

## Chapter 2

# The History and Present Condition of Ecological Migration in Ningxia

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For thousands of years, migration and development defined the two major themes of Ningxia's history. Development through migration continues to push Ningxia forward. During the Qin (221–206 BCE) and Han (206 BCE–220 CE) dynasties, military migrants defended the Central Plain of China from foreign invasion. In the Tang (618–907) and Song (960–1279) dynasties, a tribe called the Dangxiang tribe migrated to inland China, which ultimately established a strong Western Xia Dynasty. During the Yuan (1271–1368) dynasty, a large-scale policy directed migration greatly contributed to the regional economic development. In the Qing (1644–1912) Dynasty, the politically motivated compulsory migration shaped the distribution pattern of today's Hui nationality in the Ningxia region. As time passes, profound change has taken place in the background, form, and goal of migration. Yet, in Ningxia, migration is a historically meaningful topic, whose vitality is perennial.

## 2.1 The Journey of Ecological Migration and Development

Since 1983, Ningxia migration has changed from purely poverty reduction migration to the dual purpose of poverty reduction and ecological restoration. As the goal changes, the *Diaozhuang* style of migration has given way to ecological migration.

### 2.1.1 The Goal and Type of *Diaozhuang* Style of Migration

In 1982, the State Council of China decided to implement an agricultural construction project in the “*sanxi*,” and to fundamentally raise to the subsistence level the people living in Gansu and Ningxia regions, which feature contiguous poor counties. In September

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**Table 2.1** Migration of the people in the style of *diao*zhuang

Type of <i>diao</i> zhuang	The name of <i>diao</i> zhuang	Move-out time	Move-out county	Move-in county
Inter-county, group-based	Dazhangchang <i>diao</i> zhuang	1983	Guyuan County	Zhongning County
	Majialiang <i>diao</i> zhuang	1983	Pengyang County	Zhongning County
	Lucaowa <i>diao</i> zhuang	1983	Jingyuan County	New District of Yinchuan
	Yueyahu <i>diao</i> zhuang	1983	Haiyuan County	Taole County
	Longhu <i>diao</i> zhuang	1983	Longde County	Pingluo County
	Langpiziliang <i>diao</i> zhuang	1985	Yanchi County	City of Lingwu
Group-based	Nanliangtaizi <i>diao</i> zhuang	1990	Haiyuan County	Helan County
	Shibozi <i>diao</i> zhuang	1992	Guyuan County	Tongxin County
	Yuquanying <i>diao</i> zhuang (Xiji)	1992, 1997	Xiji County	Yongning County
	Yuquanying <i>diao</i> zhuang (Haiyuan)	1993	Haiyuan County	Yongning County
	Biandanguo <i>diao</i> zhuang	1995	Guyuan County	Itong District of Wuzhong City
	Huaxicun <i>diao</i> zhuang	1995	Xiji County, Haiyuan County, Guyuan County, Tongxin County	New District of Yinchuan
Inter-county, in dispersion	Wuduizi <i>diao</i> zhuang	1985	Haiyuan County	Taole County
	Hongyazi <i>diao</i> zhuang	1985	Haiyuan County	Taole County
	Nanshantaizi <i>diao</i> zhuang	1985	Xiji County	Zhongwei County
	Changshantuo <i>diao</i> zhuang	1985	Pengyang County	Zhongning County
	Ganchengzi <i>diao</i> zhuang	1986	Yanchi County	Qingtongxia City
Intra-county	Tongxi County: Hedong, Hexi <i>diao</i> zhuang	1980		
	Guyuan County: Qiyang <i>diao</i> zhuang	1982		
	Haiyuan County: Xingren, Gaoya and Liwang <i>diao</i> zhuang	1982		
	Zhongwei City: Nanshantaizi <i>diao</i> zhuang	1985		
	Zhongwei City: Jianjianhu <i>diao</i> zhuang	1986		
	Yanchi County: Huianbao <i>diao</i> zhuang	1995		

◀ Notes Dazhanchang *diaozihuang* of Guyuan County and Majialiang *diaozihuang* of Pengyang County have been turned over to Zhongning County. They have changed their name to Dazhanchang *xiang* of Zhongning County. Lucaowa *diaozihuang* of Jingyuan County has split into two towns. Xingjing Township has been transferred to Xixia District of Yinchuan. Xingyuan *xiang* has been transferred to Jinfeng District of Yinchuan. Yueyahu *diaozihuang* of Haiyuan County has been transferred to the county formerly known as Taoyue County for administrative purposes. It has since changed its name to Yueyahu *xiang*. When Taoyue County was eliminated, Yueyahu *xiang* was under the jurisdiction of Xingqing District of Yinchuan. Yuquanying *diaozihuang* of Xiji County and Yuquanying *diaozihuang* of Haiyuan County have been transferred to Yongning County. They have changed their name to Minning Town. Longhu Development Zone of Longde County was turned over to Dawukou District of Shizuishan City in 2003  
Source Data and statistics of Ningxia poverty reduction office

1983, the “*sanxi*” region agricultural construction leadership group announced that local development would follow the principle of designing strategies that match the actual condition on the ground. Accordingly, the Ningxia regional government formulated the strategy of “taking advantage of the prosperity of Hetao and help lift Xihaigu out of poverty.” It mobilized the people in the south mountainous region where resources were scarce, space for survival was limited and basic living conditions were poor, and moved them to patches of uncultivated land elsewhere with richer resources and more water. Then the government encouraged the migrants to engage in production through development in their new homeland. From here, poverty reduction in Ningxia went from assistance-based to development-based, from donation to capacity building.

*Diaozihuang*, also known as “*la diaozihuang*” had been an agricultural operation model in Loess Plateau in Northwest China in late Qing and Republic China (1912–1949). The Loess Plateau region is dry and rainfall is irregular. Historically, as the land was cultivated without constraint, the vegetation in this region became sparse and serious soil erosion followed. As the humans and land were in great disharmony and the land could not support the people living on it, the local farmers, under pressure to survive, reclaimed the nearby wasteland. After the nearby wasteland was reclaimed, they would move to a further place to reclaim and cultivate. Sometimes, the reclaimed land was too far away from their village, so the farmers had to dig caves and set up tents as a makeshift residence in the reclaimed land. After the harvest was over, they would return to their own village. Although the farmers had one village as their principal place of residence, they had to commute between two places. One village was suspended in two places. Therefore, it was called *diaozihuang*, “a village that is suspended between two places.” Although the migration base today is no longer provisional, the policy for the migrants is still to allow them to “have two homes between which one can freely move.” The root of the migrants is still the home village. Therefore, we call the current migration base as migrant *diaozihuang*.

In 1983, under the leadership of the *diaozihuang* migration work group of Ningxia and implemented through the coordinated efforts by the local governments of the source region and destination region, and relying on key water conservation projects such as Guhai and Yanhuangding Pumping Systems, the *diaozihuang* migration project for Lucaowa of Yongning County and Longhu of Pingluo County began. By 1997, across the Ningxia Hui autonomous region, a total of 23 sets of residents had been moved *diaozihuang*-style, 12 in whole groups and outside their home county, 5 in dispersion and outside their home county, and 6 within their home county (see Table 2.1).

### 1. Inter-county contiguous *diaozhuang* migration

In July 1983, Jingyuan County conducted development and construction in Lucaowa of Yongning County and Longde County conducted development and construction in Longhu of Pingluo County. Both the county governments settled the migrants in groups. The migrants moved from one county to another, developed land resources in the Yellow River irrigation area and settled down in groups. We call this type of migration “inter-county group-based *diaozhuang* migration.” This is the main type of *diaozhuang* migration in Ningxia. This type of *diaozhuang* migration is of a large scale and the *diaozhuang* migrants come from similar sources. Some *diaozhuang* resettlers were moved in whole administrative unit. After the migration, they retained the name of the original village. Luweiwa *diaozhuang* is a case in point. This type of *diaozhuang* has two characteristics. First, migrants from the same area are settled in the same area. Normally, once a migrant is detached from his original familiar society, it leaves the migrant isolated and without a reliable social support network. The migrants become strangers to each other and it is not easy to establish a rapport and trust among them. Moving whole villages together prevents this from happening. After the migrants enter *diaozhuang*, they still live in a familiar environment and can maintain their original lifestyle and support group. This will greatly stabilize the life of the early migrants.

Second, even after they move, the migrants are still under the same jurisdiction as before. This means that the migrants are administrated by the government of the source region. Migration is a huge project. Compared with the government of the source region, the government of the destination region has limited knowledge of the migrants and has weak organizational control over them. Once it mishandles the migration affairs, chaos in the settlement would ensue, which might arouse antagonism and lead to the backflow of the migrants. Therefore, the administration by the original government is a necessary measure to stabilize the migrants. By 1995, 11 *diaozhuang*-style migrations were established, 111,679 migrants were settled, and 160,000 mu of land was developed.<sup>1</sup> In 1996, inter-county *diaozhuang* migration introduced a new development model—that being an east–west cooperative construction model. With assistance from Huaxi Village in Jiangsu and Fujian Province, Huaxi Village *diaozhuang* of Zhenbeibao Township and Yinchuan and Minning Cooperative Village were newly established on the basis of Yuquanying *diaozhuang*. Inspired by fresh ideas and driven by large investments, the *diaozhuang* style of migration was on its way to standing at the high point of fast development. By the end of 2002, 12 *diaozhuang* style migrations in Ningxia developed 318,000 mu of arable land and settled 136,023 migrants (Ma Zhongyu 2012:251).<sup>2</sup>

<sup>1</sup>Wang, Chaoliang. 2005. *Diaozhuang Style of Migration and Development---A Study of Construction and Development of Ecological Migration Bases in Hui Group Region*. China Social Sciences Press.

<sup>2</sup>Ma, Zhongyu, ed. 2012. *A Strategic Study of Ningxia Response to Global Climatic Change*. Yangguang Press.

## 2. Inter-county dispersive *diaozhuang* migration

Inter-county dispersive *diaozhuang* migration is a model of migration that was adopted relatively late and on a small scale. Besides a vast uncultivated land in the Yellow River irrigation area, some areas of land had been developed in some counties and there was insufficient supply of labor. In response to this, the destination counties designated a few villages and with the direction of the government of Ningxia, moved the people from the source county to the villages. This type of migration village is called “inter-county dispersive *diaozhuang* migration.” It has two characteristics. First, the migrants are dispersed widely and resettled in small clusters. Because destination regions are already developed irrigation areas and has a local population, migrants could only fill in the gaps. Second, dual administration by the governments in two localities is practiced. This type of migration is of a small scale. The source region’s government managed poverty reduction funds and the destination region provided good construction and facilities. And therefore, the source region’s government was responsible for the migration and the materials for production and living, while the destination’s regional government was responsible for providing housing and land for cultivation. Each government fulfilled its responsibilities and cooperated in dual administration. After the migrants basically made their ends meet, the source region’s government would surrender the administration to the destination region’s government. By 2011, there were five inter-county dispersive *diaozhuang* style of migrations, which settled 13,416 poor villagers (Ma Zhongyu 2012:251).

## 3. Intra-county *diaozhuang* resettlement

The intra-county *diaozhuang* style resettlement can be traced back to the time before Ningxia implemented *diaozhuang* migration projects. At the time, Tongxin and Guhai counties’ water pumping projects were put into use and created favorable conditions for converting dry land into irrigable land. Some governments concerned started to organize migration within the same county. In 1980, Tongxin County moved villagers to the irrigation areas of Hexi and Hedong. In 1982, the Haiyuan County government moved villagers to the irrigation areas of Xing-Gao-Li (Xingren, Gaoya and Liwang). In the same year, the Guyuan County government moved villagers to the Qiyang irrigation area. It is fair to say that the practice of migration from these three mountainous regions gained rich experience for the large-scale intra-counties migration in Ningxia later on. The advantage of this type of *diaozhuang* resettlement was obvious. First, the distance of the migration was short as it was within the same county, which saved moving expenditures. Second, moving in and moving out were both under the jurisdiction of the same level of government and were good for administration. It can be said that this type of migration had minimum negative effects on the migrants, as the duration of development and construction was shortest and the return for investment was fastest. The six intra-county *diaozhuang* style resettlements settled

70,228 persons. The total number was 154,102, when 83,874 persons residing in the irrigable land converted locally from the dry land were counted.<sup>3</sup>

#### 4. Poverty reduction Yellow River Pumping Project migration

While other types of *diaozhuang* style migrations were being practiced, a larger scale and more innovative migration activity was conducted in Hongsipu, the central dry land of Ningxia. In 1993, Li Ruihuan, the chair of the Chinese People's Political Consultative Conference went on an inspection tour of Ningxia. He suggested that water pumping irrigation be introduced where feasible and the contiguous mass of migrants be moved to these areas. In September 1994, Qian Zhenying, the vice-chair of the Chinese People's Political Consultative Conference entrusted by Li, led a group of experts on water conservancy to inspect on the spot. He proposed that the flat and dry wasteland along the Yellow River be utilized by pumping water from the river and 2 million mu of irrigation area be constructed. Then 1 million poor people in the southern mountainous region would be moved to this area, by which the fundamental problem of poverty could be resolved. The planned investment on the construction was 3 billion yuan, which would take 6 years to complete. This project was later called the "1236" Project.

In 1995, the State Council approved Ningxia's poverty reduction water pumping project. In December 1995, the project was listed and incorporated into the state's "9th Five-year Plan." The plan called for four sections of pumped irrigation to be developed. Among them, Hongsipu would take up 750,000 mu. On May 11, 1996, the Hongsipu District irrigation project was formally launched. In December 1998, the work committee and management committee of Hongsipu Development Zone were established to oversee migrant settlement and development. Since 1999, Ningxia incorporated parts of Tongxin, Zhongning, and Qingongxia into Hongsipu and this new migration region is now nearly 2000 km<sup>2</sup>. A large number of Hui and Han people from the counties of Yuanzhou, Longde, Xiji, Haiyuan, Jingyuan, Pengyang, and Tongxi and part of towns in Zhongning County moved to Hongsipu. By 2000, the Hongsipu Development Zone settled 11,081 households of migrants with a total population of 51,330.<sup>4</sup> See Table 2.2 for a specific number of households and population.

In 2000, *diaozhuang* style of migration was formally transferred to Yellow River irrigation areas in Ningxia for administrative purposes, which signaled the end of the *diaozhuang* stage of migration.

<sup>3</sup>Ma, Zhongyu, ed., 2012, *A Strategic Study of Ningxia Response to Global Climatic Change*, Yangguang Press.

<sup>4</sup>Wang, Chaoliang, 2005, *Diaozhuang Style of Migration and Development—A Study of Construction and Development of Ecological Migration Bases in Hui Group Region*, 26. China Social Sciences Press.

**Table 2.2** The resettlement of the people in Hongsipu development zone

The name of town	Household number	Population
Dahe <i>xiang</i>	1688	7999
Hongsipu Town	5469	25435
Shaquan <i>xiang</i>	2380	10841
Maihe <i>xiang</i>	1544	7055
Total	11081	51330

### 2.1.2 The Goal and Phases of Ecological Migration

In 2001, the State Planning Commission issued “Opinions on Implementing Pilot Projects of Poverty Reduction and Migration of the People to Another Locality,” which says, the experimental projects of poverty reduction and migration in the western region is a new avenue for exploring poverty reduction in the new century under a new situation. It is also a beneficial attempt to improve the ecological condition of the western region. Through the experiments, part of the population has been lifted out of poverty and the ecological condition of the source region has also been improved. Experience has been gained on the form, characteristics, major methods, and the lessons of poverty reduction and migration to another locality, which has laid a good foundation for promoting similar work. From the “Opinions,” we can see that in the stated goal of migration, ecological improvement was placed in the same standing as poverty reduction. After that, Ningxia’s government issued “Opinions on Implementing Experimental Projects on Poverty Reduction and Migration.” This programmatic document indicates that Ningxia’s *diao Zhuang* style of migration has given way to ecological migration.

In 2001, led by the Ningxia Development and Reform Commission, assisted by relevant departments in cities and counties and dependent on the large and medium-size water conservancy projects, ecological migration was launched. Specifically, the farm land was reconverted into forestry and grasslands. The ecological conditions of the source region for migration were improved and migrants were assisted in coming out of poverty. Up till now, Ningxia’s ecological migration has undergone three phases: Ningxia poverty reduction and migration to another locality, intra-county ecological migration in the Ningxia central dry land, and ecological migration of Ningxia central and southern mountainous regions.

#### 1. The poverty reduction through migration to another locality in Ningxia (2001–2006)

In 2001, the central government implemented the program of poverty reduction and migration to another locality, involving the poor population in the regions where the life condition was harsh, the resources were scarce, and the ecological conditions were deteriorating. The population lived mainly in the provinces of Ningxia, Inner Mongolia, Guizhou, and Yunnan. In so doing, the government hoped to reach the dual goals of poverty reduction and ecological restoration. In Ningxia, this migration program is also called “Ecological Migration Program.” Drawing on the experience of “*Diao Zhuang* style migration,” now



the whole village was moved to another locality or through concentrated or disperse settlement, unlike the earlier mode of migration by which the migrants moved voluntarily but settled separately. The houses, water, and power supply facility in the source region were all dismantled. The land in the source region lay fallow or was taken over by the Forestry Department for the purpose of for-estation and care. The migrants benefited from the policy of returning the farm-land to grassland and returning the land for forestation. The migrants’ residence registration was directly transferred to the destination region and was under administration of the local government in the destination region. Through the change in the mode of migration and the system of administration, the source region’s land could be restored by a lump sum, on one hand. On the other hand, it prevented the migrants from the need of commuting between “two resi-dences,” so that they could settle down and rapidly merge into the local society.

By 2006, 21 settlements had been built, involving 94,000 settlers, under the program of poverty reduction and pumping Yellow River irrigation, which covered the Hongsipu irrigation zone, Guhai expanded water pumping irrigation zone, Yanhuangding water pumping irrigation zone, mountainous region well irrigation zone, and reclamation state farms. Among these settlers, 49,400 were settled in the water nourishing forestry zone in the Liupan Mountain and 44,600 in the central dry land, according to *An Outline of the Intra-County Ecological Migration in Ningxia Central Dry Land (2007–2011)*. The names of the destination regions and the number of migrants are indicated in Table 2.3.

2. Intra-county ecological migration in Ningxia’s central dry land (2007–2011)
- As the ecological migration program deepened, it was necessary that the gov-ernment make a detailed division of the land and guide the migration accord-ingly. Ningxia Hui Autonomous Regional government, on the basis of the physical contours of the land, divided the land into loess hill in the south, dry land in the center, and the Yellow River irrigation zone in the north from what were formally two zones: traditional mountainous region and regions close to

**Table 2.3** Population resettlements in Ningxia as a poverty reduction measure

The destinations’ names	Changchengyuan irrigation zone of Pengyang County, Xitang irriga-tion zone of Yanchi County, Majiatang irrigation zone of Tongxin County, Xinquan irrigation zone of Hongsipu, Xinzhuang third and fourth branch irrigation zones of Hongsipu, Water pumping irriga-tion zone of Yanchi County, Changshantou Farm, Qukou Farm, Nanliang Farm, Longhu Development Zone, Helanshan Agricultural and Pastoral Farm. Jinshan Village of Helan, Taole Town East of Pingluo County. Huinong West, Xiji Malian Reservoir Settlement Zone, Pengyang Wangwazhen Settlement Zone, Jianquan Farm, Taiyangliang of Qukou Farm, Nanshantaizi of Zhongwei County, Miaotai of Pengyang County and Baijitan of Lingwu County
Number of settlements	21
Number of migrants	90,400



Yinchuan. In light of the fact that the earlier migrants tended to concentrate in the loess hills in the south, Ningxia's government decided to implement intra-county migration in the central part where basic living conditions were poor. The program covered the key regions of poverty reduction and development on the state and regional levels such as Haiyuan County, Tongxin County, Yanchi County, East of Yanzhou District, West of Xiji County, and the urban district and mountainous region of Zhongwei City.

By focusing on the five key areas such as “water resources, ecology, development, unique feature and transference” and following the line of thinking, “letting the people follow water and letting the water flow where there are people,” the government, as a priority, moved the poor population who were scattered about in remote areas suffering under ecological imbalances and a shortage of water to places near water lines, highways and on the outskirts of cities. The government also actively promoted the development of the unique strengths of the agriculture characteristic to the region, the use of modern technology and engineering to provide optimal conditions for cultivation and breeding, as well as promoting the saving of water and efficient agriculture. The goal was that “the problem in the mountain will be solved outside the mountain. The problem on the top of the mountain will be solved at the foot of the mountain and the underlying problem on the surface would be simplified.” These would basically solve the problem of poverty in the dry lands of the central region. Intra-county migration was encouraged and the settlement with “land” was practiced. In accordance with the water resources and land resources, the size of the relocation was rationally calculated and the move of the whole village or town was implemented. The intra-county migration was integrated with ecological migration, the development of small towns, returning the land for forestation, and the development of facilities agriculture. The building of the large village for migrants was constructed as well. In addition, the government actively explored the settlement without “land” mode as well. To make full use of the potential development of industries near the resettlement regions, the government would involve the migrants in the labor intensive service.

Beginning in 2007, the regional government planned to spend 5 years along with an investment of 2.842 billion yuan to build 42 migrant settlement zones, with an adjusted land size of 351,100 mu to resettle 46,382 households with a combined population of 206,829 people. That involved 6 counties (districts) and 520 villages, according to *An Outline of the Intra-County Ecological Migration in Ningxia Central Dry Land* (2007–2011). The migration counties (district), number, and households are indicated in Table 2.4. By 2010, 160, 800 migrants had completed their move, which constituted 77.7 % of the population under the migration plan. The farm land developed for the migrants was 277,000 mu, which constituted 78.9 % of the planned acreage. The accumulated investment was 2.6 billion yuan, which constituted 91.5 % of the planned investment, according to *Ecological Migration Plan for Central and Southern Regions of Ningxia During Its 12th Five-year Plan Period*.

**Table 2.4** The intra-county ecological migration in the dry region in the central Ningxia

Name of county	No. of migrants	No. of households	Scale of migration	Migrants settlement zone
Tongxin County	133,261	31,326	The move of the whole township such as Yaoshan, Tianlaozhuang, Zhangjiayuan (not including Wangjiayuan Village, Magaozhuang (not including the three villages such as Zhaojiashu, Ququ and Qiaojiawan), Yuwang (not including Nanguan, Nanyuan, Shatubo, Beiguan, Tufeng and Yuwang Town. These five townships included 83 villages including 22,700 households and 96,000 people. The whole villages that were moved included 3 towns such as Wangtuan, Hexi and Weizhou with 29 administrative villages. The number of households totaled 8,600 which consisted of 36,000 people	They relied on the water pumping engineering that was built under Ningxia's poverty reduction effort and Yellow River irrigation. 244.4 thousand mu of land was developed for the migrants and 16 settlements were established such as Weizhou-Xianaguan-Yuwang, Juhutai of Hexi Town, Miao'erling of Shisi Town, Shayan, Mageda, Daguoyan of Wantuan Town, Yanquan of Weizhou, Ganyangshui of Guhaixi and Luoshan East Slope of Hongwugan
Haiyuan County	59,303	11,796	Haiyuan County the scale of migration is 11,796 households with a population the size of 59,300. The migration involved 6 towns such as Xi'an, Jiucui, Hongyang and Zhengqi with 35 administrative villages and 114 sub-villages	The land size for settlements of the migrants was 82,300 mu. Five settlement zones were established including Xingren, Shixiakou, Xinjankuba Irrigation Zone, Xinglong-Gaoya Water-saving Irrigation Zone and Damaishui of Xutao
Yanchi County	2200	600	The migration scale was 600 households consisting of 2,200 people. It involved 7 towns such as Mahuangshan, Huianbao, Dashuikeng, Qingshan, Fengjiigou, Wanglejing and Gaoshawo and 15 administrative villages and 15 sub-villages	Developed 3,400 mu of land for settling the migrants in the areas of water pumping irrigation, well irrigation and plantation and water saving irrigation and the area surrounding small towns. It established 7 migrant's settlement zones

(continued)

Table 2.4 (continued)

Name of county	No. of migrants	No. of households	Scale of migration	Migrants settlement zone
Yuzhou District	7830	1720	Involved 6 towns such as Tanshan and Gancheng and 7 administrative villages and 22 sub-villages	Developed and adapted the 11,300 mu of settlement land. It established 3 migrants settlement zones such as Nanchengguai, Qiying and Pengbao
Xiji County	1657	322	Involved Xinying <i>xiang</i> (including Zhangjiawa, Cheluwan, Dashuhe and Dayaoan), Yanli of Tianping <i>xiang</i> , Pingfeng of Pinggeng Town, Hetan of Subao <i>xiang</i> , You'ai of Xingping <i>xiang</i> and Dabao of Hongyao <i>xiang</i> . It included altogether 6 <i>xiang</i> /towns, 9 administrative villages and 9 sub-villages	Developed 1,400 mu of settlement land. The villagers were generally moved to a location close to their places of residence. 9 settlement zones were established
Urban area of Zhongwei City	2578	618	Involved Xiangshan area which included 4 <i>xiang</i> /towns, 7 administrative villages and 22 sub-villages	Taking Nanshantai water pumping engineering as a water source, it developed 8,300 mu of land. It established 2 settlements zones, which included the Haojiatang project zone of Xuanhe Town and the Heiliang project zone of Nanshantai (from third brigade of Jingnong to Dongguo)
Total	206829	46382		

Source An outline of the intra-county ecological migration in Ningxia central dry land (2007–2011), 2008

### 3. Ecological migration in the central and southern regions of Ningxia (2011–2015)

The central and southern regions of Ningxia are recognized as an “old revolutionary base, featuring a high concentration of members of ethnic minorities and the poor.” The central and southern regions belong to one of 18 problem areas, with concentration of poor inhabitants in linked pieces of land. Although poverty reduction and migration have been practiced for nearly thirty years, the inhabitants still are confronted with the problems of dire poverty, poor conditions for survival and resistance to development. The practice of ecological migration in key areas is not only a path with proven success, but also meets the practical needs of the poor in the central and southern regions of Ningxia. Therefore, in the 12th Five-year Plan Period,” Ningxia’s government decided to invest 10.58 billion yuan on the migration of 78,800 households consisting of 346,000 people in the central and southern regions. It involved 9 counties/districts such as Yuanzhou, Xiji, Longde, Jingyuan, Pengyuan, Tongxin, Yanchi, Haiyuan and Shapotou, with 91 *xiang*/towns, 684 administrative villages, and 1,655 sub-villages. The migration mainly took two forms: ecological migration and migration through labor. The government planned to build 274 settlement zones, which would include 234 ecological migration settlement zones to resettle the migrants of 58,700 households with a population of 259,500. These types of migrants constituted 75 % of total migrants. The migrants through labor would be placed in 40 settlement zones, which would settle 20,100 households with a population of 86,500. These types of migrants constituted 25 % of the total migrants. The settlement involves both intra-country and inter-county migrants with the focus more on inter-county settlement.

Taking into account the seven factors such as the condition of the destination region, comprehensive rate of urbanization, gross income per capita of farmers, urban residents’ disposable income, GDP per capita, local fiscal income per capita, irrigation land per capita, and the capacity of absorbing laborers in the second and tertiary industries, the regional government planned to settle 50,400 households of inter-county migrants with a total population of 224,900. It constituted 65 % of total migrants. Taking into account arable land, water-saving effects in water-pumping irrigation zones and reservoir and well irrigation, newly added water resource and precipitation volume, the government planned to settle 28,400 households of the intra-county migrants with a total population of 121,100. It constituted 35 % of total migrants, as is indicated in *An Outline of Ecological Migration in the Central and Southern Regions in Ningxia in the Period of “12th Five-year Plan.”* The cities and counties concerned took flexible measures to settle the migrants as circumstances required. They took various forms of settlements such as developing the land and placing the migrants in one locality, placing them in a relatively concentrated area and being close to their residence, placing them in different spots surrounded by other residents, and placing them through offering work as laborers without providing land. The government placed the people with special needs in seniors’ home, an innovation by itself. The orphans, the widows,

widowers and the childless couples were placed in the seniors' homes according to the policy of social security. Through various forms of migration, it was guaranteed that the migrants "moved out voluntarily, were firm in pursuing a new life and were able to vastly improve their standard of living."

Since the day the policy was executed to the end of September 2012, the total number of migrants reached 85,000, which constituted 25 % of the total migrant population. A total of 38,000 houses were built and 166,000 mu of land was developed and adjusted (Tables 2.5 and 2.6).

## 2.2 The Accomplishments in the Implementation of Ecological Migration

Faced with the fact that in the central and southern parts of Ningxia there was a large-scale poor population, the poverty level was deep, living conditions were poor, and the development was difficult, the Ningxia regional government at

**Table 2.5** The migration scale in the source county (district) and its settlement chart

County (district)	Total scale of migration		Intra-county settlement			Extra-county settlement		
	No. of households (household)	No. of population (person)	No. of households (household)	No. of population (person)	Ratio (percentage)	No. of households (household)	No. of population (person)	Ratio (%)
Total	78,815	346,000	28,368	121,100	35	50,447	224,900	65
Tongxin County	8,869	44,659	1,589	8,000	17.9	7,280	36,659	82.1
Yanchi County	2,251	7,300	2,251	7,300	100.0	—	—	—
Yuanzhou County	15,204	61,948	5,983	24,377	39.4	9,221	37,571	60.6
Xiji County	14,474	70,429	4,399	21,409	30.4	10,075	49,020	69.6
Delong County	7,409	30,649	2,204	9,119	29.8	5,205	21,530	70.2
Jingyuan County	7,701	33,116	34,221	4,716	44.4	4,279	18,400	55.6
Pengyang County	8,676	36,333	3,232	13,533	37.2	5,444	22,800	62.8
Haiyuan County	12,775	55,595	3,832	16,675	30.0	8,943	38,920	70.0
Shabotou District (Haochuan)	1,456	5,971	1,456	5,971	100.0	—	—	—

*Source* An outline of ecological migration in the central and southern regions in Ningxia in the period of "12th Five-year Plan"

**Table 2.6** The chart for the settlement in the destination counties (city, district, administrative unit)

County (city, district and unit)	Total task in settlement		Source of migrants		
	Household No. (household)	Population No. (person)	7 counties 1 district	No. of households (household)	Population No. (person)
Total	50,447	224,900		50,447	224,900
Three districts of Yinchuan	5,444	22,800	Pengyang County	5,444	22,800
Yongning County	4,328	17,800	Longde County	2,691	11,130
			Yuanzhou District	1637	6670
Helan County	3,905	19,000	Xiji County	3,405	16,963
			Yuanzhou District	500	2,037
Lingwu City	4,279	18,400	Jingyuan County	4,279	18,400
Dawukou District	2,514	10,400	Longde County	2,514	10,400
Huinong District	3,399	15,400	Yuanzhou District	943	3,842
			Xiji County	2,456	11,558
Pingluo County	4,213	20,500	Xiji County	4,213	20,500
Litong District	1,787	9,000	Tongxi County	1,787	9,000
Hongispu District	7,208	31,500	Tongxin County	2,216	11,159
			Yuanzhou District	4,992	20,341
Qingtongxia City	3,277	16,500	Tongxin County	3,277	16,500
Shabotou District	1,965	8,550	Haiyuan County	1,965	8,550
Zhongning County	1,965	8,550	Haiyuan County	1,965	8,550
Bureau for Agricultural Reclamation	6,163	26,500	Haiyuan County	5,014	21,820
			Yuanzhou District	1,149	4,680

*Note* The settlement task of Hongispu includes 2,454 households with a population of 10,000 originally undertaken by the Department of Justice of Ningxia. The department gave the settlement land for Lujiayao migrants to Hongispu for administrative purposes

*Source* An outline of ecological migration in the central and southern regions in Ningxia during the “12th Five-year Plan” Period 2011

different times took different measures and adopted flexible means to move and settle the people. It accomplished dual victories in reducing the poverty of the migrants and effectively improved ecological conditions. The great accomplishment in the ecological migration proves that the ecological migration is not only a poverty reduction project or ecological protection project, but also a project for the wellbeing of the people and a project for winning the heart of the people. It is a strategic measure to solve the problem of poverty in the central and southern regions in a profound way. It is of great significance for speeding the process of poverty reduction, changing the mode of development, improving the people’s livelihood, making an overall plan for coordinated regional development, and building a moderately prosperous society in all respects.

2.2.1 Relatively Higher Degree of Satisfaction for Migrants

See Table 2.7.

2.2.2 The Living Standard of the Migrants Has Generally Improved

“Eliminating poverty and vastly improving standards of living” was the initial motivation of the ecological migration project implemented in Ningxia. It is also the goal that the migrants relentlessly pursue. After the migration, directed and supported by the government, the migrants took full advantage of the excellent environment and rich resources and changed their traditional way of farming, which relied too much on the grace of Heaven and obtained low yields. They actively enhanced education and studied practical skills of production and expanded sources of revenues. They developed high efficiency water saving agriculture, livestock breeding, and the labor industry, which enhanced their income steadily.

As far as the income of the settlers in the destination region is concerned, in 2011, nearly half of the settlers had annual incomes exceeding 10,000 yuan (see Table 2.8). According to statistics, the settlers’ annual income per capita

Table 2.7 The Migrants’ overall level of satisfaction

Type	Migrants in destination region (%)
Satisfied	91.8
Dissatisfied	2.7
Not too sure	5.5
Total	100.0

Source Research group’s 2012 sample survey



**Table 2.8** The settlers’ income in the destination regions in 2011

Income	Percentage of migrants in destination region (%)
0–9,999 Yuan	55.8
10,000–19,999 Yuan	28.0
2,0000–29,999 Yuan	9.0
30,000 Yuan and above	7.2
Total	100.0

Source Research group’s 2012 sample survey

was 13,458.69 yuan, while the potential migrants’ income per capita was only 7,022.71 yuan. There was a yawning gap between these groups in terms of income. Besides, some of the more well-off settlers’ income already exceeded that of the residents of the Yellow River irrigation areas.

Besides the increase in income, the higher living standard is also reflected in better infrastructure and social services in the settlement. As the migrants moved to the region which had easy access to water, the town center and the highway, the settlement saw no muddy and bumpy roads. Instead, over 70 % of the main roads were clean and were smooth asphalt or cement roads. Clean drinking water was ensured. They basically drank clean well or tap water. Renewable clean energy such as solar energy, methane, and wind energy was extensively used in the settlement zones. 81.6 % of the migrants no longer lived in thatched huts, caves, or mud houses. Instead, they now moved into bright one-story houses. The household occupancy per family and living area per capita both far exceeded that before their migration. The new villages of settlement had “seven implementations, seven equipments and two improvements.” The seven implementations consisted of electricity, tap water, asphalt roads, buses, radio and TV, telephone; the seven equipments consisted of school, village level activity center, clinic, employment center, supermarket, cultural square, environmental protection facility, effective public transportation; and the two improvements were in service quality and in general living standard of the migrants.

**2.2.3 Great Ecological Improvements**

The mountainous region in the south of Ningxia is the source for the Jing River, Hulu River and Qingshui River. Its ecological function is very special in terms of water conservation, soil conservation, and bio-diversity. Its ecological location is very important. The implementation of the ecological migration project has greatly reduced the population pressure on this region and effectively restored local ecological conditions. This is particularly true when the whole village migration was integrated with national and regional ecological projects constructions such as, the state initiative of preventing and control of desertification, greater Liupan

**Table 2.9** Views on the improvement of ecology of the source regions

		Migrants in destination region (%)
Since the implementation of the migration project, the source region ecological condition has improved	Highly disagree	0.6
	Slightly disagree	9.2
	Relatively agree	56.5
	Highly agree	33.7
	Total	100.0

Source Research group's 2012 sample survey

ecological economic circle, “Sanheyuan” water source conservation project, returning farmland to forestry. The returned land was all used for ecological construction. Thus, the original forestry and grasslands were effectively protected and the deterioration of the ecological condition was checked.

From the survey on the settlers, over 90 % of the settlers believe that the ecological condition of the source region has indeed improved. 33.7 % of the settlers hold a very affirmative view (see Table 2.9). This shows that the improvement is very significant. However, owing to natural and historical causes, the source region suffers from a severe population overload. Its ecological condition is very fragile as water is in short supply and natural disasters are frequent. Therefore, we can only say that ecological conditions show a good sign of improvement. The task is still arduous for improving the ecological condition significantly.

While the ecological condition of the source region is improved, the ecological construction in the destination region also achieves good results. With a mind to create a beautiful and hospitable settlement, the government and the settlers develop ecological gardens with their own characteristics, combining growing cash crops, court economy, agriculture with ecological circulation, small watershed control, reforestation of new villages, and windbreak for farmland. They do this according to the local circumstance and aim to realize the dual goals of economic development and environmental protection.

Generally speaking, the migrants have highly positive comments on the ecological condition of the settlement zone. Table 2.10 indicates that 73.1 % of the settlers hold that their current location has good ecological conditions. 24.3 % of the settlers hold that the ecological condition of their settlement is barely acceptable. Only 2.3 % of the settlers hold that the ecological condition of their settlement is

**Table 2.10** Evaluation of the ecology in the destination regions

	Migrants in destination region (%)
Good	73.1
OK	24.3
Not good	2.3
Not sure	0.4
Total	100.0

Source Research group's 2012 sample survey

not good, because they still have to face sandstorms and land degradations such as soil desertification and salinization.

2.2.4 The Migrants’ Attitude Changes Significantly

In the past, the people were only concerned about economic development rather than environmental protection. With the deterioration of the ecological condition, the people living in the south of Ningxia gradually developed a strong sense of life crisis. Under the impact of the ecological migration project, this sense of crisis heightens the idea of environmental protection, which stimulates the migrants’ awareness of environmental protection while doing economic construction. As far as the attitude toward ecological conditions is concerned, the settlers and potential migrants all pay great attention to it. Because the potential migrants still live under poor ecological conditions, they pay even greater attention to them. The survey shows that 81.5 % of the potential migrants express their concern about ecological conditions, which is 6.6 % higher than the settlers (see Table 2.11).

In addition, the attitude toward birth also changes significantly. In the past, people were influenced by the ideas of “more children = more blessed” and “rearing children for the security of old age,” and did not control themselves in giving birth. Having three or four children in a family was commonplace. After the migration, with the rising economic status of women and the implementation of the government’s profit-oriented mechanism, most of the people answered the government’s call and gave birth to only two children or even less. Now, the ideas of “fewer birth, getting rich faster,” “better bearing, better rearing” are deeply rooted in the migrants’ heart. This greatly helps control the population in the settlement zone and relaxes the great tension between the people and the land.

2.2.5 More Harmonious Relationship Between Ethnic Groups

Migration has changed the dynamics of the former ethnic relationship. This relationship is reconstructed in the new settlements. In the source regions, most of the

Table 2.11 The attitudes toward ecology

	Potential migrants (%)	Migrants (%)
Attentive	81.5	74.9
Somewhat attentive	17.8	23.1
Not attentive	0.3	1.6
Not attentive at all	0.5	0.4
Total	100.0	100.0

Source Research group’s 2012 sample survey

villages are predominantly made up of Hui or Han people. Some villages are made up of purely Hui Muslims and Han Chinese. In their daily life and work, they do not mingle much. Mutual understanding is shallow. They may even create conflicts owing to different cultures and social customs. Migration changes the former patterns of living. Now, different ethnic groups from different regions blend in a village. Although the government considered ethnic differences in its settlement plan and placed them in the villages separately if it could, it did not deliberately influence normal exchange between Hui Muslim and the Han Chinese. In the process of building new migration villages and reducing poverty and improving living standards, Hui and Han migrants deepened their understanding and friendship. Every time Hari Raya and Maulid al-Nabi and other festivals were celebrated, Hui Muslims would send Niyyah—kind greetings to the neighboring Han Chinese villagers. When Han Chinese celebrated Spring Festival, they would invite Muslim friends to their dinner. As they interacted more and more often, they deepened their relationship and the tendency for ethnic integration became obvious.

From the migrants' attitude toward ethnic relationship, we see that 6.6 % of the settlers hold that after the migration, ethnic relationship is more harmonious. 73.8 % of the settlers hold that there is no difference in terms of ethnic relationship after the migration (see Table 2.12). In other words, the ethnic relationship was quite harmonious in their former place of residence and there is not much difference after the migration. Although 5.8 % of the settlers hold that the migration has brought negative impact on ethnic relationships, this percentage is lower than that holding the positive impact. In the process of migration and settlement some ethnic disputes are unavoidable. With long-term interaction, this negative impact will gradually disappear. Generally speaking, after the migration, the ethnic relationship tends to be more harmonious. This is especially true with intermarriage between Hui Muslims and Han Chinese. In the past, owing to ethnic and cultural differences, the traditional idea of no intermarriage between Hui and Han was deeply rooted. Now, since they move and settle in a more open and tolerant region, Hui and Han have closer relationships. Cases of intermarriage increase. Ultimately, harmonious ethnic relationships will prevail where "You are part of me and I am part of you. You cannot leave me and I cannot leave you."

**Table 2.12** Migration's impact on ethnic relations

Impact	Percentage of migrants in destination region (%)
Positive impact	6.6
No impact	73.8
Negative impact	5.8
Not sure	13.8
Total	100.0

*Source* Research group's 2012 sample survey

**2.2.6 Migrants’ Avenues Toward Increasing Their Standard of Living Are Greatly Expanded**

The main task of Ningxia’s regional government is to increase the settlers’ income. It encourages developing modern efficient agriculture, special breeding industry, and labor industry to solve the problem of development facing the settlers. Before the migration, 85.7 % of migrant families derived their main income from crop production, 10 % of the migrants derived their income from doing casual work. There was a very small percentage of people engaged in the breeding industry, that being only 1.5 % (see Table 2.13). As can be seen here, before the resettlement, the migrants basically relied on crop production for a living. As the mode of production was too uniform, once natural disasters struck, the migrants would run great risk of losing their income or see it fall. This would not only affect the chances of eliminating poverty and becoming more well-off, even worse, they might not be able to survive in the first place.

After the migration, the settlers’ main revenue still comes from crop production. The migrants in different settlements adapt to the local conditions and implement industrial operations, facility farming, and special agriculture. They shift the means of production from labor-intensive dry land agriculture to high efficiency water saving agriculture. There is also a shift from extensive cultivation to intensive farming. The production of special crops such as potatoes, yasha melons, dates, grapes, apple, traditional Chinese medicinal materials, and nursery stock has achieved very good economic returns. The source of family income has now diversified into crop production and doing casual work. Table 2.14 shows that 45.2 % of the migrants hold that the main source of income comes from doing casual work, next only to crop production (46.8 %). The settlers are also engaged in building, communication and transportation, trade, and service sectors as they live close to cities and gain access to key projects there. The settlers’ income sources now shift from agriculture to the second and tertiary industries, which are more stable than

**Table 2.13** The main sources of family income before the migration

Source	Percentage of migrants in the destination region (%)
Crop production	85.7
Breeding	1.5
Casual work	10.9
Business	0.3
Property renting	0.0
Government-related job income	1.0
Subsidy and relief	0.1
Other sources	0.5
Total	100.0

Source Research group’s 2012 sample survey

**Table 2.14** The main sources of family income after the migration

Source	Percentage of migrants in the destination region (%)
Crop production	46.8
Breeding	2.8
Casual work	45.2
Business	3.0
Property renting	0.0
Government-related jobs	1.2
Subsidy and relief	0.1
Others	0.9
Total	100.0

Source Research group's 2012 sample survey

the former. Income that comes from labor becomes a “pillar crop,” which ensures stable yields in all weather. It not only ensures basic standard of living for the settlers, but also serves as a main driver for the migrants to become wealthier.

### ***2.2.7 Assistance to the Disabled and Rapid Development of the Charitable Cause***

Ningxia Hui Autonomous Region is very active in incorporating the poor handicapped people into the social security system in order to ensure that the handicapped persons can enjoy a minimal level of life security, medical insurance, and old-age insurance. According to the principle of insurance based on classification, the family with a handicapped person as a member, who enjoys the minimum life insurance, can get a rise in assistance level. Severely handicapped persons can be partially exempted from the premium. This temporary relief plays an important role in ensuring a basic life for the poor handicapped people. In response to a large base of mentally retarded and psychiatric patients, an integration of medical rehabilitation and life assistance is introduced. Underway is the institution for rehabilitating and supporting the handicapped people in order to raise the service and security level of the handicapped.

Hongsipu District establishes one after another Charity Service (Rehabilitation) Center, the Center for the Care of the Handicapped (foster), and kindergarten in Juhuatai Village of Nanchuan *Xiang*. It fundamentally solves the problem of fostering the mentally retarded, psychiatric patients, and severely handicapped persons and their basic living. Besides “blood transfusion,” that is, direct economic relief, the government also assists the handicapped in finding jobs. The government provides job training sessions for those people with disabilities who are employable, and supports and encourages them to start sole proprietorships. Those who do business in this way are exempted from taxation or reduced in taxation.

They are given preference when they apply for a license. In this way their enthusiasm for business is aroused. In the meantime, the government encourages the establishment of charity companies, helping the handicapped find jobs there. With a population of 400,000 people with disabilities, it is a daunting task for the government to serve them well.

“Charitable Valley of the Yellow River” is a cluster of new types of charitable industrial zones built in the cities along the Yellow River and the southern mountainous region. It is a new mode of undertaking where charity resources are gathered and poverty reduction and support for the handicapped are explored. Through assimilating the mild handicapped persons into the companies, a win-win effect is gained for both charity and industry.

## **2.3 The Problems Existing in the Development of Ecological Migration**

Although Ningxia’s ecological migration has achieved a marked effect and played an enormous role in helping the migrants eliminate poverty, improve standards of living and ecological conditions, ecological migration is an arduous and complex social system. It cannot thoroughly solve the problem of poverty within a short time. In the process all kinds of problems inevitably arise. These problems involve society, politics, economy, and culture and pose a barrier to further development of ecological migration programs.

### ***2.3.1 Part of the Migration Plan Is Out of Joint with the Migrants’ Practical Needs***

The plan of migration is a long-term and comprehensive plan that is geared to the needs of the migrant in general. Ningxia migration involves extensive land and the source region’s conditions vary. The government migration plan may have considered the overall needs of the migrants, but neglected variations. This causes some plans to lack adaptability resulting in the failure to meet the practical needs of the migrants.

#### **1. Strong desire for inter-county migration**

From the volition of the migrants surveyed, nearly 70 % of interviewees are willing to comply with the government’s decision to migrate. Yet 30.9 % of the interviewees are not willing to move (see Table 9.26). The interviewees who are not willing to move are out of concern with the environment of the settlement. This is especially true with 28,400 households with a population of 121,000 who are placed in the same county under the central and southern regions migration plan during Ningxia’s “12th Five-year Plan.” Because the



natural condition of the settlement is mostly poor for the intra-county migration, the people are not enthusiastic about the move.

In terms of the choice of settlement region, 30 % of the interviewees are willing to move to the place arranged by the government. But 64.6 % of the interviewees insist on a precondition that the destination region must be superior to the source region (see Table 9.29). With the activation of inter-county migration and settlement, those villagers who were originally not willing to move, were impressed with the industrial setup and beautiful living environment and expressed their desire to make the inter-county migration. The structural difference between the scale of the intra-county migration and inter-county migration dictates that the government is not able to meet the needs of the people who wish to make the inter-county migration in a short time.

2. The housing space is very limited for settlers with “three generations living under one roof”

According to the ecological migration plan designed by the Autonomous Region for the period of “12th Five-year Plan,” the standard house for ecological migrants is 54 m<sup>2</sup> per household. The standard transitional house for labor migrants is 40 m<sup>2</sup>. As can be seen here, the house is allocated on the basis of household. Actually, as different households may have different heads, the tension may arise with more heads in a household as the house size remains the same for each household according to the standard. According to the house size expectation in the survey, 79.6 % of the potential migrants hope to get the house allocated based on their family size. 73.1 % of the migrants in the destination region have this expectation (see Table 9.37). As can be seen here, most of the migrants have concern over the space of the house. Among the potential migrants, 76.1 % hold that the average size of the house per person should be 20 m<sup>2</sup>, or larger. Among the settlers, 71.2 % hold the same view. Take three-member families as an example. If allocation is made on the basis of household, the ecological migrant will get only 18 m<sup>2</sup> per person. The labor migrants will get no more than 14 m<sup>2</sup> per person. The distance between this and the expectation of the migrant is rather great. Besides, according to the time defined in the residence registration, there are circumstances where “three generations of migrants live under one roof” or some married children live with their parents. In these cases, after the migration, the average house size would be 10 m<sup>2</sup> per person, which makes the house basically impossible to live in.

3. Restricting some groups of villagers from migration will affect the overall process of migration

According to the policy of Migration Bureau of the Autonomous Region, the following persons may not migrate: the person registered as a single household, couples over the age of 60 and new household members who registered as independent after December 31, 2009. In addition, those who are non-farmers but hold no permanent job and those widowers, widows, orphans, and childless couples may not migrate either. The group that falls into one of these categories

is found in every source region of migration. This group in some regions may make up a large percentage. If not dealt with properly, it will greatly affect the migration of the whole village or ecological restoration.

**2.3.2 The Settlers Are Slow in Earning Income, Which Affects Their Pace in Eliminating Poverty**

In order to help the settlers to earn their keep and to eliminate poverty and improve standards of living, Ningxia’s regional government issued several preferential policies to assist the settlers in their production. At this stage most of the settlers have earned their keep and are on the way to eliminating poverty or increasing their personal wealth. However, for reasons external or internal to them, part of the settlers make little progress in increasing their income, and they are still below the poverty line.

1. Low educational level hampers their productivity
- For migrants, educational level and productivity are positively correlated. The higher their educational level is, the better they can master farming technology. Since compulsory education was implemented, the education level of youngsters rose significantly. But generally, the migrants’ educational level is still low. It is much lower than that of the people in other regions. As far as the educational level of the migrants in the destination regions are concerned, the illiterate occupy 39 %. 62 % of the migrants receive primary school or lower education (see Table 2.15). The number of people receiving vocational trainings is even smaller. In our survey, we discover that over half of the settlers plunged into farming or other lines of business without vocational training. Therefore, it was difficult for them to make full use of the production material. This created a waste of resources and kept the migrants below the poverty line.

**Table 2.15** Educational levels of the migrants

Education Level	Percentage of migrants at the destination region (%)
Illiterate	39.0
Private tutorial/Literacy class/ not graduate from primary school	3.4
Primary school	26.8
Junior high	21.7
Vocational senior high	7.4
College or university	1.7
Graduate level	0.0
Others	0.0
Total	100.0

Source Research group’s 2012 sample survey

## 2. Slow development of industry causes the low ratio of input and output

Generally speaking, the land allocated to settlers is more fertile than the land in their original place of residence. But this does not mean that all the land in the settlement zones is necessarily fertile. In terms of the quality of land in the settlement zones, no more than 50 % of the settlers believe that their allotted land is fertile; 43.4 % of the settlers think that their land is of medium quality; 7.7 % of them even think that their land is sterile (see Table 6.11). The sterile land is an unarguable truth in the settlement zones. Flood irrigation and desertification impoverish the land and make nutrition content of the soil low. As the land is poor in providing nutrition, it takes a longer cycle to reform the land and add fertility to it. The cost is high, water usage is heavy, and the rate of utilization of the land is low. The soil improvement and the formation of the new economic growth point are not achieved in a day. It takes a fairly long time to achieve self-sufficiency for the settlers in the process from land arrangement, supporting facilities, regional layout, and enterprise move-in. By the time the soil is improved, the input and output ratio will have been low.

In addition, in terms of strengthening the government support for the development of industry, 58.2 % of the settlers hold that the government should develop special industry to a great extent. 64.7 % of the settlers believe that the government should greatly strengthen its support (see Table 9.47). The support comes in many facets such as capital, policy, and farming loans. These are in greatest need for the development of the migration industry. The economic base for the settlers is weak. The difficulty in migration transition is evident, and there is a shortage of migration funds and a lack of technical skills. In addition, follow-up industrial cultivation is difficult. The industrial facilities are not given full play. Though solar greenhouse, large and medium-sized arched sheds and stalls, and other industrial facilities are in place, they are not effectively used. The stalls for breeding have a high rate of vacancy.

### ***2.3.3 A Big Gap Exists Between the Training of Settlers and Actual Needs***

Technical training is an important means for the government to help the settlers to eliminate poverty and improve standards of living. The technical training can on the one hand increase the settlers' employability and on the other hand provide rich human resources for the industries and companies around the settlement zones. And it can thus promote the development of the regional economy. Though the government invests large human, material, and financial resources in technical training, there remains a large gap between technical training and actual needs.

The survey result indicates that the technical training does not relate well to the need for production. From the survey on the settlers in the destination region, 66.1 % of the settlers request guidance in technical knowledge and 67.7 % the settlers hope to have the guidance from the experts on the spot (see Table 9.50). This suggests two things. One is that the mode of training settlers needs to be more

varied. Second, is that the training in the knowledge of planting, breeding, and job skills are not practical enough in terms of relevance for the life and work of settlers.

#### ***2.3.4 There Is a Lack of Funding for Construction the Settlement Zones***

With the progress of the project construction in the migration settlement, the problem of the shortage of construction fund surfaces. The cost of the project increases and the project fund often does not come in place as planned. As the county (city, district)'s ability to raise funds are limited, the project progress is affected. Because the budget for the migrant house was low, during the construction, the building materials and workers' wage increased a great deal, the cost of the building infrastructure increased. The shortage of construction funds is significant.

#### ***2.3.5 Labor Migration Is a Slow Progress***

Labor migration is an employment contract signed with the county government, which sponsors the move-in, by which the government takes various supporting measures for labor migrants to find stable jobs and earn income. Currently, it is not clear where the workers are needed. It is difficult to make an effective match between labor migrants and the enterprises. The delay of the migrants in finding jobs further delays the migration process of labor migrants. The policy and practice of labor migration are not well connected. On one hand, a unified residence registration system for villagers and city residents is not yet established. There is a big gap between the villagers and city residents in welfare, which is difficult to bridge. On the other hand, the government in the migration destination does not provide a sound system in regard to migrants' employment, housing, education, and social security and relevant social management service. It takes too long to verify and transfer residence registration for labor migrants, so that they cannot enjoy in time the preferential policy such as social security in the destination region. Besides, the labor migrants are settled without providing them with land, that is, they are not allocated the land after the migration. They completely rely on their labor income to support their family. Now, being alienated from their land, these labor migrants change their role from a farmer, to a businessman, or a serviceman. Once they lose their jobs, they face the crisis of life. Faced with the settlement for "no land," as our survey shows, 40 % of all migrants not willing to move are labor migrants. Indeed, they are not enthusiastic about the move.

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