

Qinghai Delingha Concentrated Solar Thermal Power Project

Land Acquisition and Ethnic Minority Development Plan

China Guangdong Nuclear Solar Energy Development Co. Ltd.

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ENDORSEMENT LETTER

The China Guangdong Nuclear Solar Energy Development Company Co. Ltd (CGNPC) is going to implement the Qinghai Delingha Concentrated Solar Thermal Plant Project in Delingha city. The project will need to acquire 3690mu of unused semi-desert land from Taositu village. CGNPC is going to use an ADB loan to partly finance the project. According, the project must be implemented in compliance with ADB's Safeguard Policy Statement (2009). CGNPC had prepared the "Land Acquisition and Ethnic Minority Development Plan" for the project. The plan represents key requirements of ADB and will constitute the basis for land acquisition, compensation and resettlement. The plan also complies with PRC laws and local regulations but includes some additional enhancement measures and implementation and monitoring arrangements to ensure high quality implementation.

Delingha City Government has carefully reviewed the plan and hereby endorses the contents and arrangement of the attached plan. Delingha City Government and its line agencies will closely cooperate with CGNPC to implement this plan.

Approved on

Date by

Vice Mayor

2012.11.28

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Figure 1: Locations of Project Site, Xuji Township and Taositu Village



Figure 2: Project Site (behind the Power Line)



Figure 3: Ground Vegetation of Project Site



Figure 4: New Apartments and Old Houses

(Note: There are 9 buildings with 360 sets of apartments for herder households of Taositu, Wuchahan and Yikela villages of Xuji Township. These buildings form a compound named as Herders' Community. Sixty sets of these apartments were allocated to the project village of Taositu.

I. INTRODUCTION

A. Project Description

1. Qinghai Delingha Concentrated Solar Thermal Power Project will construct 50 megawatt (MW) concentrated solar thermal power (CSP) plant in Taositu village, Xuji township, Delingha city, Qinghai province. The project site is about 7 kilometers (km) from urban Delingha city. The project affected village of Taositu, located at the northern suburb of urban Delingha, is one of the nearest communities to the project site.¹ The China Guangdong Nuclear Solar Energy Development Company Co. Ltd (CGNPC) is the implementing agency of the project.

2. The impact of the project will be expanded share of CSP plants in the renewable energy mix in the People's Republic of China (PRC). The outcome will be successful commercial operation of the utility scale CSP plant with thermal storage system in Qinghai province.

B. Scope of Land Acquisition

3. The project will acquire 246 hectare (ha) (3,690 mu)² of semi-arid unused land from 153 persons of 31 households in Taositu village of Xuji township in Delingha city. The acquired land is within a jointly contracted grazing land of 136,827 mu of the affected village. The land use right was contracted to the 31 households of affected village in 1984 for 50 years (1984–2034). This jointly contracted land, as part of the officially mapped desert land (see Figure 1) was under grazing ban since 5 years ago.

4. The land to be acquired accounts only for 0.73% of the total land³ (3,690 mu out of a total 507,556 mu) and only 2.7% of the jointly contracted land (3,690 mu out of 136,827 mu) of the 31 affected households. Each household will be compensated by CNY167,552 by giving up the semi-arid unused land which is equivalent to three times of the annual average net household income (CNY54,837 in 2011).

5. There is no shelter or structure in the land acquisition area (Figure 2)..Therefore, there will be no loss of crops, trees, and fixed assets (Figure 2 and Figure 3). Overall, there will be no economic and physical displacement resulting from the land acquisition, as the amount of land lost has no impact on their grassland areas for herding.

II. SOCIOECONOMIC INFORMATION AND PROFILE

A. Delingha City

6. Delingha city is the capital of Haixi prefecture which was established in 1988 by separating the Delingha town and 5 townships from the Wulan county. Delingha means “golden world” in Mongolian. Delingha is within the Qinghai-Tibetan Plateau and its average elevation is over 3,000 meters (m) above sea level. The total land area of the city is 27,700 square kilometers (km²) and a total population is 73,300 in 2010. Around 70,000 people are concentrated in urban Delingha and its suburbs. Delingha city administrates four township and three urban subdistricts, and all townships are located along the Qinghai-Tibetan Highway (Figure 1). There are 18 ethnic groups in Delingha, including Han, Mongol, Tibetan, Tu, Hui, Shala, and etc. The ethnic minority population accounted for about 27% of the total population in 2010.

¹ Village site of Taositu is mixed with that of the Baishuihe, Hongguang, Yikela and Wuchahan villages.

² One hectare is equivalent to 15 mu.

³ These are both individually and jointly contracted land.

7. The general socioeconomic data of Delingha city, in comparison with Haixi prefecture and Qinghai province, are given in Tables 1 and 2. As shown in the tables, Delingha's main economic indicators are better than the provincial averages, but slightly behind the prefecture averages. Delingha and its neighboring areas have rich salt and alkaline earth resources, and salt and alkaline related chemical industries are the backbone of Delingha's economy. As indicated in Figure 1, southern Delingha, including the project site, is a desert where there are a number of salt lakes. The desert area of Delingha is part of the Qaidam Basin which is known for rich mineral resource of salt lakes. As a result of salt-related industries of the Qaidam Basin, Haixi prefecture's per capita gross domestic product is CNY97,747 in 2011 which is 3.4 times higher than the provincial average of CNY28,800.

Table 1: Socioeconomic Data of Qinghai, Haixi and Delingha (2011)

No.	Indicator	Unit	Qinghai Province	Haixi Prefecture	Delingha City
1.	Total population	Person	5,681,700	495,700	73,300
1.1	Agri. popu.	%	68.6	23.9	41.5
1.2	Non-agri. popu.	%	31.4	76.1	59.1
1.3	Han	%	53.0	76.2	73.0
1.4	Tibetan	%	24.4	10.1	5.6
1.5	Mongolian	%	1.8	5.3	9.9
1.6	Male	%	50.6	51.8	51.4
1.7	Female	%	49.4	48.2	48.6
2.	Land area	km ²	720,000	325,785	27,700
3.	GDP (2011)	CNY million	163,472	48,140	32,820
3.1	Primary sector	%	9.5	2.8	8.8
3.2	Secondary sector	%	57.5	81.2	54.7
3.3	Tertiary sector	%	33.0	16.0	36.5
4.	GDP per capita	CNY	28,800	97,747	44,757
5.	Urban per capita annual income	CNY	15,603	19,007	17,210
6.	Rural per capita annual income	CNY	4,608	6,574	6,192
7.	Rural poor (CNY1,500)	%	10.3	11.9	9.2
8.	Urban poor				
8.1	Standard	CNY/month	n.a.	238	238
8.2	Poor	%	13.2	7.6	12.8

% = percentage, CNY = yuan, GDP = gross domestic product, km² = square kilometer, n.a. = not applicable.

Sources: <http://wenku.baidu.com/view/1708b98ba0116c175f0e48dd.html> for Qinghai 2011 data; <http://wenku.baidu.com/view/c87b141a59eef8c75fbfb31b.html> for Haixi Prefecture data; and <http://www.hxdlh.gov.cn/sites/dlh/index.jsp>.

Table 2: Specific Social Development Data of Delingha (2010)

No.	Indicator	Unit	Qty
1.	No. of townships	No.	4
2.	No. of urban subdistrict	No.	3
3.	No. of villages	No.	51
3.1	No. of herder villages	No.	13

No.	Indicator	Unit	Qty
3.2	No. of farming/cropping villages	No.	38
3.3	Villages with tap water	%	74.5
3.4	Villages with telephone connection	%	90.2
3.5	Villages with cable television	%	54.9
4.	Farmland	mu	110,000
5.	Grassland area	mu	14,750,000
	Usable grassland area (grazing land)	mu	7,140,000
6.	Color television among rural households	%	100
7.	Computer coverage rate among rural households	%	8.3
8.	Enrollment rate of school-aged children	%	99.9
9.	Enrollment rate of school-aged girls	%	99.9
10.	Primary school graduates entering into junior middle schools	%	67.5
11.	Junior secondary school graduates entering into high schools	%	82.0
12.	Registered urban unemployment rate	%	4.4
13.	Coverage of rural cooperative medical service	%	73.2
14.	Baby delivery in hospitals	%	98.3
15.	Per capita GDP (2011)	CNY	44,757

% = percentage, CNY = Yuan, GDP = gross domestic product, 1 hectare = 15 mu, Qty = quantity.

Source: Qinghai Statistical Yearbook, 2011. <http://www.hxdlh.gov.cn/sites/dlh/index.jsp>

B. Xuji Township and Taositu Village

8. The project site is within Taositu village in Xuji township. The project site is about 7 km from the village site (as well as the urban Delingha), and 50 km from the township center. General data of Xuji township and Taositu village are given in the Table 3.

9. Xuji township has six Mongolian villages⁴ with a total population of 2,178 in 2011. The main economic activity of the township is livestock. The township is sparsely populated and it only has 3.0% of Delingha's total population while it has as 29.3% of Delingha's total land area. The population density of Xuji township is only 0.27 person/km² compared to 2.65 person/km² for Delingha city. Xuji is the richest township in Delingha in terms of per capita net income due to its rich grassland resource. As indicated in Table 3, Xuji Township's rural per capita net income of CNY6,585 in 2011 is 6.3% higher than Delingha's average of CNY6,192.

10. Taositu village is one of the six Mongolian villages of Xuji township. The village, with a total area of 385 km², stretches for about 140 km from south to north. The village site of Taositu is at the northern suburb of urban Delingha and it is mixed with that of Baishuihe, Hongguang, Wuchahan and Yikela villages (Figure 1). The project site, officially mapped as desert land (Figure 1), is at the southern part of the village. The better grassland, to the north of village, was individually contracted to the 31 households in 1985 for 50 years (1985–2035). The semi-arid land in the south (Figure 1), where the project site is located, was jointly contracted to the 31 households also in 1985 for 50 years. Annex 1 shows that the land was evenly distributed among the 31 households. The semi-arid land can grow some limited *Alhagi Sparsifolia* (Figure 2 and Figure 3).

11. There were 31 households in Taositu village in 1984 when land contracts were rewarded. The 31 households had split into 46 households by 2011. Since there was no contract

⁴ All Mongolian herder households, including those from the project affected Taositu village, will be resettled in department building of urban style of compounds (see Figure 4).

adjustment or re-contracting after 1984, all lands including the project site are still contracted by the original 31 households. However, the new households formerly obtained some grazing land elsewhere in the village from their parents and/or grandparents among the original 31 households

Table 3: General Data of Xuji Township and Taositu Village (2011)

	Indicator	Unit	Xuji Township	Taositu Village
1.	Land area	km ²	8,125	385
2.	Total HH	HH	522	46
3.	Number of agricultural HH	HH	522	46
4.	Total population	Person	2,178	246
4.1	Agricultural population	%	100	100
4.2	Han	%	7.0	0
4.3	Tibetan	%	1.2	0
4.4	Mongol	%	89.0	97.6
4.5	Hui	%	0.0	0
4.6	Tu	%	2.8	2.4
4.7	Male	%	49.5	50.1
4.8	Female	%	50.5	49.9
4.9	Population density	p/km ²	0.27	0.65
5.	Cropland	mu	800	160*
6.	Total grazing land	mu	12,150,000	572,732*
7.	Per capita annual net income	CNY	6,586	8,600
8.	Rural poor	%	8.4	8.1 (20 persons of 8 HHs)

CNY = yuan, HH = household, 1 hectare = 15 mu, p/km² = population per square kilometers.

*: 507,556.4mu belong to the 31 affected households, and 65,175.6mu belong to the remaining 15 households that are officially registered in the village, but originally from some of the 31 households.

Source: township government and village authority.

C. Affected Households

12. The land acquisition will affect 153 persons from 31 households that had legally and jointly contracted the land (equal share per household) in 1984 for 50 years⁵. The 31 households include 30 Mongolian households of 148 persons and 1 Tuzu household of 5 members. There is no vulnerable household. Details for each affected household are given in Annex 2.

1. Land Resource

13. Table 4 shows the land resource of the 31 households. The individually contracted grazing land accounts for 73% and the jointly contracted grazing land account for 27% of the total land. On average, each household has 16,372 mu of land, of which 48% is officially counted grazing land.⁶ The quality of grazing land is classified into five grades. As shown in Table 4, good quality (Grade I-II) grazing land is very limited (15%), and all jointly contracted

⁵ The remaining 15 households in the village will be indirectly affected as they were new households developed from those 31 households. These 15 households have obtained certain grazing lands⁵ from the individually contracted grasslands of their parents and/or grandparents among the 31 households.

⁶ Eligible for government project support or subsidies, if any. The remaining 52% of land are counted as unusable land.

grazing land belongs to the worst quality (Grade V). The grazing land is divided into spring, summer, autumn and winter grazing areas. Winter and autumn grazing areas are around the village site, while spring and summer grazing areas are in the mountains to the north.

Table 4: Land Resource

Use Right	Officially Counted Grazing Land							Unusable Land	Total	
	Grade	I	II	III	IV	V	Subtotal		Area	%
Individually contracted	Area (mu)	6,075	20,843	94,433	49,042	8,637	179,030	191,694	370,724	73.0
	%	3.4	11.6	52.7	27.4	4.8	100.0			
Jointly contracted	Area (mu)	0	0	0	0	66,077	66,077	70,750	136,827	27.0
	%	0	0	0	0	100	100			
Total	Area (mu)	6,075	20,843	94,433	49,042	74,714	245,107	262,444	507,551	100.0
	%	2.5	8.5	38.5	20.0	30.5	100.0			

% = percentage, 1 hectare = 15 mu.

Source: Taositu village.

2. Animals and Assets

14. Table 5 presents the average holdings of animals, and other assets of the affected households. Each household has average of 452 sheep and goats with a total value of about CNY542,400.⁷ All households have color television, cell phone, and washing machine (100%) and most of the households have motorcycle (90%) and refrigerator (97%). More than half of the households have cars (63%) and more than one-third of households have computers (37%). It can be concluded from the survey results that all affected households have enough productive assets to sustain their livelihood and assets to live a modern life (access to information, communication, and transportation).

3. Income and Sources

15. The per capita net income of the affected households is as high as CNY10,895 in 2011, much higher than township (CNY6,586) and city averages (CNY6,192).⁸ The per capita net income ranges from CNY5,333 to CNY22,950 (Table 1 of Annex 2).

16. It can be grouped into two types of households in terms of major income source: (i) income from animal husbandry, and (ii) income from migrant work. Of the 31 households, 27 earn income mainly from animal husbandry (selling animals, wool, and cashmere) which contributed to 71 % of total net income in 2011. The net income from animal husbandry ranged from CNY19,800 to CNY72,000 per household and averaged at CNY38,722 per household in 2011. The remaining four households earn incomes mainly from migrant work and other sources which contribute about 73% of household net income. The government subsidy for preventing overgrazing (CNY11,000 per household)⁹ contributes about 22% on average of their net income

⁷ CNY 1,200 per head.

⁸ Each person has a government subsidy for ban grazing of CNY2,185 on average, therefore, per capita income is much higher than the average of CNY8,600 of the village. Of the current 46 households in the village, the 15 households, established after 1984, do not receive such subsidy.

⁹ The government provides subsidy of CNY4.5 mu/year for 75,778 mu (more than the officially counted grazing land of 66,077 mu) of the jointly contracted semi-desert land to prevent overgrazing. This allows each household to

(Table A2.2).

Table 5: Holdings of Animals and Other Assets

Assets		Unit	Range/Average	% of HH with Assets
Animals (27 HHs) ¹⁰	Sheep/goats	Head/HH	310-800/452	90
	Yak		7-150/11	19
	Horse		1-6 (19 HHs)/2	70
Production & living assets (data of 30 HHs) ¹¹	Agri.vehicle	Set/HH		10
	Tractor			47
	Pickup/car			63
	Motorcycle			90
	Color television			100
	Cell phone			100
	Washing mach.			100
	Refrigerator			97
	Computer			37

HH = household.

Source: Household survey in April 2012.

4. Employment and Education

17. Tables 6 and 7 present the employment status and educational levels of the work force¹² of the affected households. Among the 31 households, 8 households have migrant workers (8.9% and 12.5% of total male and female labors), but only 4 households are long-term migrant workers; the remaining workforce are engaged in animal husbandry.

18. The educational levels of the workforce were poor. The illiteracy rates are 14.2% for the male workforce and 17.3% for the female workforce. Only 19.3% of the workforce have attended or are attending high school or higher level. It is interesting to see that the female attendance above high school level is higher than male. All school aged children are attending schools (Annex 2).

Table 6: Employment of the Work Force

Employment	Male		Female		Total	
	Number	%	Number	%	Number	%
Migration (eight HHs)	5	8.9	6	12.5	11	10.6
Pure grazing	51	91.1	42	87.5	93	89.4
Total	56	100.0	48	100.0	104	100.0

% = percentage, HH = household.

Source: Household survey in April 2012.

Table 7: Education Levels of the Work Force

Level of Education	Male		Female		Total	
	Number	%	Number	%	Number	%
University	4	7.1	5	10.4	9	8.7

receive CNY11,000 of the subsidy every year from the government.

¹⁰ Four households are no longer engaged in animal husbandry.

¹¹ One household is living in Dacaidan some 200km away to the west (migration).

¹² The ages range from 18 to 65 years old.

Technical secondary school	1	1.7	2	4.1	3	2.9
High school	3	5.3	5	10.4	8	7.7
Primary middle school	12	21.4	9	18.7	21	20.2
Primary school	28	50.3	17	35.4	45	43.3
Illiterate	8	14.2	10	21.0	18	17.3
Total	56	100.0	48	100.0	104	100.0

% = percentage. Source: Household survey in April 2012.

5. Housing Conditions

19. Under the government rural housing program, 27 out of 31 affected households moved into apartment buildings with district heating before Oct 2011 (Figure 4)¹³ and the remaining four households bought houses in city. The new apartment buildings¹⁴ are close to the current village site and to both a primary and a secondary school.¹⁵ Individual households could choose either 87 square meter (m²) or 120 m² apartment based on their affordability. The government provided the subsidy of CNY45,000 for each household regardless of the size of the apartment. Contribution from individual household was CNY60,000 for the 87 m² apartments or CNY99,000 for the 120 m².

20. During the spring and summer time, labors live in their traditional yurt in their grazing areas which could be as far as 120 km away from the village site. A new type of yurt, which is light and highly insulated, is now available in the project area. The project will promote this type of yurt to affected ethnic minority herder households.

D. General Description of Mongolian Ethnic Minority

21. **History.** Mongolians first came to Qinghai in 1200s as rulers and they ruled Qinghai region for about 150 years (the period of Yuan Dynasty in PRC, 1229–1368 or so). Eastern Mongols first fled/came to the Qaidam Basin area as semi-settled herders in 1514 from current Inner Mongolia after their failure against the Ming Dynasty Government. Then more eastern Mongols joined in 1559 as herders. Western Mongols, from current Xinjiang province, then defeated the Eastern Mongolia in 1638 and occupied Qinghai. As a result, many western Mongolians came to the project area and Qinghai as semi-settled herders.

22. In 1723, the Mongolians organized themselves to fight the Qing Dynasty Government, but were defeated in 1724 with many Mongolians being killed. The remaining Mongolians were then restricted to the specific sites and were organized in a manner of military units.¹⁶ As a result, the Mongols became fully settled herders with fixed grazing areas. According to the Place Name Book of Haixi prefecture,¹⁷ almost all the current Mongolian villages, including the project village of Taositu, were established shortly after 1724. There were 10 Qi in the current Haixi prefecture since 1720s, the project city of Delingha belonged to the Beizuoyi Qi (also named as Kelugubeizi Qi).

23. **Language.** The Mongolian language belongs to the Mongolian group of the Altaic phylum and has eastern and western dialects. Mongols in the project area speak the latter. The written form is derived from that of the 13th century and had experienced many changes. Although many Mongols can speak their own language, they use Mandarin for written

¹³ The apartment buildings have been constructed as shown Figure 2.

¹⁴ There are 360 sets of apartments for three Mongolian herder villages of Taositu, Wuchahan and Yikela of the Xuji Township.

¹⁵ Shijian Hope Primary School and No.2 Middle School of Delingha.

¹⁶ A hundred households formed a Zuoling (similar to current village), some Zuoling formed a Qi (like today's township or county), several Qi formed a Meng (similar to today's prefecture).

¹⁷ Chief editor: Wang Zhenguo, internal publication of Haixi Prefecture Toponymy Office, Dec 1990.

documents (e.g., signatures are all in Mandarin).

24. **Religion.** Before the 16th century, the Mongolians, together with many other northern tribes, believed in Shamanism but turned to Lamaism (Buddhist) in the Yuan Dynasty when they were the mainstream and ruling group.

25. **Livelihoods.** For rural Mongolian, herding/pasturing livestock is still the main economic activity and source of income.

26. **Housing.** Rural Mongolians are settled herders and they used to live in single storey houses of brick-wood and earth-wood structures (Figure 4). During summer and spring time, when grazing in high mountains, they live in traditional yurts.¹⁸ Currently, local governments are promoting modern apartment buildings with district heating system and modern highly insulated yurts.

27. **Gender Aspects.** Mongolian, compared with the Han, don't have gender preference and discrimination against women. Usually, the Mongolian parents will give large dowry, in the forms of animals and grazing land, to their daughters when getting married. However, men are still considered superior to women and men hardly do any household chores except tending (grazing) their animals.

III. IMPACT ASSESSMENT

A. Land Loss

28. The affected households will lose 246 ha or 3,690mu (7.94ha or 119.0mu per household) of jointly contracted semi-arid unused land (classified as lowest grade of V). Table 8 presents the land losses of each affected household. Land loss impact is very insignificant as each household will lose only 0.7% of their total land on average.

Table 8: Land and Income Losses of Affected Households

No.	Household	Land Area (mu)			Land Loss	
		HH Contracted	Jointly Contracted	Total	Area (mu)	%
1.	(Na)Yonghong	13,002.0	4,413.8	17,416	119	0.7
2.	Husihalituo	19,512.0	4,413.8	23,926	119	0.5
3.	Qi Meige	7,282.0	4,413.8	11,696	119	1.0
4.	Mengkebatu	12,833.0	4,413.8	17,247	119	0.7
5.	Baoli	6,699.0	4,413.8	11,113	119	1.1
6.	Batu	13,086.0	4,413.8	17,500	119	0.7
7.	Ji Haishan	6,997.0	4,413.8	11,411	119	1.0
8.	Jiamutan	13,928.0	4,413.8	18,342	119	0.6
9.	Naomunuer	9,002.0	4,413.8	13,416	119	0.9
10.	(Da)Yonghong	10,619.0	4,413.8	15,033	119	0.8
11.	Saiqing	6,344.0	4,413.8	10,758	119	1.1
12.	Taohuajie	19,029.0	4,413.8	23,443	119	0.5
13.	Batejirigeli	19,151.0	4,413.8	23,565	119	0.5
14.	Mengkeer	7,657.0	4,413.8	12,071	119	1.0

¹⁸ The Mongolian yurt is a domed tent. A circular wood frame at the top is supported by slim wooden poles about two meters long that extend to the top of the walls. The walls themselves are an interwoven latticework structure. The frame is covered with a thick piece of felt fastened from the outside of the yurt with ropes. The yurt has an adjustable opening on top which provides both light and ventilation.

No.	Household	Land Area (mu)			Land Loss	
		HH Contracted	Jointly Contracted	Total	Area (mu)	%
15.	Bateer	12,040.0	4,413.8	16,454	119	0.7
16.	Bayisihali	13,723.0	4,413.8	18,137	119	0.7
17.	Weihong	15,875.0	4,413.8	20,289	119	0.6
18.	Dongji	15,107.0	4,413.8	19,521	119	0.6
19.	Yixi	14,523.0	4,413.8	18,937	119	0.6
20.	Wulanbatu	8,461.0	4,413.8	12,875	119	0.9
21.	Qiaoxin	8,410.0	4,413.8	12,824	119	0.9
22.	Dong Bateer	15,440.0	4,413.8	19,854	119	0.6
23.	Shengli	10,157.6	4,413.8	14,571	119	0.8
24.	Baolide	15,394.0	4,413.8	19,808	119	0.6
25.	Ba Yinji	8,878.0	4,413.8	13,292	119	0.9
26.	Dong Qing	6,402.0	4,413.8	10,816	119	1.1
27.	Cairenjide	17,917.0	4,413.8	22,331	119	0.5
28.	Dai Deer	13,353.0	4,413.8	17,767	119	0.7
29.	Da Bateer	6,007.0	4,413.8	10,421	119	1.1
30.	Nao Jiamucuo	12,388.0	4,413.8	16,802	119	0.7
31.	Aimin	11,512.0	4,413.8	15,926	119	0.7
Total		370,728.6	136,827.8	507,556.4	3,690	0.7

% = percentage, HH = household, 1 hectare = 15 mu.

Source: Household survey in April 2012.

B. Income Loss

29. The land to be acquired is semi-arid and unused land, therefore, there will be no loss of crops, trees, and fixed assets. There is also no shelter or structure in the land acquisition area (see Figure 2).

30. Each household will be compensated CNY167,552 by giving up semi-arid unused land which is equivalent to three times of the annual average net household income (CNY54,837 in 2011). This type of land is not permitted to be grazed, so each household gets a government subsidy of CNY 4.5 per mu for 66mu out of the 119mu to be acquired. After the land is acquired, this subsidy will be lost (CNY 297 per household per year) but the cash compensation each household receives will be equivalent to 564 times of the annually subsidy loss. Overall, there will be no economic and physical displacement resulting from the land acquisition. In fact, the compensation will be a significant benefit for the affected households.

IV. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

31. A number of consultation sessions among local people, township and city governments, were carried out during the feasibility study and is in the process of preparing the resettlement plan and the environmental impact assessment (Table 9). The results of public consultation with all affected households are summarized below:

- (i) All the affected households and government departments support the project.
- (ii) All households are willing to transfer their land use rights to the project by a reasonable compensation fee.¹⁹

¹⁹ Some herders even made phone calls to the consultants during July-August showing their worries if the project and land acquisition are not going to be implemented..

- (iii) All households prefer conflict arbitration through local governments.
- (iv) The affected households had experienced land acquisition for the same type of solar thermal power plants for four times, and are satisfied with the land acquisition policy, procedures and compensation rate.

Table 9: Consultation Activities

Date	Participants	Number	Purpose
June 2011–February 2012	Design institute; implementing agency; Haixi prefecture and Delingha city governments and their line agencies (land resource bureaus, development and reform bureaus, energy sector, environmental sectors, agricultural bureaus); Xuji township; and Taositu village	120 (30F and 90M) in 10 times	Assess the feasibility of the project, project site selection, land availability
April 2012	Implementing agency, consultants, Xuji township, government agencies, Taositu village, herder households	50 (25F and 25M)	Assess land acquisition, social, and environmental impacts
May 2012	Implementing agency, consultant, Xuji township, Taositu village, affected herder households	70 (35F & 35M)	Socioeconomic survey, impact assessment on social and land acquisition
Sept 2012	Delingha Land Resource Bureau, Taositu village	50 (30F & 20M)	Notifying the scaling down of land acquisition impact from 4,200mu to 3,690mu.
Oct 2012	Consultants, EA	10 (6F & 4M)	Latest progress of the project preparation, adjustment of land acquisition scope
Total		300 (126F & 174M)	

F = female; M = male

Source: Public consultations under TA-7643 (PRC): Qinghai Delingha Concentrated Solar Thermal Plant Project.

V. GRIEVANCE REDRESS MECHANISM

32. Any disagreement related to land acquisition and compensation will be settled according to the following procedures:

Step 1: If any affected person is aggrieved by any aspect of the land acquisition, he/she can state his/her grievance and appeal to the village committee in oral or in written form. If an oral appeal is made, the village committee will record it on paper and process it. Village committee will make a decision on or resolve it in 2 weeks.

Step 2: If the aggrieved affected person is not satisfied with the decision of the township, the aggrieved affected can state the grievance and appeal to the township government in oral or in written form. The township government will make a decision on or resolve it in 2 weeks.

Step 3: If the aggrieved affected person is not satisfied with the decision of the township, he/she can appeal to Delingha city government after receiving the decision; the city government will reach a decision in 2 weeks.

33. **At any point**, if the affected person is dissatisfied with the grievance process, he/she may appeal to the civil division of a people's court according to the civil court procedure.

VI. LEGAL FRAMEWORK, ENTITLEMENTS, ASSISTANCE AND BENEFITS

A. Legal Framework

34. In accordance with Qinghai Provincial Land and Resources Department's Order No. 144 issued in 2005 and the requirements of ADB's Safeguard Policy Statement (2009),²⁰ all the affected households are entitled for cash compensation for transferring their land use rights to the CGNPC through the Delingha City Land and Resource Bureau.

B. Entitlement, Assistance and Benefits

35. For the loss associated with land acquisition, the affected peoples are entitled the compensation stipulated in the entitlement matrix (Table 10).

Table 10: Entitlement Matrix

Type of Loss and Opportunities	Level of Impact	Entitled Person	Compensation Policy and Standards, and Actions	Agency Responsible
Permanent loss of land use right to the project executing agency establishing solar thermal power plant	3,690 mu	31 HHs (153 persons)	Lump sum cash compensation at the rate of CNY1,408/mu for the termination of the land use rights. Compensation will be paid prior to the transfer of land use right	An official from Land and Resource Bureau was assigned (Mr. Xie Haiqing) to manage the land acquisition and compensation payments. City and township governments will adjust the land use contract free of charge and will also provide free advices on legal issues, if any.
Employment opportunities during the operation and construction period	4,010 person-months of unskilled labors during construction, with 800 person-months or 20% for women 30 permanent low-skill positions during operation with 10 positions for women 1-2 technical positions for ethnic minority youths of	31 affected HHs and many others	Priority given to affected HHs for project employment during construction.	CGNPC

²⁰ ADB. 2009. *Safeguard Policy Statement*. Manila

Type of Loss and Opportunities	Level of Impact	Entitled Person	Compensation Policy and Standards, and Actions	Agency Responsible
	university graduates			
Provision of high insulation yurts	40 sets	40 HHs of Taositu village		City government (agricultural sector) and participating households
Provision of portable solar power generation set for yurts	40 sets	40 HHs of Taositu village		City government (agricultural sector) and implementing agency
Training	Capacity building of households in Taositu village	All HHs of Taositu village	Employment skill training: 100 person-times, 20% of women Grassland management training: 200 person-times, 40% of women Household financial resource and asset management training: 100 person-times, 50% of women	CGNPC Agricultural bureau of Delingha city Women's federation of Delingha city

CGNPC = China Guangdong Nuclear Solar Energy Development Company Co. Ltd, CNY = yuan, HH = household, 1 hectare = 15 mu.

Source: Implementing agency and local government estimates.

VII. ACTION PLAN

A. Actions

36. To better benefit the affected households and avoid any potential negative impact from the sudden flow in a large sum of compensation to the affected households, the following enhancement actions will be taken along with the implementation of land acquisition.

37. **Employment skill training.** The project will provide: (i) 4,010 person-months of unskilled labors during construction, with 800 person-months or 20% for women; and (ii) 30 permanent low-skill positions during operation with 10 positions for women. To better benefit affected households and many others from these employment opportunities, the implementing agency will train at least 100 person-times of local laborers (2 person-times for each household), including 20 person-times of female laborers.

38. **Provision of high insulation yurts and portable solar power generation sets.** Herder households have to stay in yurts in the high mountains, with the farthest of over 100km, during spring and summer grazing periods. Due to high elevation of over 3,000m, the grazing grounds are rather cold in evenings even in summer. The project will provide 40 sets²¹ of high insulation yurts and portable solar power generation sets to the herder households of the affected village of Taositu.

39. **Grassland management training.** Along with the provision high insulation yurts and solar power generation sets, training on protection oriented grassland management will be provided to both male and female laborers of all herder households. About 200 person-times of

²¹ There are 46 households in the village, but some of them are no longer engaged in grazing/ animal production.

training (2 person-times for each household), with 40% for women, will be organized.

40. **Training on household financial management.** To enable the affected households to better use the land compensation payment, which is a large sum to each affected household, training on both household financial and assets management for both male and female adults will be carried out by the local women's federation before and after compensation disbursement. Similarly, 100 person-times of training (2 person-times for each household), with 50% for women, will be organized.

B. Implementation Schedule

41. Implementation schedule is presented in Table 11.

Table 11: Implementation Schedule

No.	Tasks	Target	Responsible Agency	Status and Deadline
1	Preparation of Land Acquisition and Ethnic Minority Development Plan			
1.1	Draft plan		Implementing agency and PPTA consultants	30 May 2012
1.2	Information disclosure	31 HHs	Implementing agency, PPTA consultants, local government	Done in April and May 2012
1.3	Finalizing Land Acquisition and Ethnic Minority Development Plan and Approval		Ditto and ADB	November 2012
1.4	Approval of land acquisition and ethnic minority development plan		Implementing agency, Delingha city government	December 2012
1.5	Posting on ADB website		ADB	January 2013 or sooner
2	Implementation			
2.1	Jointly signing contract	31 HHs	Delingha city government	April 2013 or sooner
2.2	Disbursement of compensation fee	31 HHs	Delingha land and resource bureau	Within 1 month after signing contract
2.3	Land transfer		Delingha land and resource bureau and the executing agency	Within 2 weeks after paying compensation to affected HHs
2.4	Provision of high insulate yurts and portable solar power generation panels	40 HHs	Government and benefiting HHs	May 2013-May 2015
2.5	Employment skill training for construction	100 person-times of labours	Implementing agency	June 2013-December 2016
2.6	Employment of locals as long term staff	5-10 locals	Ditto	January 2017 or sooner
2.7	Training on grassland management	Taositu village	Agricultural bureau of Delingha	March (i.e., before grazing season starts) in each year from 2013 to 2017, 40 person time each year
2.8	Training on household financial management	100 person-time	Delingha women's federation	Before and after compensation payments
3	Monitoring and Reporting			
3.1	Semi-annual progress report	3 report	Implementing	July 2013

No.	Tasks	Target	Responsible Agency	Status and Deadline
			agency	January 2014 July 2014 January 2015
3.2	Completion report	1 report	Ditto	January 2016

ADB = Asian Development Bank, HH = household, PPTA = project preparatory technical assistance, TBD = to be determined.

Source: Implementing agency and local government estimates.

VIII. BUDGET

42. Table 12 presents the budget for land acquisition and ethnic minority development. The total budget will be CNY6,625,520 including (i) land compensation of CNY5,195,520 with the rate of CNY1,408 per mu; (ii) ethnic minority development cost of CNY600,000; (iii) training expense of CNY 50,000; (iv) administration and monitoring expense of CNY260,000; and (v) contingency of CNY520,000. As indicated in Table 12, the costs will be shared by CGNPC (91.5%), government (6.6%) and the benefiting households (1.8%)²². The land compensation will be evenly and directly paid to the 31 affected households through a local bank by the Delingha City Land Resource Bureau.

Table 12: Cost Estimates

Item		Unit	Qty	Unit cost	Cost		Funding Source (CNY)		
					CNY	%	IA	Gov't	HHs
1. Land acquisition	Permanent land acquisition	mu	3,690	1,408	5,195,520	78.4	5,195,520	0	0
2. Ethnic minority development	High insulation yurt	Set	40	12,000	480,000	7.2	0	400,000	80,000
	Portable solar power generation set	Set	40	3,000	120,000	1.8	40,000	40,000	40,000
3. Training activities					50,000	0.8	50,000		
4. Administration and monitoring		5 % of land compensation cost			260,000	3.9	260,000	0	0
5. Contingency		10% of land compensation cost			520,000	7.8	520,000	0	0
Total ²³					6,625,520	100	6,065,520	440,000	120,000
							91.5%	6.6%	1.8%

% = percentage, CNY = yuan, HH = household, IA = implementation agency

Source: Implementing agency and local government

IX. MONITORING AND REPORTING

43. Semi-annual reports will be required during implementation which the first report will be due after land transfer. Thereafter, two annual monitoring reports will be prepared to evaluate the impacts of the project on the livelihoods and lifestyles of the affected village and ensure there are no remaining issues. If issues should arise, remedial measures should be prepared and agreed with ADB and implemented prior to project completion.

²² Households will contribute one sixth of cost for yurts and one third of cost for portable solar power generators.

²³ Exemption of government charges for renewable energy projects.

ANNEX 1: LIST AND SIGNATURES OF CONTRACT HOUSEHOLDS

青海省草原承包经营合同联户签名表

德令哈市蕃集乡陶斯图村一、二社

姓名	户主身份证号	家庭人口 (人)	承包草原面积 (亩)	户主签名	日期
爱民	632821197110072918	2	4413.8		
✓乔新	632821195612072919	8	4413.8		
✓巴特尔	632821195111102913	6	4413.8	巴特尔	2012.4.27
✓巴特尔	632802197108030517	5	4413.8	巴特尔	2012.4.27
✓其美格	632821195801012624	1	4413.8	其美格	2012.4.27
永红	632821196804132917	7	4413.8		
✓赛青	632821196404212926	6	4413.8	赛青	2012.4.25
✓东青	632802197607060534	4	4413.8	东青	2012.4.25
✓巴音吉	632821196606032915	4	4413.8	巴音吉	2012.4.25
✓闹木努尔	632821195211162913	5	4413.8		
✓孟克巴图	632802197109300515	4	4413.8	孟克巴图	2012.4.27
✓巴图	632802198001150513	3	4413.8	巴图	2012.4.27
✓乌兰巴特尔	63282119720206291X	5	4413.8		
✓保利	632802194812090851X	5	4413.8		
✓伊西	632821194804112917	9	4413.8	伊西	2012.4.27
✓永贵	632802197312200552	11	4413.8	永贵	2012.4.27
✓闹加木措	632821194504072917	7	4413.8		
✓永红	632821196707082911	5	4413.8		
✓巴依斯哈力	632802197306120513	4	4413.8	巴依斯哈力	2012.4.25
✓孟克尔	632821196305142918	4	4413.8	孟克尔	2012.4.25
✓巴特尔	63282119650316291X	4	4413.8	巴特尔	2012.4.27
✓加木坛	6328021955010110513	5	4413.8		
✓季海陵山	632821196802262910	4	4413.8		
✓胜利	632821196707102919	5	4413.8	胜利	2012.4.27
✓东给	632821196901132919	4	4413.8		
✓保利德	632802196612060534	3	4413.8	保利德	2012.4.26
✓巴依日图	632802198210253017	4	4413.8		
✓巴特吉尔格力	632821197202252916	5	4413.8		
✓东格尔	632802197402260532	3	4413.8	东格尔	2012.4.25
呼斯哈力托	632802197501240510	5	4413.8		
小计		147	136827		

ANNEX 2: RESULT OF HOUSEHOLD SURVEY OF AFFECTED PEOPLE

Table A2.1: Household Size, Ethnic Groups, Income and Sources

No.	HH head	Sex	Ethnic Group	Age	HH Size	If Poor	Annual Income (CNY) and Sources										
							Total	Animal husbandry.	%	Ban Grazing Subsidy	%	Migration	%	Land Leasing or Salary (bold)	%	Net Income	Per Capita
							65,000	54,000	83	11,000	17	0	0	0	0	43,400	10,850
							79,000	68,000	86	11,000	14	0	0	0	0	51,800	17,267
3	Mengkebatu	M	Mongol	42	7	No	83,500	72,500	87	11,000	13	0	0	0	0	54,500	7,786
4	Baoli	M	Mongol	56	10	No	87,000	76,000	87	11,000	13	0	0	0	0	56,600	5,660
5	Batu	M	Mongol	34	2	No	44,000	33,000	75	11,000	25	0	0	0	0	30,800	15,400
6	Ji Haishan	M	Tu Zu	38	5	No	67,000	56,000	84	11,000	16	0	0	0	0	44,600	8,920
7	Jiamutan	M	Mongol	58	5	No	85,800	44,800	52	11,000	13	30,000	35	0	0	61,880	12,376
8	Naomunuer	M	Mongol	60	5	No	48,000	37,000	77	11,000	23	0	0	0	0	33,200	6,640
9	(Da)Yonghong	M	Mongol	45	5	No	25,000	57,000	46	11,000	9	45,000	36	12,000	10	93,200	18,640
10	Saiqing	F	Mongol	49	6	No	64,000	53,000	83	11,000	17	0	0	0	0	42,800	7,133
11	Batejirigeli	M	Mongol	42	5	No	54,000	43,000	80	11,000	20	0	0	0	0	36,800	7,360
12	Mengkeer	M	Mongol	50	4	No	73,000	62,000	85	11,000	15	0	0	0	0	48,200	12,050
13	Bateer	M	Mongol	42	5	No	63,500	52,500	83	11,000	17	0	0	0	0	42,500	8,500
14	Bayisihali	M	Mongol	40	6	No	03,400	92,400	89	11,000	11	0	0	0	0	66,440	11,073
15	Weihong	M	Mongol	43	4	No	31,000	120,000	92	11,000	8	0	0	0	0	83,000	20,750
16	Dongji	M	Mongol	44	4	No	83,000	72,000	87	11,000	13	0	0	0	0	54,200	13,550
17	Yixi	M	Mongol	64	9	No	05,000	94,000	90	11,000	10	0	0	0	0	67,400	7,489
18	Qiaoxin	M	Mongol	57	8	No	88,000	77,000	88	11,000	13	0	0	0	0	57,200	7,150
19	Dong Bateer	M	Mongol	48	4	No	05,500	68,500	65	11,000	10	20,000	19	6,000	6	74,100	18,525
20	Shengli	M	Mongol	45	6	No	07,900	96,900	90	11,000	10	0	0	0	0	69,140	11,523
21	Baolide	M	Mongol	47	3	No	85,400	56,400	66	11,000	13	18,000	21	0	0	59,240	19,747
22	Ba Yinji	M	Mongol	50	4	No	79,000	52,000	66	11,000	14	16,000	20	0	0	55,000	13,750

No.	HH head	Sex	Ethnic Group	Age	HH Size	If Poor	Annual Income (CNY) and Sources										
							Total	Animal husbandry.	%	Ban Grazing Subsidy	%	Migration	%	Land Leasing or Salary (bold)	%	Net Income	Per Capita
23	Dong Qing	M	Mongol	38	4	No	63,000	48,000	76	11,000	17	0	0	4,000	6	43,800	10,950
24	Cairenjide	F	Mongol	77	3	No	89,000	78,000	88	11,000	12	0	0	0	0	57,800	19,267
25	Dai Deer	M	Mongol	62	7	No	95,000	67,000	71	11,000	12	17,000	18	0	0	64,800	9,257
26	Da Bateer	M	Mongol	61	8	No	87,500	76,500	87	11,000	13	0	0	0	0	56,900	7,113
27	Nao Jiamucuo	M	Mongol	69	6	No	46,000	35,000	76	11,000	24	0	0	0	0	32,000	5,333
28	Qi Meige	F	Mongol	52	4	No	11,000	0	0	11,000	10	96,000	86	4,000	4	91,800	22,950
29	Taohuajie	F	Mongol	54	2	No	24,000	0	0	11,000	46	0	0	13,000	54	24,000	12,000
30	Wulanbatu	M	Mongol	40	3	No	56,000	0	0	11,000	20	40,000	71	5,000	9	48,000	16,000
31	Ai Min1	M	Mongol	41	2	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Average				4.9	No	79,950	64,537	79		16	5,407	79	7,333	22	54,837	10,895

Note: Data is not available as the household migrated to another county.

Source: Household survey conducted by TA consultants in April 2012.

Table A2.2: Contribution to Net Income by Income Sources

No.	Income Source	Animal Husbandry		Subsidy	Migration		Others
	HH head	CNY	%	%	CNY	%	%
1	(Na)Yonghong	32,400	75	25	0	0	0
2	Husihalituo	40,800	79	21	0	0	0
3	Mengkebatu	43,500	80	20	0	0	0
4	Baoli	45,600	81	19	0	0	0
5	Batu	19,800	64	36	0	0	0
6	Ji Haishan	33,600	75	25	0	0	0
7	Jiamutan	26,880	43	18	24,000	39	0
8	Naomunuer	22,200	67	33	0	0	0
9	(Da)Yonghong	34,200	37	12	36,000	39	13
10	Saiqing	31,800	74	26	0	0	0
11	Batejirigeli	25,800	70	30	0	0	0
12	Mengkeer	37,200	77	23	0	0	0
13	Bateer	31,500	74	26	0	0	0
14	Bayisihali	55,440	83	17	0	0	0
15	Weihong	72,000	87	13	0	0	0
16	Dongji	43,200	80	20	0	0	0
17	Yixi	56,400	84	16	0	0	0
18	Qiaoxin	46,200	81	19	0	0	0
19	Dong Bateer	41,100	55	15	16,000	22	8
20	Shengli	58,140	84	16	0	0	0
21	Baolide	33,840	57	19	14,400	24	0
22	Ba Yinji	31,200	57	20	12,800	23	0
23	Dong Qing	28,800	66	25	0	0	9
24	Cairenjide	46,800	81	19	0	0	0
25	Dai Deer	40,200	62	17	13,600	21	0
26	Da Bateer	45,900	81	19	0	0	0
27	Nao Jiamucuo	21,000	66	34	0	0	0
28	Qi Meige	0	0	12	76,800	84	4
29	Taohuajie	0	0	46	0	0	54
30	Wulanbatu	0	0	23	32,000	67	10
31	Ai Min1	N/R	N/R	N/R	N/R	N/R	N/R
Average		38,722	71	22		40	4

% = percentage, CNY = yuan, HH = household, N/R = no response.

Source: Household Survey conducted by PPTA consultants in April 2012.

Table A2.3: Land Resource, Land and Income Losses

Name of Households	Households Contracted Grassland (mu)								Jointly Contracted (mu)			Grand Total (mu)	Land Loss	
	Grazing Land by Class						Unusable	Total	Grazing Land	Unusable	Total		Area (mu)	%
	I	II	III	IV	V	Subtotal			V					
1. (Na)Yonghong	303	1,161	2,910	1,906	0	5,976	6,723	13,002	2,445	1,969	4,414	17,416	119	0.7
2. Husihalituo	221	788	5,285	2,940	189	9,202	10,090	19,512	2,445	1,969	4,414	23,926	119	0.5
3. Qi Meige	128	556	1,688	1,146	0	3,389	3,765	7,282	2,445	1,969	4,414	11,696	119	1.0
4. Mengkebatu	297	1,140	2,691	1,799	270	5,900	6,636	12,833	2,445	1,969	4,414	17,247	119	0.7
5. Baoli	141	548	1,436	883	228	3,094	3,464	6,699	2,445	1,969	4,414	11,113	119	1.1
6. Batu	268	1,094	2,844	2,113	0	6,051	6,767	13,086	2,445	1,969	4,414	17,500	119	0.7
7. Ji Haishan	82	255	2,113	803	126	3,297	3,618	6,997	2,445	1,969	4,414	11,411	119	1.0
8. Jiamutan	132	612	4,546	1,437	0	6,595	7,202	13,928	2,445	1,969	4,414	18,342	119	0.6
9. Naomunuer	159	679	2,114	1,129	267	4,188	4,655	9,002	2,445	1,969	4,414	13,416	119	0.9
10. (Da)Yonghong	213	742	2,268	1,478	428	4,915	5,491	10,619	2,445	1,969	4,414	15,033	119	0.8
11. Saiqing	80	273	1,712	760	240	2,984	3,280	6,344	2,445	1,969	4,414	10,758	119	1.1
12. Taohuajie	203	667	5,220	2,392	708	8,987	9,840	19,029	2,445	1,969	4,414	23,443	119	0.5
13. Batejirigeli	245	734	5,445	2,289	536	9,004	9,903	19,151	2,445	1,969	4,414	23,565	119	0.5
14. Mengkeer	245	202	2,393	858	0	3,453	3,959	7,657	2,445	1,969	4,414	12,071	119	1.0
15. Bateer	266	1,045	2,780	1,724	0	5,548	6,226	12,040	2,445	1,969	4,414	16,454	119	0.7
16. Bayisihali	206	647	3,802	1,651	319	6,419	7,096	13,723	2,445	1,969	4,414	18,137	119	0.7
17. Weihong	141	390	5,030	1,788	318	7,526	8,209	15,875	2,445	1,969	4,414	20,289	119	0.6
18. Dongji	184	168	4,323	1,900	721	7,112	7,812	15,107	2,445	1,969	4,414	19,521	119	0.6
19. Yixi	289	1,114	2,847	1,403	1,360	6,724	7,510	14,523	2,445	1,969	4,414	18,937	119	0.6
20. Wulanbatu	151	626	1,765	1,545	0	3,935	4,375	8,461	2,445	1,969	4,414	12,875	119	0.9
21. Qiaoxin	158	637	2,101	1,166	0	3,903	4,349	8,410	2,445	1,969	4,414	12,824	119	0.9
22. Dong Bateer	152	474	4,753	1,699	378	7,304	7,984	15,440	2,445	1,969	4,414	19,854	119	0.6
23. Shengli	230	230	2,356	2,091	0	4,678	5,250	10,158	2,445	1,969	4,414	14,571	119	0.8
24. Baolide	231	727	4,269	1,850	357	7,203	7,960	15,394	2,445	1,969	4,414	19,808	119	0.6
25. Ba Yinji	176	733	2,121	1,258	0	4,111	4,591	8,878	2,445	1,969	4,414	13,292	119	0.9
26. Dong Qing	75	389	1,506	791	332	3,017	3,310	6,402	2,445	1,969	4,414	10,816	119	1.1

Name of Households	Households Contracted Grassland (mu)								Jointly Contracted (mu)			Grand Total (mu)	Land Loss	
	Grazing Land by Class						Unusable	Total	Grazing Land	Unusable	Total		Area (mu)	%
	I	II	III	IV	V	Subtotal			V					
27. Cairenjide	178	483	5,488	2,143	361	8,475	9,265	17,917	2,445	1,969	4,414	22,331	119	0.5
28. Dai Deer	247	1,098	2,556	1,476	1,071	6,201	6,905	13,353	2,445	1,969	4,414	17,767	119	0.7
29. Da Bateer	186	765	989	961	0	2,715	3,106	6,007	2,445	1,969	4,414	10,421	119	1.1
30. Nao Jiamucuo	245	919	2,706	1,683	429	5,737	6,406	12,388	2,445	1,969	4,414	16,802	119	0.7
31. Aimin	243	947	2,382	1,988	0	5,316	5,953	11,512	2,445	1,969	4,414	15,926	119	0.7
Total	6,075	20,843	94,433	49,042	8,637	172,955	191,694	370,729	75,789	61,039	136,828	507,556	3690	0.7

Source: Household Survey conducted by PPTA consultants in April 2012.

Table A2.4: Animals and Animal Products

No.	Household	Sheep/Goat (head)		Yak (head)		Horse (head)		Wool Sold in 2011 (kg)	Cashmere Sold in 2011 (kg)
		Qty in Stock	Qty Sold in 2011	Qty in Stock	Qty Sold in 2011	Qty in Stock	Qty Sold in 2011		
1.	(Na)Yonghong	400	100			1		270	
2.	Husihalituo	500	100			4		380	
3.	Mengkebatu	460	110	100	20			150	
4.	Baoli	450	100			3	2		30
5.	Batu	600	60			3		300	
6.	Ji Haishan	400	100			2		260	
7.	Jiamutan	500	90			3		200	10
8.	Naomunuer	380	80			3		180	
9.	(Da)Yonghong								
10.	Saiqing	360	80			2		100	
11.	Batejirigeli	650	70					350	12
12.	Mengkeer	300	100			2		120	8
13.	Bateer	500	80			2		450	
14.	Bayisihali	800	200			6	1	150	
15.	Weihong	350	200	11		4		110	
16.	Dongji	370	120	7		2	3	130	12
17.	Yixi	450	200			2		130	
18.	Qiaoxin	420	100			1	1	40	50
19.	Dong Bateer	500	100			3		250	
20.	Shengli	700	200	15		5			
21.	Baolide	600	100						10
22.	Ba Yinji	360	110				3	400	
23.	Dong Qing	310	90				3	100	20
24.	Cairenjide	600	100	150	8	5		500	
25.	Dai Deer	400	100					480	
26.	Da Bateer	500	100			2			10
27.	Nao Jiamucuo	350	70						
28.	Qi Meige	Land leased to others							
29.	Wulanbatu	Land leased to others							
30.	Taohuajie	Land leased to others							
Total (27 HHs)		12,210	2,860	283	28	55	13	5,050	162
Average (head/HH)		452.2	105.9	10.5	1.0	2.0	0.5	187.0	6.0

HH = household, Kg = kilogram, Qty = quantity.

Source: Household Survey conducted by PPTA consultants in April 2012.

Table A2.5: Educational Attainment (Currently in School)

	No.	Age	Primary School	Junior middle school	High school	University
Girls	1	11	X			
	2	20				X
	3	7	X			
	4	21				X
	5	21				X
	6	14	X			
	7	23				X
	8	16		X		
	9	19				X
	10	15	X			
	11	14		X		
	12	14	X			
	13	20				X
	14	16			X	
	15	15	X			
	16	14	X			
	17	13	X			
	Subtotal		8	2	1	6
	Boys	1	19			
2		6	X			
3		17			X	
4		13	X			
5		15		X		
6		8	X			
7		13	X			
8		7	X			
9		18			X	
10		15	X			
11		7	X			
12		6	X			
13		19				X
14		13		X		
15		9	X			
16		16		X		
17		6	X			
18		14	X			
19		17		X		
20		8	X			
21		13	X			
Subtotal		13	4	2	2	
Total			21	6	3	8

Source: Household Survey conducted by PPTA consultants in April 2012. Among the 30 households surveyed, there were 17 females and 21 males between the age of 6 and 23.

Table A2.6: Production and Assets

	Household	Agri. Vehicle	Tractor	Car	Motorcycle	Color TV	Cell Phone	Washing Machine	Refrigerator	Computer
1.	(Na)Yonghong			1	2	1	3	1	1	1
2.	Husihaltuo		1	1	2	1	2	1	1	
3.	Qi Meige					1	4	1	1	
4.	Mengkebatu	1		1	1	1	4	1	1	1
5.	Baoli		1	1	1	3	7	3	2	1
6.	Batu		1		1	1	3	1	1	
7.	Ji Haishan		1	1	2	1	3	1	1	
8.	Jiamutan		1	1	2	1	5	1	1	
9.	Naomunuer	1	1	1	3	1	4	1		
10.	(Da)Yonghong			1	1	1	4	1	1	2
11.	Saiqing			1	2	2	4	1	1	
12.	Taohuajie		1		1	1	2	1	1	
13.	Batejirigeli			1	2	1	3	1	1	1
14.	Mengkeer				2	1	4	1	1	
15.	Bateer			1	1	1	5	1	1	
16.	Bayisihali		1	1	2	1	6	1	1	
17.	Weihong			1	2	1	4	2	2	1
18.	Dongji		1	1	1	1	2	1	1	
19.	Yixi	1	1		3	4	6	4	4	1
20.	Wulanbatu					1	3	1	1	
21.	Qiaoxin		1	1	2	1	5	1	1	
22.	Dong Bateer			1	2	2	4	1	1	1
23.	Shengli			1	1	1	6	1	1	
24.	Baolide		1		1	1	3	1	1	1
25.	Ba Yinji			1	1	1	4	1	1	1
26.	Dong Qing			1	2	1	3	1	1	
27.	Cairenjide				1	1	2	1	1	
28.	Dai Deer		1		3	1	5	1	1	1
29.	Da Bateer		1		2	1	7	1	1	
30.	Nao Jiamucuo					1	4	1	1	
31.	Ai Min									
Number of Households Possesses		3	14	19	27	30	30	30	29	11
Percentage of Possession (%)		10	47	63	90	100	100	100	97	37

Source: Household Survey conducted by PPTA consultants in April 2012.