Conduct sufficient participation and consultancy of the public to allow the public to join in project design and to ensure the embodiment of their

benefit demand;

- b) *Compensate the affected assets at full replacement cost and provide support to livelihood rehabilitations.* Compensation will be paid to the affected people for their land and houses at full replacement cost. Additional allowance will be provided to vulnerable groups such as female household and the disabled in the process of house reconstruction;
- c) *Provide skill training and job opportunities to affected persons;*
- d) *A grievance redress mechanism* has been established and included in the resettlement action plan.

- To manage the potential risks associated with long term land lease, detailed land transfer processes and procedures and the legitimate rights of both parties are included in the RAP.

- To minimize the impacts on the local communities during construction, measures have been included in the ESMP, which mainly include but not limited to the following:

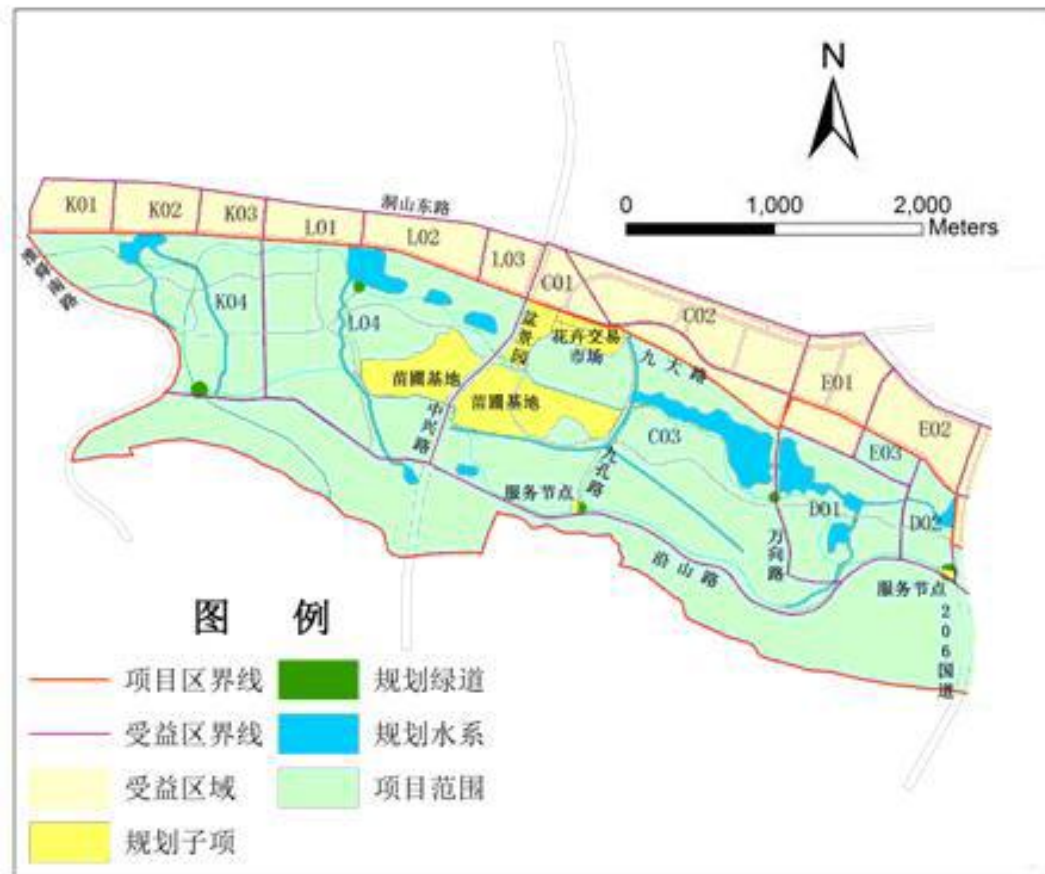
- a) The road and water supply pipeline will be constructed section by section to reduce influence on the travelling of residents;
- b) To provide additional road signs to limit vehicle speed and carry out traffic safety propaganda;
- c) The contractor will follow noise control standard strictly, and to take actions to reduce noise pollution as much as possible;
- d) Forbid high-noise construction at night and avoid night work if possible;
- e) Regularly water the entrance road and makeshift road for construction to prevent dust pollution;
- f) Remove the construction refuse and major pollution source from the

construction camp in time and sanitize the construction camp, and regulate behaviors of the construction workers.

6. The Arrangements for Local People to Benefit from Land Value Increase

6.1 The Area with potential of land value increase

The area with potential land value increase is the belt between Dongshan East Road and Linchang Road and Jiuda Road adjacent to the north side of the project area, which includes 10 land plots according to the two development plans (see the map below). The belt is divided into two parts by the Zhongxing Road under planning, which belong to two different regions in terms of planning. The first part to the west of Zhongxing Road with an area of 91.84 hectares belongs to the *Regulatory Detailed Planning on Quanda Resources Exhausted Area of Huai'nan City*, while the second part to the east of Zhongxing Road with an area of 103.37 hectare belongs to *Regulatory Detailed Planning on Jiulonggang Region of Huai'nan City*.



Based on the documents of land ownership and the two development plans, of 195.21 hectares of the total land area of the belt, there are 49.36 hectares of collective land distributed in Chengxiang village, Xiacai village, Qingfeng community and Datong Street and 145.85 hectares of state-owned land .The size and ownership structure of each plot are shown in Table 1.

Table 1. Land ownership and size of each plot in the belt

Plots	Actual area	Area of Collective land	Collective unit and population		Area State-owned land	User and population	
			Unit	Population		User	Population
C01	14.05	2.83	Chenxiang Village	25	11.22	Datong Forest Farm	400
C02	45.45	18.73	Chenxiang village	75	26.72	Shunfa Hengye Co., Ltd.	3,000
E01	19.69	6.75	Xiacai Village	700	12.94	Jiu-yi Company	300
E02	24.18	-			24.18	Mining Group	4,048
K01	24.24	12.45	Qingfeng Community	339	11.79	Datong Forest Farm	750
K02	14.50	8.60	Datong Street	843	5.90	Datong Forest Farm	589
K03	8.52	0.00	—		8.52	Mining Group	2,500
L01	11.06	0.00	—		11.06	Mining Group	
L02	18.08	-			18.08	Huai'nan Municipal Government	
L03	15.44	-	Datong Street	230	15.44	Huai'nan Municipal Government	147
Total	195.21	49.36		2212	145.85		11,734

The development status of the state-owned land is the following:

- 59.42 hectares of land plot of C02, E02 and K03 have been developed into residential areas;
- the using right of 33.52 hectares of land plot of L02 and L03 has been transferred to the Huainan Municipal Urban Investment and Construction Company and is ready for development;
- no clear development schedule for the remaining 52.91 hectares of land of other plots.

6.2 Population Profile

The field survey shows that there is a population of 13946 in the belt (see Table 1), including 2212 of rural population (Chenxiang village, Xiacai Village, Qingfeng community and Datong Street) and 11734 of urban population, of which 9548 people live in the newly developed residential area of plots C02, E02 and K03.

6.3 Mechanism for Local People to Benefit from Land Appreciation

Urban residents: Among 11,734 of urban residents, 9,548 people have properties within the belt and their properties will be appreciated along with land appreciation, so they will gain benefit from land value increase as a result of the project implementation. The remaining 2,186 persons to be affected by land development in the future will be compensated by replaced housing area with floor area of 1.2 times of the original living area. The resettlement site will be within the belt. Therefore they will be able to benefit from the land value increase. If these people are relocated outside of the belt, the land value and its appreciation of the resettlement site will not be lower than that of the land within the belt.

Rural residents: As indicated in table 1, there are 2, 212 rural residents within the belt. These people own 49.36 hectares of collective land, of which there are 26.2 hectares of cultivation land and 23.16 hectares of land for housing construction. The collective land is distributed in two villages including Chenxiang village and Xiacai village and remaining land is distributed in four collective entities including Chenxiang Village, Xiacai Village, Qingfeng Community and Datong Street. In order to make the rural residents benefit from land value increase through land development in the future, the government will take the following measures:

- a) To update the Regional Comprehensive Land Price at least once every two years in order to guarantee that the land appreciation can be reflected in new land compensation standard. It was agreed that Land Compensation Standard will be updated for three times during project implementation respectively in 2015, 2017 and 2019.

- b) Land area expropriated each year shall not exceed 20% of the total collective land area within the belt. It means that collective land expropriated in the area shall not be more than 10 hectares each year during project implementation. Thus there will have land to be expropriated over the next few years after land appreciation. Therefore rural residents will be able to benefit from land appreciation.
- c) To allocate 5-10% of expropriated land to village collective for economic development as per relevant policies. Specific measures and procedures are the following: 1) government pay compensation to affected people at the Regional Comprehensive Land Price; 2) convert the collective land into state owned land when full compensation is paid; 3) government transfers a piece state-owned construction land, which equal to 5-10% of actual size of expropriated collective land, to village collective for economic development; 4) local people will decide how to use the land for development and the benefit distribution appreciation among rural residents.
- d) For those rural residents to be relocated will be resettled within the belt in principle. In case some residents want to move outside of the belt, the land value of the resettlement site should not be lower than the land value within the belt.

6.4 Monitoring mechanism

Currently, the municipal government of Huainan City has a well-established monitoring mechanisms and auditing procedures with regard to the land acquisition, demolition and resettlement. To monitor the implementation of the mechanisms design for local people to benefit from land appreciation, a specific monitoring arrangement will be established as part of Environmental and Social Management Plan. The monitoring arrangements and indicators are the following:

- a) The external resettlement monitoring unit will monitor the implementation of the mechanism to benefit local people from land value increase and include the findings as a part of the biannual resettlement monitoring report.
- b) The area to be monitored will include all land plots within the belt which have

the potential of land appreciation as a result of the project implementation.

c) The monitoring indicators and contents:

- Amount of state-owned lands purchased and stored and collective lands expropriated each year during the construction period of the project
- Population affected by state land purchase and collective land acquisition
- Resettlement sites of affected people
- Market price of resettlement houses within and outside of the belt
- Status of Regional Comprehensive Land Price updating
- Amount and location of state construction land allocated to the village affected by land acquisition and the status of its development and utilization
- Distribution of benefits generated from the land allocated to the village among local people within the village