

Environmental Resettlement Policies in a Multi-Religious and Multi-Ethnic Context: The case of Inner Mongolia and Ningxia (China)

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In China, one priority of public policy is the ostensible equality among ethnic groups, a principle which is reflected in the various forms of regional and local autonomy of areas with high concentrations of minorities. However, it appears that this principle is not fully respected by state institutions during the design and implementation of environmental migration and population resettlement projects in minority areas. Based on field surveys conducted in two migrant communities of Inner Mongolia and Ningxia, we examine how the inclusion (or lack thereof) of the cultural factors of migrant populations is likely to influence the results of environmental migration projects. We find that including cultural and religious factors of migrants in the design phase of the resettlement project can promote successful integration of migrants. Thus, resettlement authorities should adopt an approach focusing on the needs of the migrant community, which is often essential for the success of the resettlement project itself.

Keywords: *environmental migration, China, ethnic minorities, Inner Mongolia, Ningxia*

Introduction

This article focuses on environmental migration as a public policy. In other words, it examines projects initiated by a central government and implemented by regional or local institutions, aimed at mitigating the environmental and social issues related to environmental degradation by relocating some or all members of a vulnerable community to an area capable of supporting sustainable livelihoods (Bao, 2006). These forced resettlements may be inherently disruptive for the target migrant communities, affecting not only their material and economic situation, but also their cultural, religious and social capital.

We argue in this article that the objectives of such environmental resettlements—namely, increasing the physical and social well-being of migrants—can hardly be accomplished if local authorities refuse to take into account the cultural specificities of the minority communities (Chandler & Lalonde, 1998; 2008). However, previous investigations focused on environmental resettlements in the minority autonomous regions of China have largely ignored these issues, preferring to concentrate on concrete results in terms of material gains

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and losses by comparing the pre- and post-migration situation of households and individuals (Tan, Zuo & Hugo, 2013; Zheng, Pan & Zhang, 2013). In this paper, we explore the potential of cultural, ethnic and religious aspects in determining outcomes of environmental migration projects.

This is especially true in China, where the majority of these projects involve western provinces, a region facing serious problems of soil erosion and desertification (Liu & Wang, 2001) and largely populated by ethnic minorities. In theory, environmental migration projects must fully take into account the cultural specificities of the target populations in their design and implementation. In doing so, the projects can enforce and protect equality among ethnic groups, a principle which is embodied in the regional autonomy of areas with a high concentration of ethnic minorities. However, previous research on migration projects in minority areas suggest that these cultural specificities are not fully respected, whether it is on the Tibetan Plateau, in Xinjiang or in Inner Mongolia (Banks, Richard, Ping & Zhaoli, 2003; Foggin & Torrance-Foggin, 2011; Liao, Morreale, Kassam, Sullivan & Fei, 2014).

Empirical research clearly demonstrates that addressing cultural characteristics of migrant populations and communities that host migrants is a critical factor for a successful transition. Indeed, ethnographic studies show that responses to environmental degradation may vary according to the ethnicity of the population concerned. Ethnic solidarity networks can, for example, reduce or increase the mobility of different groups (Fishman, Jain & Kishore, 2013). Ethnicity also plays a role in the choice of destinations, because the politicization of ethnic relations may limit or influence migration options (Morrissey, 2008).

Cultural aspects are just as important – if not more important – in migration projects initiated by public authorities. In some cases, failure to take these aspects into account can feed the suspicion that these projects attempt to change the demographic balance of a given region (Chelidze, 2013; Trier & Turashvili, 2007) or give the impression that certain ethnic groups are favored for obtaining public resources (Wheatley, 2006). This was the case in Georgia, where the ethnicity of migrants created significant difficulties in the implementation of migration projects. These difficulties, as noted by Lyle (2012) and Trier & Turashvili (2007), resulted primarily from the "lack of policies" on the part of state institutions, namely the lack of involvement of both migrants and local population in the planning and implementation phases, and the lack of transparency of agencies responsible for migration. Similar phenomena can be seen in other countries that have implemented programs of eco-migration, where the failure to account for the cultural specificities of migrants and host communities is often identified as one of the main sources of failure of these projects (Tirtosudarmo, 2001).

But in China, cultural factors in determining the success or failure of environmental resettlement projects remains largely unexplored in the literature. Most scholars focus exclusively on economic criteria (Bao, 2006; Chen, 2007; Ma & Zhang, 2010; Shi, 2008; Wilmsen, Webber & Duan, 2011) or evaluate post-migration conditions of migrant communities on factors such as the endowment of physical resources, sources of income, land compensation (Duan & McDonald, 2004; Liu & Wang, 2001; Liu, Yue, Ju, Wang & Li, 2005; Tan, Zuo & Hugo, 2013; Tang, Yang, Zhang & Xiang, 2012).

Typically, research in China, even when focusing on projects taking place inside minority autonomous regions, adopts similar analytical approaches with a strong emphasis on economic aspects of migration. Very few studies fully consider the relationship between the degree in which public authorities take into account the specificities of ethnic minority migrants and the integration of such migrants. Yet, in China, perhaps more than elsewhere,

projects aimed at resettling or urbanizing minority populations are inherently ethnicized, because success and failure of these projects—that is to say, the economic, social and institutional integration of migrants—are ultimately conditioned by the relationship between the ultra-majority Han community and minority migrants (Dickinson & Webber, 2007).

Thus, a major challenge for research in this field is to understand how the relation between ethnic minority migrants and institutions can promote or hinder integration and influence the risks to which migrants are exposed. This article aims to fill this gap by examining the policies of environmental migration in a multi-religious and multi-ethnic context. Based on extensive field surveys carried out in 2014 in two migrant communities of the Mongolian minority (Inner Mongolia) and of the Hui minority (Ningxia), we examine how the inclusion (or lack thereof) of cultural specificities of migrant populations by public institutions influences the outcomes of environmental migration projects. After presenting the contributions of the literature on the issues of environmental migration and inclusive governance, we present the results of our field survey. We conclude by examining what these experiences can teach us about the importance of inclusive governance with respect to cultural, religious and ethnic minorities for the adaptation of migrants, and what lessons can be learned for similar projects in China and abroad.

Data and Research Methodology

A variety of structural dysfunctions underpin the governance of migration projects. The nationality policy is only one revealing factor. These dysfunctions are related to a patent lack of inclusion. Public institutions responsible for designing, implementing and managing projects of environmental migration essentially act according to a unilateral and exclusive logic. In many cases, they refuse to integrate the demands and needs of local communities and migrants, whose lives are most severely impacted by these projects.

As made clear by the model of Cernea (1997), this institutional deficiency with respect to cultural factors is itself directly related to the vulnerability context of migrants. The unwillingness on the part of state institutions to give communities the means to secure their cultural continuity can have disastrous effects on post-migration well-being. Chandler and Lalonde (1998), based on their study of Aboriginal communities in Canada, showed that people whose identity is compromised by radical cultural changes can become likely to engage in behaviors that place their own physical and psychological well-being at risk. Therefore, we can identify a transition and resettlement program as “successful” based on Cernea's vulnerability context: If migrants are less vulnerable in their new habitat compared with their previous situation, then we can reasonably argue that their resettlement was positive. For this model to be relevant, we need to use a broad definition of the vulnerability context, including not only income-based indicators, but also indicators based on culture, religion, health and education.

In order to test our hypothesis—that in a multi-religious and multi-ethnic context, considering specific characteristics of ethnic minority migrants is an essential part of a successful environmental migration policy—we collected data in two migrant communities in northern China: the village of Luanjingtang, in Inner Mongolia, and the village of Jingling, in Ningxia. These two communities were selected because of their similarities, both in terms of their proposed resettlement (in both cases, organized and carried out by the local village government between 2010-2012) and of their pre-migration patterns (no significant

differences were found in terms of the level of poverty, unemployment rate, average years of education and average income between the two villages).

Since we did not have time or resources to access all migrant households, our sampling strategy centered on real-time systematic sampling, in which samples were taken according to a preset sampling frequency (i.e., visiting every third or fourth household in the migrant community). This way, we made sure that the frequency was unbiased, was set independently and did not in any obvious way match an underlying income- or activity-based structure in the migrant community.

Data were collected during field research in the winter of 2013 and the summer of 2014, using participatory methods, in accordance with the methodological suggestions of the International Organization for Migration (IOM) (2011). This participatory method consists in a multi-step methodology, based on interactions between interviewers and interviewees. During the first field trip, structured questionnaires were distributed in migrant communities, mainly to the head of the family, in order to gather quantitative data on the pre and post-migration economic and social situation, focused especially on the cultural and religious needs of migrants, the attitudes of local institutions and village officials regarding these needs, and the perceived influences of these cultural and religious aspects on their post-migration situation (vulnerability context)⁴. Respondents were given one week to complete the questionnaires, and field researchers contacted respondents to remind them of the deadline. During subsequent field trips, questionnaires were collected and seven group discussions were organized (in Chinese and Mongolian languages), involving several families in the same neighborhood/street, without the presence of local officials. At the same time, researchers conducted eight private interviews with village officials in both communities. Such techniques ensured a relatively high response rate (more than 70%) among migrants⁵.

As shown in the table below, 66 interviews were conducted in total ($N = 66$ respondents) and the authors had complete freedom of choice when selecting both sites and respondents. Additional data were provided by field research conducted by the Institute of Sociology of the Chinese Academy of Social Sciences, in cooperation with the Academy of Social Sciences in Ningxia and the University of North for Nationalities (Yinchuan).

Table 1: Data collection methods

	Jingling	Luanjingtian
No. of households surveyed	36	30
No. of group discussions	3	5
No. of interviews with officials	5	4

⁴ Evidence from the data collection field trips points to the fact that older women make up the overwhelming majority of non-literates in both villages. Although the questionnaire was designed to be self-administered, illiterate respondents without the help of literate household members were assisted by the field workers, in order to eliminate bias against non-literate respondents.

⁵ The 30% non-response rate is mainly due to two factors: villagers who refused to participate in the survey and villagers who were absent from the village during the data collection field trips, because they were either working in Yinchuan or in other Chinese cities. A comparison between the first and fourth quartiles of responses did not identify any significant difference in demographics and other key constructs, which may indicate the absence of non-response bias.

The Migrant Community of Luanjingtan (Inner Mongolia)

The Alashan league is an internal division located in the west end of the Autonomous Region of Inner Mongolia. It is bordered to the east by the Ningxia Hui Autonomous Region and to the southwest by Gansu Province, and it shares a border with the Republic of Mongolia to the north. It administers three banners (counties), with a total population of 223,900. The total area of the league is about 270,000 km², of which 30% (80,000 km²) is covered by three deserts (Badanjilin, Tengger and Ulanhube). The climate is arid, with large variations between seasonal and diurnal temperatures and precipitation being spatially and temporally variable, with peaks of more than 200 mm per year in the south to less than 40 mm in the northwest.

The Mongols are the largest ethnic minority of the league (22% of the population), while Han Chinese constitute the absolute majority (Alashan Left Banner Municipal Government, 2009). The Mongols were able to maintain some of their traditional farming practices up until the 1980s, when policies promoting agriculture and discouraging camel husbandry were enacted, bringing about a major change of pastoral practices. This transition to a sedentary lifestyle was accompanied by a marked deterioration of the environment, caused by population growth and a significant increase in livestock (Liu et al., 2005). Ninety percent of Alashan's land area of 270,000 km² can be categorized as "desertified" (State Council Development Research Center, 2013). This severe land degradation, coupled with a very dry climate and strong winds, resulted in severe soil erosion and is generally considered one of the main reasons for the increased frequency of sandstorms and dust storms observed in recent decades.

It is in this context of serious environmental degradation that the Alashan league became the first laboratory of environmental migration projects in Inner Mongolia in the 1990s. Our population of inquiry—the Luanjingtan migrant community—occupied a central place in these eco-migration plans. As of 2010, these programs have resettled a total of 7,652 families (27,079 people), which is about 36% of the total population of the pilot area of Luanjingtan; the ethnic Mongolian minority accounts for around 30% of local migrants. We examine how the inclusion of ethnic and religious factors of these Mongolian migrants influenced their economic integration by addressing issues of language and minority education.

First, our investigation in the migrant community of Luanjingtan shows that migrants of Mongolian ethnicity have raised specific concerns about their difficulty of adapting to agricultural-based lifestyle, partly because of their lack of expertise in this area. Respondents point out that the transition from animal husbandry to agriculture was not an easy task, indicating that they did not feel "at home" in agricultural production:

It's not like before. Particularly in the early months after we left the steppes, it was very difficult. I do not like the city, so my wife and I often went back to the countryside. [...] We were not in our element here, growing vegetables.

(Migrant, Luanjingtan)

But a more careful examination of the situation indicates that this negative experience may come not only from nostalgic feelings or from a so-called natural reluctance of the Mongols towards urbanization. Rather, it may be a reflection of a significant lack of transition assistance offered by local institutional programs. Indeed, agricultural training organized for migrants was available only in Mandarin, without translation or interpretation in Mongolian language. Interviews with local officials made it clear that it is assumed that all migrants

have a working knowledge of Chinese language, which is not the case. Village officials, therefore, see no need to provide specific Chinese language training to ethnic Mongolian migrants. In fact, according to migrant respondents, this linguistic barrier discouraged many migrants from participating in technical training activities. Many of the older migrants from rural areas are illiterate and have only a rough command of spoken Mandarin, typically preferring to communicate in Mongolian. It is understandable that communication problems, seemingly innocuous, can greatly hinder the ability of migrants to undertake agricultural activities and result in huge problems of integration – and significant loss of income.

Language problems go beyond agricultural training. The implicit domination of Han Chinese in the economic, institutional and entrepreneurial sectors of Luanjingtan highlights the imbalance between ethnic groups. Linguistic biases systematically favor Mandarin speakers in job selection, as well as in cultural networks that promote economic advancement. For example, job interviews for full-time jobs in the industrial and public sectors are conducted entirely in Mandarin, according to national standards. Many migrants have noted that this is a significant disadvantage for Mongolian migrants seeking to find extra income in factories, especially for those who have excellent technical skills but whose Chinese skills are poor or limited.

Our investigation reveals another problem experienced by ethnic Mongolian migrants in their new community: education. In Luanjingtan, migrants often noted a lack of attention to the preservation of minority culture and language, specifically in childhood education. Respondents said that, particularly in the initial phase of migration, nurseries, schools and colleges gave little thought to the linguistic needs of Mongolian children. Some respondents referred to this issue as the main reason for their strong resistance and even to their opposition to the proposed resettlement project, expressing concern that the proposed resettlement is ultimately aimed at assimilating Mongolian communities:

If [local authorities] do not give our children the means or even the choice to study the language and culture of our ancestors and of our people, then why should I participate? Why should I help them?

(Migrant, Luanjingtan)

Migration policies in Luanjingtan, being closely associated with the phenomena of marketization and urbanization, may be particularly harmful to the Mongolian culture and language. In order to integrate themselves in their new community, more and more migrants discover that they must adopt Mandarin instead of Mongolian (and not in addition to Mongolian). This language loss can have lasting and negative impacts on the cultural continuity of migrant communities. The apparent lack of preparedness on the parts of local institutions to accommodate the influx of minority populations was thus perceived by migrants as a form of hostility. This situation directly affected migrants' degree of participation and reinforced the distrust of some households towards public education offered in Luanjingtan. Despite local officials quoting figures of a 100% rate of school enrollment for children of migrant families, some respondents described a very different situation, where many families opted out of local schools and sent their kids back to the countryside.

The Migrant Community of Jingling (Ningxia)

The Hui Autonomous Region of Ningxia is a mountainous province in northwestern China and is one of the smallest provinces in China, both in terms of population (6.25 million) and area (66,000 km²). According to indicators of income and life expectancy, Ningxia is below the national average, and is also one of the least developed regions of China. At the heart of the Loess Plateau (altitude of ≈1050 meters), the ecology and environmental capacity of the region are among the most vulnerable in China. According to Liu and Wang (2001), the natural endowments of the province would ideally allow a density of 1.79 persons/km², while the current population density is 89.9 persons/km².

In order to reduce the population pressure on an already fragile environment, restore the deteriorating ecosystem and eradicate extreme poverty, the government of Ningxia was one of the first to implement an environmental migration policy in China (Merkle, 2003). For the past 30 years, it is estimated that the government of Ningxia resettled over 700,000 farmers from the extreme south of the region in an area called Xi-Hai-Gu⁶. Rural populations of these counties are particularly affected by droughts and water scarcity resulting from climate change and a sharp drop in rainfall since the 1960s (Tan & Liu, 2013). The most recent phase of this extensive program of resettlement is detailed in the Twelfth Five Year Plan (2011-2015) of Ningxia, which calls for the continuation of its environmental project by resettling around 350,000 farmers out of these remote mountain areas.

But these large-scale migratory projects have also led to a series of problems related to ethnic and religious issues unique to Ningxia, primarily related to the local Muslim minority. The south of the region has the highest concentration of Hui Muslims⁷ in China. Out of a total population of 1.5 million, about two-thirds are Hui (Song, 2000), and they also form the majority of the villagers affected by resettlement projects. The urbanization rate of Hui is similar to that of the Han majority, and they do not differ in terms of language and physical appearance (State Ethnic Affairs Committee, 2003). However, as Muslims, most Hui strictly follow Islamic dietary restrictions. Moreover, in most rural Hui communities, clothing is a strong marker of identity. Married women usually wear a sky-blue hat, sometimes a veil of Malaysian style, and men of a certain age wear a skullcap, usually white (Zang, 2007).

In socio-economic terms, it is generally recognized that the proportion of Hui households falling under the level of absolute poverty is higher than that of Han households, while other surveys suggest that income does not differ significantly between the two groups and that poverty rates are relatively similar (Gustafsson & Sai, 2014). In addition, Hui families have on average more children and Hui women are less active on the labor market than Han women. The average education level of Hui Chinese is also lower than that of Han Chinese, but that does not seem to have a significant influence on family income, as environmental degradation in the area indiscriminately affects all rural communities (Gustafsson & Sai, 2012).

⁶ This includes seven counties categorized as "poor" by the central government: Xiji, Haiyuan, Guyuan, Pengyang, Jingyuan, Longde and Tongxin.

⁷ The Hui are the largest Muslim minority in China, and the third most populous minority after Zhuang and Manchu. Historically, the Hui are a genuine national minority, in that they live in all provinces of China, even though they tend to cluster in Muslim neighborhoods, districts and streets.

For this study, the selected migrant community in this area is the village of Jingling, inhabited by 1,686 families (7,303 individuals), including 835 Hui Muslim families (3,879 individuals), or 53% of the migrants. These were displaced in four waves of migration between 2012 and 2013, from southern Ningxia to their new community of Jingling, located near Yinchuan, the regional capital. We will present the experiences of this community according to two specific issues of particular importance for migrants of the Hui minority: spatial planning and sectarian conflicts.

First, a critical aspect of the adaptation of Muslim migrants is their compliance with dietary laws according to their Islamic faith, including the prohibition to consume or to come into contact, even indirectly, with pigs and pork. In Jingling, in order to solve this problem, local authorities fully integrated these restrictions during the early phase of design of the migration project. Authorities laid out the new village in a way that Hui migrants could easily avoid coming into contact with prohibited animals and products. Indeed, authorities were careful to divide the village into two distinct areas (north and south Jingling), separated by a four-meter asphalt road, whereby segregating Hui and Han neighbors, which consume or sometimes raise pigs on their land.

Although this urban planning based on a religious division may seem restrictive and artificial, our discussions with migrants during the field visits showed that such religious segregation seemed to satisfy both communities. In the words of several Hui families, a clear distinction between the common areas (e.g., shops, city hall), and zones deemed to be Halal (i.e., the Hui neighborhood) is an essential protection of the rights of Muslim migrants. Moreover, in the words of the migrants themselves, such segregation actually corresponds to other rural ethnic communities in southern Ningxia, where Hui and Han only mix in major common areas (e.g., central squares, markets), while rural neighborhoods are quite clearly divided on an ethnic/religious basis.

A second aspect of the Hui migrant experience is the importance of Muslim places of worship and the conflicts which may emerge from sectarian competition. Indeed, following the anti-religious campaigns of the late 1950s and the large-scale destruction of the Cultural Revolution—both human and material—the Hui started to restore their Muslim heritage from the 1980s (Dillon, 2000). The speed with which they fully reclaimed their environment, including through the restoration of religious objects and buildings, is amazing considering that, in Ningxia, mosques that survived this troubled period can be counted on one hand, while destroyed religious sites amount to several thousand. Today, Ningxia has approximately 4,500 mosques, which is about one mosque for every 500 Hui individuals.

Our field survey also shows that this restoration of the Muslim physical heritage was quickly followed by a reaffirmation of identities linked to the various local Muslim sects. Indeed, the real possibilities of ethnic conflict in Ningxia are found not between Hui and Han communities, but much more between different Muslim sects inside the Hui migrant communities themselves⁸. This issue is probably one of the most critical in Ningxia, and is responsible for several brutal incidents throughout the history of the Hui in China.

⁸ Muslim sects, called *Menhuan*, are sectarian organizations of Islam in China. The main sects in Ningxia are *Gedimu* (old school), which is the ultra majority with about 80% of the Hui, followed by *Jahriyya* (14%), *Ikhwan* (5%) and various *Sufi* schools (1%).

Generally, in traditional Hui communities, a mosque can only be used by one sect. According to our data, 84.4% of Hui adult men only visit mosques belonging to their own sect, while 3.1% said they visit other mosques. If this is not a problem in southern Ningxia, where there are several mosques, this is nearly impossible in the cases of environmental migration villages. Migrants are often resettled long before mosques are built, and sometimes several years after resettlement, the number of mosques still do not match the number of Muslim sects in the said community.

This is the case of Jingling, where, at the time of our visit, no mosque was built yet. The village had six Muslim places of worship, each belonging to a particular Muslim sect, the construction of which was supported and paid for by members themselves without public assistance. The reason why the village did not yet have a mosque—nearly two years after the first wave of migration—is not that local authorities had not taken into account the religious specificities of migrants. To the contrary, the villagers themselves refused the project of local authorities to finance the construction of a common mosque, which could be used freely by all sects of the village on an equal basis. Hui villagers have thus preferred to settle for simple exclusive and private prayer rooms, rather than having to share a larger mosque with believers of rival sects.

Sectarian relations are thus a conflict-generating and potentially problematic factor in migrant communities in Ningxia, but our field survey shows that local authorities in Jingling played a positive role in mediating this factor. In order to defuse these conflicts before they even emerge, public institutions—including local village authorities in conjunction with regional public safety services—organize regular meetings between *imams* and religious leaders of different sects for dialogue based on mutual respect. Testimonies collected in Jingling indicate that, in the past, conflicts over the control of mosques or the monopoly of one sect over a community have led to violent clashes in the region, and are a major concern of both villagers and village leaders. These inter-sectarian meetings, and the fact that village leaders are working to solve sectarian differences by encouraging the sharing of a potential village mosque, is a clear sign of the positive and inclusive role of local authorities towards the religious needs of Hui migrants.

The Inclusion of Cultural Specificities: A Critical Element

Overall, these results strongly confirm our hypothesis that institutional inclusion towards the specific needs of ethnic minorities has a major influence on the integration of migrants. This is not to say that cultural factors override economic aspects. On the contrary, this research emphasizes the interdependence of minority policies and socio-economic integration of migrants. In Ningxia, local authorities integrated cultural aspects of Hui minorities in the design and implementation of resettlement projects. Regarding the physical layout of villages, the reconstruction of places of worship and the resolution of sectarian conflicts, public institutions and local village authorities have played a positive and proactive role.

The inclusive nature of public institutions in Jingling and the positive integration experiences of migrants are confirmed by data collected on-site: Compared to the relatively tense relations between Mongolian ethnic migrants and local authorities in Luanjingtan, 70.8% of migrants in Jingling say that inter-ethnic and inter-religious relations (i.e., between different Muslim sects) are harmonious, while 25% say that these relationships are normal. They are described as discordant by only 4.2% of migrants. Migrants also describe the relations

between Hui and Han villagers as positive and harmonious. According to our survey, 74% of migrants reported that they get along well with local residents, and 38.9% of migrants said that local residents are friendly and do not discriminate against them.

By contrast, evidence collected in the community of Luanjingtian makes no doubt about the exclusive nature of the migration project in this region. The views of Mongolian migrants were in no way integrated into the design and implementation process, and any alternatives to urbanization and forced displacement were rejected as hostile to economic development. Local respondents were absolutely clear in this regard: Mongolian communities did not have a significant voice in the modernization of their own communities. This lack of integration is ultimately perceived not as a mere incompetence or lack of inclusion of local institutions, but as a direct attack on the part of the majority institutions against the minority Mongolian culture. This, in turn, feeds grievances and suspicions among the local ethnic community, which – were a trigger event to occur – could have explosive consequences in the community of Luanjingtian.

Discussion and Alternatives

Overall, the relatively positive experience of environmental resettlement projects in Ningxia, including how cultural and religious factors of migrants were considered in the design and implementation phases, may serve as an example of a successful policy in this field. Accounting for cultural aspects may be one key way to promote the successful integration of migrants. An approach focusing on the needs of the migrant community is often essential for the success of the resettlement project itself. The inclusiveness of ethnic minorities can mobilize a sense of belonging and allow local voices be heard. IOM (2011), Tang et al. (2012) and Grushke (2012) all reach similar conclusions, noting that an increased participation of minority groups can raise the degree of adhesion and give migrants the opportunity to build on their traditional expertise.

It therefore seems more than necessary for research in the field of environmental migration to go beyond simplistic assessments in order to fully understand the complex role of institutions in resettlement policies. Such an approach may also require a critical look at the justification for such policies from the perspective of migrants. While political leaders and several Chinese scholars have little tolerance for critics of resettlement projects (Wang, Song & Hu, 2011), it is essential to keep in mind that other solutions – many far less risky and disruptive for local communities – are also available to restore the environment while developing local economies. However, these alternatives depend largely on the willingness of public institutions that must not only be aware of the existence of different models, but also have the will and the ability to adopt a flexible and participatory approach in the implementation of their policies.

References

- Alashan Left Banner Municipal Government (2009). *Alxa Right Banner Overview*. Retrieved from <http://www.als.gov.cn/main/>
- Banks, T., Richard, C., Ping, L. & Zhaoli, Y. (2003) Community-based grassland management in Western China rationale, pilot project experience, and policy implications. *Mountain Research and Development*, 23(2), 132-140.
[http://dx.doi.org/10.1659/0276-4741\(2003\)023\[0132:cgmiwc\]2.0.co;2](http://dx.doi.org/10.1659/0276-4741(2003)023[0132:cgmiwc]2.0.co;2)

- Bao, Z., (2006) The definition, category and some other issues about ecological migration. *Journal of The Central University For Nationalities*, (1), 27-39.
- Cernea, M. (1997) The risks and reconstruction model for resettling displaced populations. *World Development*, 25(10), 1569-1588. [http://dx.doi.org/10.1016/s0305-750x\(97\)00054-5](http://dx.doi.org/10.1016/s0305-750x(97)00054-5)
- Chandler, M. & Lalonde, C. (1998) Cultural continuity as a hedge against suicide in Canada's first nations, *Transcultural Psychiatry*, 35(2), 191-219. <http://dx.doi.org/10.1177/136346159803500202>
- Chandler, M. & Lalonde, C. (2008) Cultural continuity as a moderator of suicide risk among Canada's First Nations. In Kirmayer, L. and Valaskakis, G. (Eds.), *Healing traditions: The mental health of Aboriginal peoples in Canada* (pp. 221-248). Vancouver: University of British Columbia Press.
- Chelidze, N. (2013) *Asylum seekers, refugees and internally displaced persons (IDPs) in Georgia: The challenges of social cohesion*. Consortium for Applied Research on International Migration, CARIM-East Explanatory Note 13/130, 7.
- Chen, G. J. (2007) Strategic thoughts and suggestions of eco-migration in China. *Decision and Consulting Letter*, 5,1-4.
- Dickinson, D. & Webber, M. (2007). Environmental resettlement and development on the Steppes of Inner Mongolia, PRC. *Journal of Development Studies*, 43(3), 537-561. <http://dx.doi.org/10.1080/00220380701204513>
- Dillon, M. (2000). China's Islamic frontiers: Borders and identities. *IBRU Boundary and Security Bulletin*, 8.
- Duan, Y. & McDonald, B. (2004) *Involuntary resettlement as an opportunity for development: the application of 'resettlement with development' in the People's Republic of China* (Working Paper No.14). Melbourne: Melbourne University
- Fishman, R., Jain, M. & Kishore, A. (2013) *Groundwater depletion, adaptation and migration: Evidence from Gujarat, India* (Working Paper 41). International Growth Centre (IGC).
- Foggin, J. M. & Torrance-Foggin, M. E. (2011) How can social and environmental services be provided for mobile Tibetan herders? Collaborative examples from Qinghai Province, China. *Pastoralism: Research, Policy and Practice*, 1(1), 21. <http://dx.doi.org/10.1186/2041-7136-1-21>
- Grushke, A. (2012) Tibetan pastoralists in transition. Political change and state interventions in nomad societies. In Hermann Kreutzmann (Ed.), *Pastoral practices in high Asia. Agency of 'development' effected by modernisation, resettlement and transformation* (pp. 273-289). Dordrecht, Netherlands: Springer.
- Gustafsson, B. & Sai, D. (2012) Assessing ethnic disparities in income and poverty in China: The case of Han and Hui in Ningxia. Paper presented at the 32nd General Conference of The International Association for Research in Income and Wealth, Boston.
- Gustafsson, B. & Sai, D. (2014) Why is there no income gap between the Hui Muslim minority and the Han majority in rural Ningxia, China? (IZA Discussion Paper, No. 7970), Bonn, Germany.
- International Organization for Migration (2011). *IOM Project Handbook*. Switzerland: Geneva.
- Liao, C., Morreale, S., Kassam, K. A., Sullivan, P. & Fei, D. (2014) Following the green: Coupled pastoral migration and vegetation dynamics in the Altay and Tianshan Mountains of Xinjiang, China. *Applied Geography* (46), 61-70. <http://dx.doi.org/10.1016/j.apgeog.2013.10.010>
- Liu, J., Yue, T., Ju, H., Wang, Q. & Li, X. (2005) *Integrated ecosystem assessment of Western China*. Institute of Geographical Sciences and Natural Resources Research, CAS, Research Institute of Forest Resource Information Techniques, CAF, Information Center, SEPA.
- Liu, Y. H. & Wang, Q. (2001) Zhōngguó shìyí rén kǒu fēnbù yánjiū - cóng rén kǒu de xiāngduì fēnbù kàn gèshèng qū kě chíxù xìng [Suitable distribution of China's population]. *China Population, Resources and Environment*, 11(1), 34-37 (in Chinese).
- Lyle, J. (2012). *Resettlement of ecological migrants in Georgia: Recent developments and trends in policy, implementation, and perceptions* (Working paper No. 53). European Centre for Minority Issues (ECMI) Flensburg, Germany.
- Ma, J. & Zhang, T. (2010). Research on environmental migration in China—Illustrated by the case of the Dongxiang County in Linxia Hui Autonomous Prefecture in Gansu. *Journal of Gansu Normal Colleges*, 2.

- Merkle, R. (2003) Ningxia's third road to rural development: Resettlement schemes as a last means to poverty reduction?. *Journal of Peasant Studies*, 30(3-4), 160-191.
<http://dx.doi.org/10.1080/03066150412331311269>
- Morrissey, J. (2008) Rural-urban migration in Ethiopia. *Forced Migration Review: Climate Change and Displacement*, (31) 28-30.
- Shi, S. (2008) Living condition and social adaptation of Sanjiangyuan eco-migration: Taking case of eco-migration in Golmud city from Changjiang source. *Tibetan Studies*, 4, 93-102.
- Song, N. P. (2000) Strategies for the 'aid-the-poor' migration program in Ningxia autonomous region. *Human Geography*, 15(5), 47-51.
- State Council Development Research Center (2013). Èzhì sān dà shāmò "wòshǒu" kèbùróngguǎn [*It is Urgent to Control Desertification - Research Report of the Alxa League to Combat Desertification*]. Resources and Environmental Policy Institute, "Desertification Control" Research Group. Retrieved from <http://www.hbzyw.gov.cn/News.aspx?id=10911>
- State Ethnic Affairs Committee (2003). *China Ethnic Work Yearbook 2003*. Beijing: Ethnic Publishing House.
- Tan, Y. & Liu, X. (2013) *In-situ adaption and out-migration: Enablers and constraints among rural households of the mountainous region of Southern Ningxia, Northwest China*. Paper presented at XXVII IUSSP International Population Conference, Busan, Republic of Korea.
- Tan, Y., Zuo, A., Hugo, G. (2013) Environment-related resettlement in China: A case study of the Ganzi Tibetan Autonomous Prefecture of Sichuan Province. *Asian and Pacific Migration Journal*, 22(1), 77-107, <http://dx.doi.org/10.1177/011719681302200105>
- Tang, H., Yang, D., Zhang, X. & Xiang, X. (2012) Ecological migration effects on the Tianchi Scenic Area in Xinjiang: From the perspective of migrant farmer families. *Journal of Arid Land*, 4(1), 95-104. <http://dx.doi.org/10.3724/sp.j.1227.2012.00095>
- Tirtosudarmo, R. (2001) Demography and security: Transmigration policy in Indonesia. In M. Weiner and S. S. Russell (Eds.), *Demography and National Security* (pp. 199-227). New York: Berghahn Books.
- Trier, T. & Turashvili, M. (2007) Resettlement of ecologically displaced persons: Solution of a problem or creation of a new? Eco migration in Georgia 1981-2006. *ECMI Monograph*, 72.
- Wang, Z., Song, K. & Hu, L. (2011) Response to "Rethinking ecological migration and the value of cultural continuity." *AMBIO A Journal of the Human Environment*, 40(1), 100-101.
- Wheatley, J. (2006) *Defusing conflict in Tsalka district of Georgia: Migration, international intervention and the role of the state* (Working Paper 36). European Centre for Minority Issues (ECMI).
- Wilmsen, B., Webber, M. & Duan, Y. (2011). Involuntary rural resettlement: Resources, strategies, and outcomes at the Three Gorges Dam, China. *The Journal of Environment & Development*, 20(4), 355-380. <http://dx.doi.org/10.1177/1070496511426478>
- Zang, X. (2007) *Ethnicity and urban life in China. A comparative study of Hui Muslims and Han Chinese*. London and New York: Routledge.
- Zheng, Y., Pan, J. & Zheng, X. (2013) Relocation as a policy response to climate change vulnerability in northern China. In ISSC/UNESCO (Eds.), *World Social Science Report 2013* (pp. 234-242). Paris: OECD Publishing. <http://dx.doi.org/10.1787/9789264203419-34-en>