Introduction: Remote regions of western China and "ecological migration"

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Introduction

Within the context of the current tide of globalization (*quanqiuhua* in Chinese), China is intent on national integration through policies that emphasize political stability and economic growth. The country has achieved remarkable economic development under a system of "Chinesestyle socialism" that combines the principles of political one-party rule with free market economics. At the same time, China currently faces a number of problems, specifically environmental problems, such as the degradation of the natural environment caused by chronic population growth, economic problems such as those evidenced by the widening disparity in personal incomes between the "east" and the "west" of the country, and ethnic issues or national question (*minzu wenti*) associated with differences in tradition and culture, and related to subsistence patterns and lifestyles. Sustainable development in China thus depends on whether solutions can be found to these problems.

In considering the prospects of China's future development, it is impossible to ignore the agricultural development and migration issues of the country's past. Through the practice of agriculture, the area inhabited by Han Chinese has expanded to the extent that almost all of the river valleys, coastal areas and oases of China are inhabited by Han agricultural settlements today. These areas are either referred to as being "inland" or "east" and are considered to be "developed zones." The population growth of the Han brought about by agriculture has forced them to migrate outwards towards the so-called "remote regions" located at the peripheries of the developed zones. In these remote regions, the Han migrants cleared increasingly large areas of land for cultivation, even when the natural conditions were unsuitable for agriculture. It is thought that this practice is the principal cause of the environmental problems that have arisen in these

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remote regions. Even today, the majority of ethnic minorities inhabit the "west" and this region is currently the last frontier of negotiations between the state and ethnic groups. In an attempt to simultaneously solve the environmental, economic and ethnic problems in this region, the West Development Project was initiated.

Through this project, the Chinese government began to actively promote the development of transport and communications infrastructure and the cultivation of human resources in the west. The policy of "ecological migration" has been the focus of considerable attention, and it has become manifested as one of the most fundamental foundations of recent ecological conservation efforts in China. This policy is noteworthy because unlike earlier "one-dimensional" development policies, "ecological migration" reflects a certain amount of concern for ecosystems. However, based upon the premise of rehabilitating damaged ecosystems or preventing ecological degradation, the policy aims to restrict or transform, and in some cases to stop, traditional subsistence patterns and lifestyles in affected areas by persuading the inhabitants to migrate to other areas. This is the essence of "ecological migration".

A variety of problems have arisen due to the implementation of the "ecological migration" policy. Even if this policy were successful in promoting national integration, by forcing the diversity of subsistence patterns and lifestyles in a single direction by "homogenizing" them, it is doubtful whether the original goal of ecological conservation can be achieved. In order to resolve this doubt, it is therefore crucial to gain a comprehensive understanding of the actual state of ecological migration.

A nation of migrants and its remote regions

China, a nation of migrants

The Chinese term for "ecological migration" (shengtai yimin) literally refers to both the practice of migration conducted for the purpose of conserving the ecology and the people (migrants) who are subject to the various activities that accompany migration. So what does "ecology" (shengtai) mean in this context? Like many other modern Chinese words, it has been

borrowed from Japanese, or more correctly, it has been re-imported into Chinese from Japanese (*seitai*). As opposed to "ecology", the word "migration" is a familiar one in both Chinese and Japanese. When speaking of Chinese migration (*yimin*), overseas Chinese is likely to be the first connotation. However, in Chinese the term for "migration" is not necessarily restricted to an "overseas" context.

A notable academic text in the field of internal Chinese migration is, "History of Chinese Migration", which consists of six volumes (Ge 1997a, 1997b; Wu 1997a, 1997b; Cao 1997a, 1997b). In the book, the term "migration" was first used in Zhouli's, "The Rites of the Zhou Dynasty", which is considered to have been written in the late Zhanguo period more than 2,000 years ago. At that time, the term was not used as a noun, but as a verb in the context of compelling people affected by a food crisis in their homeland to relocate to places where food was more abundant as a special relief measure (Ge 1997a: 3). From the rise of the Qin Dynasty, the first centralized administration in China, down to the republic of today, migration has occurred in various forms within China. The migrations that have shaped the China of today have all been driven by a range of factors including the acquisition of territory, the distribution of ethnic groups, and the characteristics of the ecological environment. In this sense, China can truly be described as a "nation of migration".

The roots of China's proud millennia-long history lie in the valley of the Huanghe (Yellow River). Since the climatic conditions in the Huanghe Valley were more conducive to human subsistence and prosperity than the hot, humid Changjiang Valley or the country's cold, dry northern region, agriculture flourished there sustaining a large population around the first century BCE. As the population grew, landless peasants began to appear. For these people, the warm southern regions were more appealing than the cold north of the country. During the approximately 1,600-year period from the rise of the Qin Dynasty in 211 BCE to the collapse of the Yuan Dynasty in 1368, the main flow of migration was from the Huanghe Valley to the Changjiang Valley. Over this time, the ratio of the population in the south to that to the north (where the border between the north and south are defined by the Huai River and Mt. Qinling) rose dramatically; from 1:4 in the Early Period (early Han Dynasty) to 4:1 in the Later Period (Yuan Dynasty). Between the founding of the Ming Dynasty in 1368 until approximately 1850, not only the Huanghe Valley, but also almost all of the southern plains, including the Changjiang Valley, became

highly populated and the traditional form of plains agriculture was unable to support the increasing population. As a result, peasants began to leave the plains for the mountainous areas where they cleared new land for cultivation. This movement was accelerated in the 16th century by the introduction from the Americas of new crops such as sweet potatoes, corn, peanuts and potatoes that were suited to cultivation in mountainous areas. Associated with the increase in migration to the mountains from the early 18th century, the vast areas of virgin forest from Mt. Qinling to Mt. Nanling, between the Changjiang and the Zhujiang Valleys and from the Zhemin Hills to the Yungui Plateau, were harvested, the natural vegetation was removed, and almost all arable land was planted with corn and sweet potatoes. This attracted ever-greater numbers of migrants to the mountains in search of food or wealth and consequently, even in these mountainous areas, the population reached levels approaching the carrying capacity of the environment. Thus, in the period between the Taiping Rebellion in 1851 and 1950, large numbers of migrants migrated to the three northeastern provinces, Inner Mongolia, the northwestern provinces and Taiwan (Ge 1997a: 43-47, 66-67).

Remote regions as migrant destinations

These destinations of Chinese internal migration (Han migration) since the Ming and Qing Eras are essentially geographically equivalent to the migration events to the remote regions of modern China. This trend continued through the period of Kuomintang rule and has continued in the present era of the People's Republic of China (PRC). As a result of the influx of large numbers of Han migrants, these regions were gradually converted to agricultural use and "Hanized", and were subsequently transformed into territories that were inseparable from the rest of the nation. However, the practice of agriculture in areas unsuited to cultivation has lead to serious environmental problems such as soil degradation, desertification of grasslands, and the drying up of rivers.

The majority of advances in agriculture began in the Ming era, when Han migrants in Guizhou Province on the Yungui Plateau clashed violently with the indigenous ethnic peoples. In the 270-year Qing Period alone, the population of Han Chinese in Guizhou Province increased more than tenfold (Luo 1993). The influx of large numbers of Han Chinese

migrants to Yunnan also commenced in the Ming era (Xie 1996: 24), and even into the Qing Era, migration from Sichuan, Guizhou, Hunan and Quangdong Provinces showed no signs of abating. Between 1661 and 1749 the population of Yunnan increased by a factor of five (Cang 1998).

It was from the early Qing Era that Han migration to the region north of the Great Wall of China was at its highest. In the first half of the Qing Period, the Qing Dynasty officially prohibited Han migration to the homelands of the Manchurians (in the northeast) and the Mongolians, with whom the Manchurians had made alliances. However, in reality, migration from the interior still occurred. For example, the people who relocated to the northeast consisted primarily of migrants leaving the Shandong and Hebei Provinces in search of employment, and prisoners from all over the country. There was also migration of Han Chinese into southern Inner Mongolia, from Shanxi Province to the area of Tümed (Tumote), and from Hebei Province to the area of Chahar (Chahaer). As a form of recognition that Han migration had occurred, the Qing Dynasty replaced the banner system with a new local administrative structure for migrants within Inner Mongolia that was divided into prefecture (Fu), sub prefecture (Ting), department (Zhou) and county (Xian) levels, indicating that the settlement of Han migrants was encouraged. In the mid-18th century, after defeating the Oirad Mongols, the Qing Dynasty actively promoted migration to the northwestern region, in particular to Xinjiang. The Qing Dynasty exerted pressure on large numbers of peasants, mainly from Gansu, Shanxi and Sichuan Provinces, to migrate to Xinjiang. At the same time, the Qing changed its policy on prisoners by sending them to the northwest rather than to the northeast, which had been the destination of prisoners up until that time. Incentives to promote migration to Xinjiang were employed. For example, in addition to having their sentences reduced, prisoners serving their term in Xinjiang were permitted to be accompanied by their families and were assured that they would be considered mintun, as having the status of commoner, after their release As a consequence, more than half the population of Xinjiang in 1777 consisted of Han migrants and their descendants (Cao 1997b: 472-489; 493-495).

In the latter half of the Qing period, the law prohibiting migration to the northeast region was abolished and the number of migrants to that region increased suddenly as a result. Furthermore, due to the inequity of the Boxer Protocol Treaty, the Qing Dynasty was obliged to pay reparations amounting to 450 million *tael* to the foreign powers. In order to

assist with paying its share of the reparations, Shanxi Province sought permission from the Qing rulers to cultivate the grassland areas of Inner Mongolia, in Ulaanchab (Wulanchabu) and Ih Juu (Yikezhao) Leagues, and Chahar Banner. On receiving the official approval of the Qing rulers, Shanxi Province began to cultivate almost all of the grassland areas of western Inner Mongolia. Furthermore, according to records of the early Republic of China, referring to the then Outer Mongolia (now officially Mongolia), "the number of Han migrants has exceeded 100,000, of which 50,000 are agricultural migrants". The Mongol population for this area was 540,000 (Cao 1997b: 505).

Even after the formation of the Republic of China, land-clearing projects in the outer regions did not abate. Rather, they were conducted even more aggressively. In the late 1920s, the Kuomintang Government created three provinces in Inner Mongolia: Rehe, Chahar and Suiyuan. In addition to migrants from Shanxi and Hebei Provinces, many people came from Shandong and Henan Provinces. Thus, increasingly large areas of grasslands were cultivated. In 1931, in Suiyuan Province, "More than 180,000 chin (1 chin = 6.667 hectares) of wasteland was released... and in the 1930s the population of the province grew to 2.033 million". Also, in Chahar Province, due to the rapid increase in the number of Han Chinese migrants from Hebei Province and other places, "As of 1927, wasteland amounting to 66,000 chin have been put under cultivation, cultivated lands are connected together, villages are densely concentrated, urban development is progressing on an unprecedented scale, and more than half the total area of the province is settled by migrants" (Cao 1997b: 509-510). In the era of the Republic, Xinjiang also received a large number of Han migrants who had been affected by natural disasters in Gansu, Shanxi and Henan Provinces.

During the latter half of the Qing Dynasty the influx of migrants to the remote regions continued, and many migrants within the remote regions moved from the plains to the mountainous areas. Initially, migrants would colonize the plains where the natural conditions were more favorable, but as the population levels approached saturation, the migrants tended to advance into the mountainous areas. This process of advancement was basically autonomous. Since "the majority of migrants were poor peasants, landless or illiterate, with the rest made up of unemployed idlers", they did not do even the minimum required preparation or investment for migration (Ge 1997a: 68–69). The way in which these migrants, who

were seeking immediate success or gain, cleared land for cultivation was extremely ad hoc and exploitative of resources; "in the process of their land clearing, natural and land resources and the ecological environment were devastated" (Ge 1997a: 68-69). For example, before the area of Weichang (now in Weichang Manchu-Mongolian Autonomous County, in Heibei Province) on the southern Mongolian Plateau was cultivated, it abounded with trees, rivers and wild animals, and served as the hunting grounds of the imperial family. Soon after cultivation began at the end of the Qing period, the population increased rapidly. In 10 years, the total population grew by 82 percent, reaching 89,000 in 1917. By 1934, the area of land under cultivation had expanded to 1 million mu (1 mu = 0.67 hectares) and the natural environment was completely transformed. After large numbers of trees were harvested and vast areas of land were cleared for cultivation, desertification began, becoming increasingly severe with each passing day (Cao 1997b: 20; 503).

In the era of the PRC, the migration of Han Chinese to the remote regions was conducted in a planned and systematic manner to meet national construction needs and military requirements. Soon after the formation of the Republic, Mao Tse-Tung and the Communist Party Central Committee launched the slogan "Open up and protect the remote regions". Retired soldiers of the People's Liberation Army and young people from cities and villages throughout the country were relocated to remote regions such as Xinjiang, Inner Mongolia, Heilongjiang, Yunnan and Guangxi, to help construct over 2,000 state-run farms (Liu Bingfeng 2004). Particularly in Xinjiang, the state assumed control of the long-standing Tuntian system in which garrisoned troops or peasants opened up wasteland, grew cereals and organized an extensive, permanent land reclamation collective, known as the "Xinjiang Production and Construction Corps". It was reported that at the end of 1999, well after this movement had peaked, there were still 2.42 million people in the Xinjiang Production and Construction Corps (Gao 2001). In addition, refugees from all over China also moved to Inner Mongolia and Xinjiang due to natural disasters and other reasons, "increasing the population by a factor of four to five in 50 years: in Inner Mongolia from 4 million in 1930 to 12.39 million in 1964 and 19.27 million in 1982; in Xinjiang from 2.5 million in the 1930s to 7.27 million in 1964 and 13.08 million in 1982" (Huang 1987: 73). Even if the periods, routes, motivations of these migrations differed, the migrants invariably took up agriculture in the areas that they settled.

The population pressure and the expansion of agricultural area brought about by these migrations not only caused considerable changes in the subsistence patterns and lifestyles of the indigenous ethnic inhabitants, but also disturbed the balanced relationship that had long prevailed between humans and nature. Although different to the earlier reckless reclamation of the Han migrants, the basic policy promoted by the central government in the remote regions also favored agriculture and discriminated against livestock herding, which meant that the mentality of the migrants and the government had much in common. Some scholars, such as Liu Xuemin of the College of Resources Science & Technology, Beijing Normal University, contend that the current degraded state of the ecological environment in western China is a consequence of the national policies of the past. The following is the analysis of Liu Xuemin.

Starting in the 1950s, China implemented large-scale reclamation of grasslands on three occasions in which pastures were cleared to cultivate cereals. On the first occasion in the 1950s, during the period of the People's Commune, extensive grassland clearance was undertaken in an attempt to establish agriculture on a large scale. As a consequence, winter and spring grazing lands were reduced, and the soil suffered progressive desertification. On the second occasion in the 1960s and 1970s, during the period of the Great Cultural Revolution, grasslands were again recklessly cleared, on the basis of misguided slogans: "Herders must cultivate their own cereals" (mumin buchi quixinliang) and "Grazing areas must evolve into agricultural areas" (muqu xiang nongau guodu). The result was further deterioration of the ecological environment. Finally, in the years since the reform and opening up policy, large-scale cultivation was again undertaken in many grassland areas as part of local initiatives directed at producing short-term gain. Since this policy was implemented, initiatives such as the "Food Self-sufficiency Project (midaizi gongcheng)" and "Vegetable Self-sufficiency Project (cailanzi gongcheng)" were promoted, even in areas that were fundamentally unsuitable for the cultivation of agricultural crops and vegetables. As a result, the ecosystems were degraded further (Liu Xuemin 2002: 47).

Furthermore, in the early 1980s, soon after the introduction of the reform and opening up policy, a contract system that was being promoted in the eastern agricultural areas was rapidly adopted in the Inner Mongolia Autonomous Region. As part of this system, it was decided that domestic animals and grassland grazing rights would be distributed to individuals. Consequently, in grasslands that were originally undivided, a new method of grassland utilization (known as *caokulun*) was established in which the grazing land of each household was artificially divided by barbed wire fencing. In a short space of time this method was adopted in livestock

raising areas throughout the country. The concept of grazing animals in a fixed place is referred to as "settlement farming". As a result of this style of grazing becoming accepted practice, the traditional grazing style in which herders moved from place to place to rest grazing lands (nomadic herding or nomadic grazing) was effectively eliminated. As a consequence, within 10 years desertification was clearly evident in various parts of Inner Mongolia and eventually storms of "yellow sand" carried the sand from these areas and deposited their loads as far away as the inland areas of eastern China, creating a serious environmental problem. In this way, a chain reaction was initiated, beginning with land clearance by immigrants, which in turn led to the shrinking of the grazing lands and the adoption of settlement grazing with the concomitant discontinuation of the practice of nomadic herding. These events culminated in the desertification of grasslands and the degradation of ecosystems and resulted in the phenomenon of yellow sand. It can therefore be concluded that agricultural-style grazing, which was adopted in preference to traditional livestock raising, was one of the leading factors underlying the destruction of the ecological environment in the remote regions of China.

Environmental policy and ecological migration

Background to the emergence of ecological migration

It was the indigenous ethnic inhabitants of the remote regions, those traditionally engaged in raising livestock that bore the brunt of the negative legacy of this change in agricultural practice. Under the pretext of restoring and conserving degraded ecological environments, the Chinese government launched a campaign of "ecological migration", under which indigenous inhabitants were pressured to leave what little land they had left, and migrate elsewhere.

"Ecological migration" has been effectively practiced since the 1980s, long before the large-scale campaign was initiated. In one district in the southern mountains of the Ningxia Hui Autonomous Region, designated by the state as a "specially poor district", severe environmental degradation made it difficult for the inhabitants to subsist. Since 1982, under the

guidance of the national government, the inhabitants were encouraged to migrate from the region. This marked the beginning of the practice of "ecological migration" in China. The measure, adopted at Ningxia, was introduced in other "specially poor districts" from 1986. The efficacy and necessity of the policy of "ecological migration", which was originally aimed at the eradication of poverty, gradually became widely accepted by the people (Li Ning et al. 2003).

From the end of 2004 more than 50 scientific papers on the subject of "ecological migration" have been published, and many academic dissertations have also taken up "ecological migration" as a theme (Meng Linlin 2004; Hu Huazheng 2004). The term "ecological migration" was coined in a scientific paper in 1993 within the context of the migration associated Sanxia Dam. Although the paper does not necessarily define the term clearly, the concept of "ecologic migration" was proposed as a solution to the problems of a deteriorating ecological environment and increasing population pressure (Ren et al. 1993).

In the early years of its promotion, in addition to ecological conservation, the objectives of "ecological migration" included poverty eradication and the promotion of dam construction. It has only been since 2000 that the main focus of the policy has been that of ecological conservation and numerous reports on the policy have been presented to the public through newspaper articles under the title "ecological migration". Two examples are the migration from the Shennongjia Nature Reserve, established for the protection of rare wildlife (Zheng 2000), and the migration of herders from Alasha League in the Inner Mongolia Autonomous Region (Wulantuya 2000).

This was the exactly the same time that the West Development Project was initiated. One motivation for this project was the need to address the degradation of ecosystems. According to Du Ping, three factors directly contributed to the establishment of the West Development Project, namely the Asian financial crisis of 1997, the massive flooding of the Changjiang Valley in 1998, which resulted in more than 200 billion yuan of direct damage, and the storms of yellow sand in 1999 that caused severe damage over large areas of inland China (Du et al. 2004: 17).

In short, these ecological environmental problems inevitably became one of the main concerns of the West Development Project. The five pillars of the West Development Project policy mentioned in China's 10th five-year plan (2001–2005), released in March 2001, were: (1) Accelera-

tion of infrastructure construction; (2) Improvement and maintenance of ecological environments; (3) Coordination and rationalization of industrial structure; (4) Development of scientific technology and education; (5) Deepening of reforms and further opening up to the outside world. Of these priorities, the central government is stressing the importance of (1) and (2) and has assigned them as tasks deserving the highest priority (Onishi 2004: 48).

Ecological migration as policy

As described above, the central government was directly responsible for the ecological environmental problems. On December 14, 2002, Premier Zhu Rongji officially announced the "People's Republic of China State Council Decree (No. 367)". This law incorporated the "Cultivation discontinuation for forest (grassland) restoration ordinance" (this ordinance is designed to discontinue cultivation of affected land, in order to reforest it or develop it as grassland) (tuigeng huanlin(cao)). This ordinance explicitly mentions "ecological migration" in a number of places. For example, in Article 4 it states that, "cultivation discontinuation for forest restoration measures shall place priority on ecology... its implementation must be combined with ecological migration". Article 54 states that,

in the process of implementing cultivation discontinuation for forest restoration, the government shall encourage ecological migration, and provide assistance for the livelihood and productivity of farming households that participate in ecological migration (Zhonghua Renmin Gongheguo Guowuyuan 2002).

Following on from the "cultivation discontinuation for forest restoration" initiative for agricultural areas, a similar initiative – "grazing discontinuation for grassland restoration" (tuimu huancao) – was launched in 2003, which resulted in a stream of ecological migrants being relocated to livestock raising areas. "Grazing discontinuation for grassland restoration" means to relinquish the grazing of livestock in order to allow the grazing lands to be restored to natural grassland. According to a report by Wang Daming, this term was proposed as early as 2001 in the context of ecological conservation in livestock raising areas of Qinghai Province. A related proposal aiming to discontinue low-cost, low-efficiency, traditional livestock raising and to construct so-called "man-made grasslands," through

the substitution of inferior types of natural grazing with high-quality natural grazing in order to enhance the energy content and nutritional value of the fodder (Wang Daming et al. 2001). Subsequently, based on the experience of the "cultivation discontinuation for forest restoration" initiative, and also by accepting the proposal of the Chinese People's Political Consultative Conference that "grazing discontinuation for grassland restoration" should be implemented in livestock raising areas (Liu Zenglin 2002), the central government decided to extend this initiative to other areas, including eastern and northern Inner Mongolia, northern Xinjiang and eastern areas of the Qinghai-Tibetan Plateau, and also to supply livestock feed (National Development and Reform Commission et al. 2003). This development encouraged debate on proceeding with the creation of "manmade grasslands" (Abulizi 2003; Chen 2004).

The measures implemented under the name of "grazing discontinuation for grassland restoration" can basically be divided into three categories. These are the "banning of grazing" (completely prohibiting grazing for a fixed period of time), "suspension of grazing" (discontinuing grazing from the time of grass germination to the time of seed maturation) and "rotational grazing" (dividing grazing lands into several partitions, according to natural features and human judgment and to allow grazing by rotation in each partition) (Wang Xiangyang et al. 2003). The "grazing discontinuation for grassland restoration" project set a target of rehabilitating 1 billion mu of land, an area equivalent to 40 percent of all the degraded grazing land in China, within five years of its official commencement in 2003 ("Zhongguo Muye Tongxun" 2003). Thus, with the sharp rise in the number of "ecological migrants" generated by policies aiming at the conservation of ecological environments, such as "cultivation discontinuation for forest (grassland) restoration" and "grazing discontinuation for grassland restoration", "ecological migration" is attracting an increasing amount of attention.

Diversity of ecological migration

In considering ecological migration, it is not necessary to limit considerations of its objectives and efficacy to the conservation and restoration of the ecological environment – the aspects that have received close scrutiny since 2000.

This is because ecological migration is intertwined with a wide range of "non-ecological" elements. For example, numerous local government

bodies implement "ecological migration" exclusively in the context of poverty eradication (Dongribu 2000). Currently, other than in the previously mentioned "cultivation discontinuation for forest restoration ordinance," the word "ecological migration" rarely appears in related laws, such as the "Environment Protection Law," the "Forest Law," the "Sand Prevention Law" and the "Grasslands Law" (Standing Committee of the National People's Congress 1989, 1998, 2001, 2002). Furthermore, the term "ecological migration" has never been clearly defined by the government.

In light of this situation, researchers have made various proposals about how "ecological migration" should be defined and classified. For example, there is a popular trend to interpret "ecological migration" as a sociological phenomenon (Sang 2004; Wang Peixian 2000: 26). On the other hand, there are claims that the individual subjects of this sociological phenomenon - that is, the affected farmers and herders - should also be incorporated in the definition of ecological migration (Meng et al. 2004). Some scholars point out that the essence of ecological migration should be understood from the standpoints of both efficient cause and final cause. Here, efficient cause refers to the degeneration of the natural environment and excessive population growth, while final cause refers to conservation of ecological environments and improvement in the livelihood and productivity of all herders (Li Xiaochun et al. 2004: 35). It has been suggested that "ecological migration" can be classified into five categories on the basis of purpose: to protect the catchment areas of large rivers; to prevent sand storms; to prevent water disasters; to construct hydropower facilities; to solve poverty problems; and to protect rare wildlife and tourist sites (Pi 2004: 58-59).

While defining and classifying "ecological migration" may assist in the understanding of this phenomenon, at this point, it is perhaps more helpful to consider how "ecological migration" actually occurs in specific places and times rather than to extract common aspects from a range of cases. This makes it possible to analyze the conceptual background of "ecological migration" from a variety of angles instead of adopting a one-dimensional, rigid approach to the subject. In addition, this facilitates dynamic investigations into the effects of this phenomenon on local communities and the nation as a whole.

Western remote regions and ecological migration

The "heterogeneous" remote regions of the west

The areas targeted by the West Development Project launched in 2000, are principally in the geographical west of China: Chong Qing City, Sichuan, Guizhou and Yunnan Provinces, and the Tibet Autonomous Region (all in the southwest); Shanxi, Gansu and Qinghai Provinces, the Ningixia Hui Autonomous Region, and the Xinjiang Uighur Autonomous Region (all in the northwest). In addition to these 10 regions, the Inner Mongolia Autonomous Region and the Guangxi Zhuang Autonomous Region were also included, making a total of 12 regional self-governing bodies. Apart from all these, the Enxi Tujia and Miao Autonomous Prefectures in Hubei Province, the Xiangxi Tujia and Miao Autonomous Prefecture in Hunan Province, and the Yanbian Korean Autonomous Prefecture in Jilin Province, located in the far northeast of China, near the border with North Korea, also come under the umbrella of the West Development Project.

As is indicated in the list above, the term "west" in "West Development Project" does not literally mean the geographic region in the west of China. Rather, it refers to a number of features that distinguish the "west" from eastern China. That is, it refers to regions that are not politically centralized, have economies that are not agricultural, with cultures that do not use Chinese writing or language (*hanwen* or *hanyu*), or with inhabitants whose ethnicity is not Han. Therefore, since the east is considered to be the center of China, the "west" is regarded as "remote" and "heterogeneous".

From an exotic perspective, it might be desirable that the heterogeneity of the west is preserved. However, in terms of a nation, there are good reasons for not encouraging this heterogeneity. While the population of the heterogeneous western remote regions amounts to only 27.4 percent of the national population, the west occupies 71.4 percent of China's total land area. Most of China's ethnic minorities and energy resources are dispersed in the west. Furthermore, the west is viewed as the source of disasters, as typified by the yellow sand storms that have plagued the east; a commonly held belief is that such disasters are the result of the destruction of ecosystems brought about by the heterogeneous subsistence patterns

and lifestyles of the inhabitants of the western regions, particularly the ethnic minorities.

Thus, in order to protect the natural environment from destruction by these heterogeneous inhabitants, it is important to exercise control over them first. Many researchers perceive that ecological migration is the very basis for rehabilitating the ecosystems of the west. For example, one researcher claims that environmental problems exist because the subsistence patterns and lifestyles of the ethnic minority inhabitants of the "west" are backward (*luohou*), and that these people should therefore be reformed. The argument for this is as follows:

The vast majority of the western regions of our country, in which the ecological environment is degenerating, are areas of poverty and are inhabited by ethnic minorities. Their backward subsistence patterns and lifestyles, which they have used for a long period of time is one of the major causes of environmental degradation in the affected areas. To protect the ecological environment it is first necessary to reflect on the subsistence patterns and lifestyles of the people in these areas and then reform them... (Chi 2004: 14–15).

Many researchers share the same view; heterogeneous characteristics and ways are not merely different, but "backward". For example, one historian stresses the advanced state of agriculture of the Han Chinese and the necessity of promoting agricultural development and Han migration as contributing toward national integration as follows:

In the era before modern industry was developed, agriculture was undoubtedly the most advanced and most reliable industry. Agriculture is highly significant in the flourishing of an ethnic population and their economic and cultural progress. For the Chinese nation (*zhonghua minzu*), agriculture is a common material foundation, and at the same time, the source of the tremendous cohesive force of the Han people (Ge 1997a: 96).

These researchers who consider ethnic minorities heterogeneous and "backward" and Han Chinese as "universal" and "advanced" share a common belief in social evolutionism. This philosophy would claim that in regard to subsistence patterns, agriculture is more advanced than raising livestock; in living patterns, a fixed residence is more advanced than a mobile tent; and in living environments, urban is more advanced than rural. It also assumes that less developed areas (west) inevitably evolve towards being more advanced (east). This idea has been raised by many researchers, including Chinese scholars based overseas. As an example, a paper by Wang

Ke contains the following phrases: "Rich east and poor west", "Advanced east and backward west" and "The supporting east and the supported west". This way of thinking is clearly present in the West Development Project too, and it is accepted as axiomatic that the east is the homeland of the Han Chinese. In the Law of the People's Republic of China on Regional National Autonomy, revised in 2001, the subject of autonomy was modified from "ethnic group" (minzu) to "area" (diqu) i.e. an ethnic autonomous region. This revision clearly exposes the Chinese government's belief that ethnic minorities should study Chinese and become assimilated with the mainstream culture of the country. Through economic integration, the West Development Project is undoubtedly implementing a form of national integration that is aiming to change the cultural and ethnic consciousness of the western ethnic minorities (Wang Ke 2001: 57–58).

It is in the promotion of "national integration" that the ecological migration measures of the West Development Project are most effective. This is because, unlike the various slogans previously used to promote national integration, the term "ecological migration" has the ability to overpower all doubts and opposition - the connotations of common human welfare carried by the word "ecology" justifies this belief. People who lived by herding livestock are pressured to move as ecological migrants to small towns (Xiaochengzhen) constructed within their own areas or elsewhere. There, they are made to live in densely populated residential areas and to work in industry or in service jobs or other tertiary sector employment. This change in lifestyles and subsistence patterns reduces the dependency of people on the ecological environment and thus to promoting ecological conservation (Wang Peixian 2000; Liu Xuemin et al. 2002). This is the scenario painted by the ecological migration policy. Ecological conservation is realized through the complete eradication of the "heterogeneous presence". The process of "ecological migration" can be seen as a series of processes directed at the elimination of this "heterogeneity". Whether or not it actually results in ecological conservation is uncertain and the effectiveness of "ecological migration" as an ecological instrument awaits further verification.

The "homogenizing" effect of ecological migration

Almost all the researchers currently studying "ecological migration" in China today tend to approve of the policy, advocate its necessity, and consider how it can be successfully implemented. While there is virtually unanimous approval for the policy overall, there are some differences in opinion regarding the details of the policy. These views can be broadly categorized into two schools, the "enthusiastic school" and "cautious school".

The "enthusiastic school" considers that the active implementation of migration itself is the key to successfully solving environmental problems. There are, however, some differences of opinion about whether displaced people should migrate to other places within their region, or to other regions. Some argue that migration should be limited to the region originally inhabited by the affected people, that is, in the vicinity of the "migration origin". In this view, it is also necessary to promote urbanization and changes in the structure of industry by constructing small towns to accommodate the displaced migrants that have the five major infrastructural categories: roads, water supply, telecommunications, electricity and radio and television. Others argue that the migration destination should not be limited to neighboring areas of the migration origin, but rather that migration should be from "west" to "east". This view proposes the construction of new migrant villages and towns in two areas in good environmental condition: the northeast plains, and the plains along the mid to lower reaches of the Changjiang River. Migrants from the Loess Plateau would be relocated to the former area, while migrants from the Yungui Plateau would be relocated to the latter. The reasoning behind this is that since the "east" enjoys the effective benefits of environmental conservation measures such as "cultivation discontinuation for forest (grassland) restoration" it has a duty to accept ecological migrants from the "west" (Fang 2001: 40; Fan et al. 2003: 36). Accordingly, it has been proposed that the national government draft an "ecological migration law" and clearly legislate the east's obligation to accept ecological migrants (Xu Suhuan 2003).

In contrast, the argument of the "cautious school" is based on the experience of Alasha League in the Inner Mongolian Autonomous Region and maintains that the positive effects of "ecological migration" projects are limited to the migration origin, and even then only for the short-term and to a limited extent. At the same time, there also negative effects, such

as new environmental problems like soil alkalization, caused by excessive groundwater consumption in migrant destination areas and a sharp increase in birth rates. Thus, the basic position of the "cautious school" is that, since ecological migration may have a net negative effect on the ecosystem as a whole, it should be used not as a strategic policy, but only as a supplementary measure (Xu Honggang 2001: 25).

The "enthusiastic school" and the "cautious school" have one element in common; both have restricted their analyses to the technical aspects of the phenomenon of "ecological migration". On that basis alone, they then evaluate the present situation and try to forecast future developments. They unilaterally try to determine how "ecological migration" should best be implemented and have little or no regard for the people that will be subjected to the policy. They believe that the reason why many ethnic minority inhabitants of the west have become ecological migrants — leaving their living environments and being forced to abandon their traditional culture — is that their culture, as represented by their subsistence patterns and lifestyles, is backward. This conclusion is supported by the fact that, while the numerous slogans advocating respect for the traditional culture of the ethnic minority groups, have not yet completely disappeared, they seem to have been replaced by the new buzzword "ecological migration" and are now almost never heard.

Perhaps being conscious of this situation, a few ethnic minority researchers have raised the issue of the rights and interests of the ethnic minorities within the context of "ecological migration". One such right is the right to preserve their traditional culture, which is guaranteed by law (Wuligeng 2003). Some researchers have gone a step further, by pointing out that positioning the "ecological migration" policy within the framework of regional economics is not scientifically rational, and also that the lack of reflection on the policy by the regional leaders that are implementing it has caused a reduction in the income of livestock herders. In this way, these scholars are sounding an alarm and are warning that such economic problems, if left unaddressed, may develop into ethnic problems (Gegengaowa et al. 2003: 120).

In the context of the relationship between ecological migration and ethnic culture, and based on the experience of the Inner Mongolia Autonomous Region, Gegengaowa et al. (2003) claim that the idea that raising livestock and that the cultures of ethnic minorities are equated with backwardness and should be altered or abandoned is a dangerous one. At

the same time, they raise questions regarding the ethical responsibility of researchers, as the quote below shows.

The community of theoretical researchers in Inner Mongolia has an honorable tradition of defending the legitimate policies of parties and governments. Due to this, the Inner Mongolia Autonomous Region has been historically recognized as a model autonomous region. Still today, it is a model of national unity/amity between nationalities (minzu tuanjie) and social stability. However, these researchers, who are viewed as "yes men" by the herders, do not think about issues from the standpoint of the herders. In fact, they pander so much to authorities that their words risk steering government policy relating to livestock raising areas in the wrong direction (Gegengaowa et al. 2003: 120–121).

Certainly, the Inner Mongolia Autonomous Region, which was created in 1947, prior to the establishment of the PRC, has been regarded as a model of national integration in the process of China's efforts to unify various nationalities (or ethnic groups) into a single nation. Similarly, in the current process of national integration, Inner Mongolia is expected to serve as a model of unification in ethnic minority areas, and in Inner Mongolia Autonomous Region government is attempting to fulfill this role. For example, by 2000 the Inner Mongolia Autonomous Region had already implemented the "grazing discontinuation for grassland restoration" project in Alasha League in the west of the region. At this time, the regional government pressured more than 2,000 herders, accompanied by 150,000 head of livestock, to leave the Helan Mountains as ecological migrants (Liu Jun 2000). Also, within the entire region of Inner Mongolia, the government has actively implemented "cultivation discontinuation for forest (grassland) restoration" and "grazing discontinuation for grassland restoration". The "grazing discontinuation for grassland restoration" project, officially launched in 2003, was implemented in 65 banners and counties under the jurisdiction of 12 leagues and cities - practically the entire area of Inner Mongolia (Xu Feng 2003). The project was actively pursued in 33 livestock raising banners and in 21 half-agricultural, half-livestock raising banners and counties. The total scale of "grazing discontinuation for grassland restoration" in these areas will amount to 600 million mu. In the first implementation period, from 2002 to 2010, 450,000 mu is expected to be restored, with a further 150,000 mu restored in the second implementation period, from 2011 to 2015 ("Dongwu Kezue yu Dongwu Yixue" 2003). Furthermore, the government of the Inner Mongolia Autonomous Region announced a plan to implement ecological

migration of 650,000 people within a six-year period from 2002 (Yin Yue et al. 2002).

There has been growing concern in China in recent years about environmental degradation in the Inner Mongolian grasslands, which are the closest grassland areas to the heart of eastern China - the areas around Beijing, Tianjin and other areas in the North China Plain. Consequently, Chinese society as a whole has been paying close attention to the issue of ecological migration in Inner Mongolia. As of the end of 2004, the term "ecological migration" appeared in the title of more than 50 newspaper articles, with more than 20 percent of these articles concerned with "ecological migration" measures in the Inner Mongolia Autonomous Region. Addressed to the people of the "east", as if to ease their anxieties, these articles emphasize how the "backward" livestock raising methods practiced in the west had been abandoned and how herders had been resettled in cities, describing these measures as "success stories". The reduction and disappearance of the heterogeneous practice of livestock raising and herders from Inner Mongolia signifies conformity to the standards of the "east", or more accurately, "homogenization". In this sense, Inner Mongolia could be seen as a new model for the process of homogenization of the heterogeneous "west".

The potential of "heterogeneous" practices

Conversely, there is a view that even if the storms of yellow sand that plagued Beijing and other areas on the North China Plain do originate in Inner Mongolia, this natural phenomenon is not produced by nomadic culture, but rather by the cruel elimination of agrarian culture. Based on historical records of migration into Inner Mongolia, the organization Hanhaisha (an NGO that works to protect ecological environments and ethnic traditional culture in desertified areas of China) argues that the peasants who migrated into the region were not capable of clearing land properly. As their population expanded, the space available to nomadic herders came under pressure, eventually leaving them unable to sustain a livelihood. This is the underlying reason for the growing severity of the yellow sand storms. In this sense, Hanization equals desertification, and settlement culture equals disaster. Nomadic herding, in fact, can reduce the stress on grasslands, and contribute to the conservation of ecological systems. In the nomadic culture of traditional herding, the most precious

resources are water and grass, followed by livestock. This ecoculture harmonizes humans and nature as one and thus represents an elevated state to which human beings should aspire (Hanhaisha 2004).

When we think about environmental problems such as yellow sand storms, we almost never consider them as being related to human culture, but rather as if they were completely separate and independent phenomena. However, as Hanhaisha claims, this perception does not reflect reality – the yellow sand storms may be the penalty incurred for the extinction of nomadic herding culture. The essence of environmental problems is cultural; environment and culture are really two sides of the same coin.

As I have already briefly mentioned in the first half of this chapter, migrants who relocated from inland China to remote regions cleared land for cultivation and, in doing so, damaged the entire ecological environment in the areas in which they settled; a fact that has been acknowledged by many researchers If this is the case, efforts should have been made to conserve the "ecology" of the region by reviving the traditional subsistence patterns of the indigenous people who had become displaced. However, the current "ecological migration" measures that aim to protect the "ecological environment" have the opposite effect. Consequently, when thinking about "ecological migration" as an ecological issue, it is important to consider who is making an issue of "ecology", and on what grounds. Most importantly, there is no such thing as a completely independent "ecology" that can be protected, one that is free from all human interference. "Ecology" includes people's views of nature and their subsistence patterns. In this sense, rather than being an objective matter, "ecology" is an extremely subjective and cultural issue.

Cultural diversity is an integral part of the richness of human experience, and it is also a pivotal factor in the relationship of humans to nature. If a people of culture "A" fail to maintain a harmonious relationship with nature, the example of a people from culture "B" who have maintained harmony may help the former people reconnect with nature. Having options, such as A and B, is essential to maintaining a constant harmony with nature in the face of change. Respect for the various ways in that people have developed different cultures under different natural conditions enhances prospect of the continued survival of humanity. Given China's wealth of ethnic diversity, in this age of environmental conservation it will be expected to increase this kind of cultural contribution to the world.

China's current leadership is currently publicizing a slogan, "People oriented" (yiren weiben), reflecting its desire to pursue not only economic growth, but also the sustainable and balanced development of the entire society. The slogan means "people first" and "giving priority to people". It goes without saying that people are not merely abstract entities as they always exist under specific cultural conditions. If "people first" and "giving priority to people" means "giving importance to culture," then it should not be just one's own culture that is valued and the cultures of others must also be respected. In China, the slogan, "people first" is directed primarily at scientific development, with an emphasis also on the development of "harmony between humans and nature". Back in the era of slogans such as "political ideology first" and "economic development first", the diverse cultures of ethnic minorities and the diverse subsistence patterns that formed the foundations of those cultures were marginalized and objectified through the ideas of social evolutionism or rationalism. Now, in the era of "people first", the significance of this diversity should be reconfirmed as a model of "the harmony between humans and nature".

About the composition of this book

Over the next 10 years, there are expected to be 10 million ecological migrants in China (Pi 2004: 60). Although this is just one strategy for conserving the environment, if the scale and the features of the target areas are considered, there is no doubt that this initiative will have major effects on China's future. Research into ecological migration will be increasingly required in the years ahead. To build a solid foundation for such full-scale research, it is essential to commence by ascertaining the current situation.

This book, which aims to review the current reality, is composed of three parts. The areas discussed in this book are the Inner Mongolia Autonomous Region, Gansu Province, the Xinjiang Uighur Autonomous Region and Guizhou Province. The contents of all chapters are based on data acquired from field works.

Part 1, "Questioning ecological aspects: Can 'ecological migration' achieve environmental conservation?" mainly examines the "environmen-

tal" aspects of the policy. It poses the essential question of whether the policy, aimed at environmental conservation, really achieves this aim.

Part 2, "Questioning economic aspects: Can 'ecological migration' achieve poverty reduction?" mainly discusses arguments that are centered on "economic" aspects of the policy. By looking at how the income and spending of migrants changed with relocation, the economic effects of ecological migration measures are evaluated. Since ecological migration is also promoted as a means to achieve "poverty relief" and "poverty reduction," this part considers whether it really achieves these goals.

Part 3, "Questioning cultural aspects: What kind of transformation does 'ecological migration' effect?" changes the focus to the "cultural" aspects of "ecological migration" and poses wide-ranging questions regarding the policy.

As described above, this book clarifies various problems associated with the implementation of the policy of "ecological migration", in terms of the three aspects of environment, economics and culture. This book has been produced with the desire to contribute to making the noble objective of environmental conservation more achievable. It should be noted that ecological migration as discussed in this book deals only with contemporary environmental policy in China. For this reason, the term "ecological migration" has been enclosed in quotation marks in the main body of the text, especially in chapter titles and when it appears for the first time in each chapter. Also, when presenting readings of proper names in languages of ethnic minorities in China, the editors of the book shared a common recognition that, as far as possible, such names should be rendered directly as pronounced in the original language, without using Chinese characters. According to this convention, in this book, "Ejina" and "Yugu" are written as "Ejene" and "Yogor", respectively.

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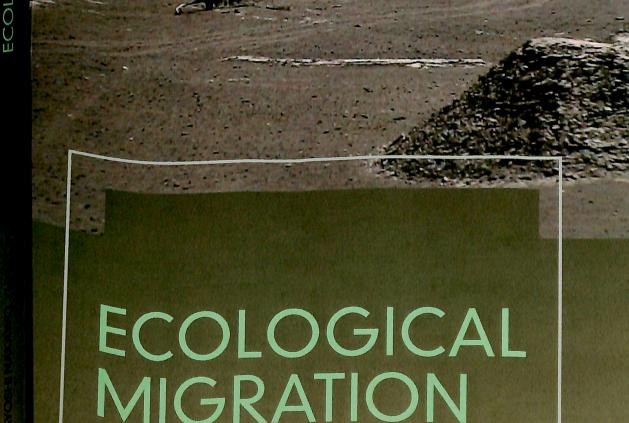
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ENVIRONMENTAL POLICY IN CHINA

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In the context of the current wave of global environmental concern, this book considers measures aimed at solving environmental problems, investigating the example of ecological migration.

The term "ecological migration" refers to the organized migration of people engaged in occupations that cause ecological destruction, aimed at rehabilitating and conserving the affected areas. In the vast arid and semi-arid regions that constitute the steppes of Inner Mongolia, grassland vegetation is in imminent danger due to overgrazing. Therefore, the herders are made to migrate to other areas in order to ensure regeneration of the affected grasslands. This book's contributions are guided by questions such as: What has been the result of the strategy of ecological migration? Have the grasslands successfully been conserved? And can the desertification of Inner Mongolia be prevented?

The essays collected in this volume originate from a workshop on ecological migration held in Beijing, China, in 2004, and were published in Japanese and Chinese, both in 2005. They have been adopted as a textbook in university classes in Japan and China, and were updated and translated for the English publication.

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