

Development through Assimilation and Integration? Evidence from Kazak Pastoral Sedentarization in Xinjiang, China

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INTRODUCTION: This paper³ analyzes the ongoing government-led sedentarization among the Kazak pastoral communities in northern Xinjiang, China as an effort to transform the traditional mobile lifestyle and assimilate the ethnic population into the Han culture and means of livelihoods. Pastoral sedentarization, or more generally population relocation, has been a popular development strategy adopted by national governments and international organizations. Massive populations are subject to development projects of different forms (e.g. infrastructure construction, slum clearance, mining operation) and under various justifications (e.g. modernization, conservation, urban redevelopment) throughout the world. However, scholars have been criticizing the inherent power asymmetries of development projects, and denouncing the induced impoverishment and disempowerment of the affected populations (Oliver-Smith, 2009). Built on the existing literature, this paper focuses on a seriously understudied ethnic population – Kazaks – in far northwestern China, and examines their current struggles with development-induced relocation and destitution.

Pastoral sedentarization reflects a historically, socially, and culturally specific vision that the Chinese government takes toward its ethnic population. Two assumptions are behind the central government's intrigue with sedentarization policies. For one, the mobile lifestyle has been long regarded as "backward" and economically inefficient. Sedentarization thus is a necessary strategy to integrate ethnic population into the Han, while bringing civilization and economic prosperity to the underdeveloped regions. For another, sedentarization is an ecologically justified approach to achieve conservation and sustainable development in a region that has experienced degrading environmental conditions in recent decades. By blaming pastoralists and their seasonal migration for rangeland degradation, the central government has come up with a series of ecological restoration projects toward which sedentarization is a necessary step (Zukosky, 2007). Accordingly, sedentarization is perceived as coordinating the needs for environmental conservation, societal integration, and economic growth in the ethnic pastoral region.

However, what have been left out from central government aspirations are the potential risks that emerge along with the drastic social-economic changes among the Kazak population. Scholars who examined development-induced relocation throughout the world have criticized various aspects of those projects, including the lack of pre-project social impact assessment, ignorance of accurate information about the affected population, and disrespect of requirements from the people. In addition, there is little integration of quantitative investigation and qualitative ethnographic examination on the study of development projects and the affected population (Rands et al., 2010).

This paper seeks to bridge the policy and knowledge gap by investigating Kazak pastoralists' status of and attitudes towards sedentarization, as well as the risks associated with the massive sedentarization of pastoral population and the problems within central government's ideology of "development through assimilation and integration". In order to gain a deeper and more comprehensive understanding of pastoral sedentarization, we conducted household questionnaire survey, semi-structured interview, and focus group discussion to gather both quantitative and

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³ This research has generated two related scholarly publications on pastoral mobile livelihoods (Liao, Morreale, Kassam, Sullivan, & Fei, 2014; Liao, Sullivan, Barrett, & Kassam, 2014). Iterative risk ranking exercises with households have revealed that sedentarization is the highest perceived-risk among mobile pastoralists. Based on this result, this paper further examines the specific risks associated with sedentarization and their implications.

qualitative data from 159 ethnic household in Altay and Tianshan Mountains of Xinjiang, China in the summer of 2011. The three research questions of this paper are: 1) how do households engage with ongoing sedentarization; 2) why and how does households' willingness to sedentarize vary; and 3) What risks do household perceive or experience with sedentarization?

CONCEPTUAL FRAMEWORK: This paper proposes a framework that integrates risk analysis, political ecology, and political science to examine the pastoral sedentarization project among the Kazak pastoral population in Xinjiang, China.

1. The Impoverishment Risks and Reconstruction (IRR) model(Cernea, 2004) provides project-based risk analysis. It itemizes a number of risks to assess population relocation projects, and argues for risk reversal strategies(Oliver-Smith, 2009). The model's focus on economic aspects of risks contributes to our efforts in examining the impacts of sedentarization on household livelihoods.

2. Political ecology complements the IRR model with an emphasis on the political nature of conservation projects(Robbins, 2012). It fosters our understanding of the power dynamics and distributive effects of government development endeavors. It also contributes by engaging with issues of ethnicity, identity, and indigenous rights(Adams & Hutton, 2007).

3. The state is a crucial actor in directing the future of its society and its population. Political science provides important insights to critically evaluate the structural and governance interests behind the state determination of ethnic assimilation and societal integration. It is that villagization is merely a state strategy to make society susceptible to manipulation and taxation(Scott, 1998).

BACKGROUND: Ethnic pastoralists have been herding livestock in the mountains of northern Xinjiang for millennia. Since 1949, they have experienced successive policy-guided changes in the forms of pastoral production: tribe-based herding and migration (1949–1960s), commune-based collective production (1960s–1980s), family-based private production (1980s–now). In the meantime, sedentarization has been always encouraged by the central government. Only in the recent decade has the central government intensified its process of sedentarization by constructing houses in planned sedentary village and selling them to pastoralists at a subsidized price(Xinhua, 2007).

METHOD: The survey was conducted with 159 Kazak households in Altay and Tianshan Mountains of Xinjiang, China. The dataset includes 96 interviews from 4 administrative counties in Altay District and 63 interviews from 6 counties in Ili Prefecture (Figure 1). Data were collected from households at various sites: seasonal pastures, winter houses, and sedentary villages. In each interview, the participant answered questions regarding personal characteristics, income sources, livestock and other assets, and related activities of the entire household. In addition, households narrated their willingness, experiences, and engagements with ongoing sedentarization projects and shared their concerns about changes in their livelihoods.

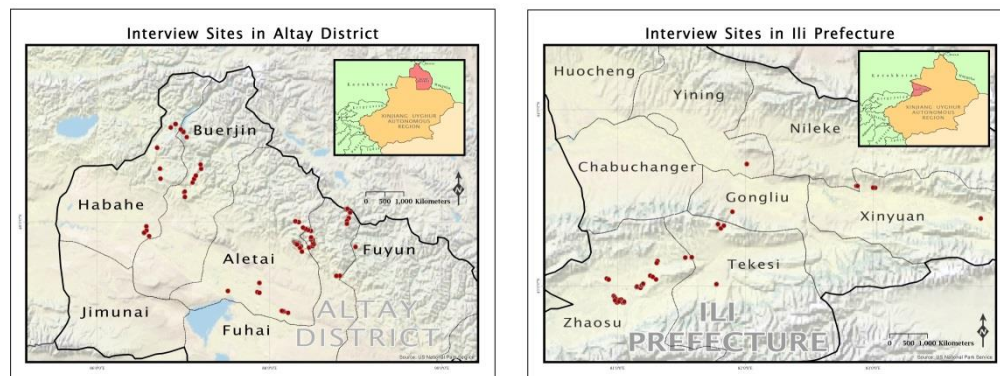


Figure 1 Interview Sites in Altay District and Ili Prefecture

RESULTS: As the 159 households are in different stages of sedentarization, we categorized them into four groups for analysis (Table 1). The categorization is based on two main criteria: 1) the household-declared major livelihood strategies; 2) the *hukou* (household administrative system) status. We ended up with four types of households (Table 1 and 2). 1) Mobile households rely upon selling livestock as their major source of income, but are also engaged in other livelihood strategies; 2) Transition households, with the highest average income, are predominantly dependent upon livestock for cash; 3) Settled households have relatively more diversified in terms of livelihood strategies, although livestock is still the major source of income; 4) Agropastoral households take crop cultivation as the primary source of income, but herding is also an important contribution.

Table 1. Ownership of assets by household type

	Mobile ⁴	Transition ⁵	Settled ⁶	Agropastoral ⁷	All
	N = 103	N = 11	N = 35	N = 10	N = 159
Livestock Unit	29.77282	42.51818	25.4	14.43	28.72704
Pasture (%)	72.8	90.9	65.7	10.0	68.6
Hayfield (%)	80.6	90.9	74.3	40.0	77.4
Cropfield (%)	26.2	9.1	45.7	70.0	32.1

Table 2. Sources of income and their percentage of total

	Mobile		Transition		Settled		Agropastoral		All	
	RMB	%	RMB	%	RMB	%	RMB	%	RMB	%
Mean	49406		83670		63615		44373		54587	
Livestock Sale	35306	71.5	77232	92.3	39607	62.3	11005	24.8	37625	68.9
Crop Cultivation	5150	10.4	1091	1.3	6423	10.1	26800	60.4	6511	11.9
Wage	4045	8.2	1527	1.8	9326	14.7	960	2.2	4839	8.9
Herding Fee	3411	6.9	2609	3.1	1543	2.4	4100	9.2	2988	5.5
Subsidy	711	1.4	65	0.1	6219	9.8	528	1.2	1868	3.4

MOBILE HOUSEHOLDS: Preliminary analysis of mobile households' willingness to sedentarize reveals the contradiction between the *willingness* and the *ability* to settle and manage post-sedentary livelihood transformation. Although 75% of the mobile households express willingness to sedentarize, only 21% of them can do so without difficulties or concerns. The other 79% either are not satisfied with current sedentarization projects, or cannot afford to purchase a sedentary house (Table 3). Further investigation of household narratives indicates that those "willing" households tend to see sedentarization as their only choice of future livelihoods due to previous and ongoing pastoral policies (e.g. rangeland fencing for conservation purpose).

We further applied multinomial regression to investigate the factors that affect households' willingness to sedentarize. The results show livestock unit (LU), household income (HH I), percent of income from livestock (L%), and annual migration times (MT) are all significantly related to households' willingness to sedentarize (Table 4). Those households with the largest number of livestock are most hesitant to sedentarize, as they are afraid of losing economic means after selling

⁴ Mobile households still maintain traditional family-based migratory livelihoods.

⁵ Transition households, though indicated as "pastoralist" in their *hukou* status, have purchased sedentary houses and begun to take up crop production in small scales.

⁶ Settled households have participated in the sedentarization projects in the recent 1-5 years and are *supposed* to rely upon crop cultivation for household reproduction.

⁷ Agropastoralists are indicated as "peasant" in their *hukou* status, while picking up migratory livelihoods voluntarily. They are not eligible to participate in the government-subsidized sedentary house purchase.

their livestock. In contrast, households with the least number of livestock units see sedentarization as an opportunity to change and improve their current livelihoods, despite the fact that their lack of sufficient livestock will prevent them from purchasing a house in the planned sedentary village. Income also affects household's willingness to sedentarize. Households that are willing the sedentarize without hesitation have the highest household income, while the poorest households cannot afford a house despite of their willingness. Moreover, the hesitant households tend to predominantly reply on livestock sale as their major source of income, while households with less dependency on livestock sale have developed other means of livelihoods, and are thus more eager to sedentarize. Finally, annual migration times are an important consideration in interpreting household's willingness to sedentarize. Those that move frequently are most hesitant to settle, although they keep a large herd and are financially capable to settle.

Table 3. Mobile Households' Willingness to Sedentarize and Associated Household Characteristics

	No	Yes	Yes with condition	Yes but cannot afford
Number of households	26	16	15	46
Livestock Unit	39.0	30.5	40.6	20.7
Income (RMB)	54421.5	70721.9	51600.0	38462.2
% Income from Livestock	67.1	65.2	76.2	53.7
Annual Migration Times	14.3	13.4	23.9	13.2

Table 4. The Relationship between Willingness to Sedentarize and Household Characteristics

	Coefficients					Std. Errors				
	Intercept	LU	HH I	L%	MT	Intercept	LU	HH I	L%	MT
Yes	-0.71***	-0.045***	1.90E-05**	0.772***	0.006	1.84E-4	0.013	7.87E-06	2.15E-4	0.012
Yes with condition	-1.05***	-0.005	-4.01E-06	0.767***	0.020*	1.31E-4	0.013	1.03E-05	1.44E-4	0.011
Yes but cannot afford	1.38***	-0.048***	3.83E-06	0.393***	0.011	1.76E-4	0.011	7.64E-06	1.80E-4	0.010

***: p<0.01; **: p<0.05; * p<0.1

TRANSITION HOUSEHOLDS: Further analysis with transition households seeks to examine their responses to widely experienced impoverishment among the settled households. What are their reactions and planned activities to prevent future impoverishment once settled? Since they are relatively wealthier households with better economic and social resources, it is crucial to investigate what livelihood strategies they will take in the future.

SETTLED HOUSEHOLDS: A preliminary examination of households' sedentarization experience reveals that not only were their previous expectations not met, but also they have been further impoverished after sedentarization. Households have to go back to mobile livelihoods and rely on livestock herding short after being sedentarized. This has triggered social issues as families become separated: half stays in the sedentary village and half goes back to migration. Further analysis aims to generate from their narratives 1) what risks they have been experiencing specifically and 2) what have constrained their abilities to manage post-sedentary lives and livelihood transformation.

AGROPASOTRAL HOUSEHOLDS: Despite their illegibility to engage in the pastoral sedentarization project, these households expressed their desires to be potentially included in government subsidy programs to help transform existing livelihoods. Undertaking both agricultural and pastoral livelihoods to make ends meet is a major complaint among households. This unique group also provides important stories from the collectivization and de-collectivization periods when

their *hukou* status was set as "peasant". Analysis of these personal histories will allow us to better understand the long-term consequences of government policies.

DISCUSSION: Built on findings from pastoralists' stages of and attitudes towards sedentarization, we identified four risks that are associated with the sedentarization process: 1) landlessness and joblessness due to inadequate land compensation and lack of job training opportunities; 2) homelessness and loss of access to social services as reflected by the sub-standard sedentary houses and poorly facilitated villages; 3) food insecurity and increased morbidity, which not only severe household economic desperation, but also lead to psychological stress; 4) marginalization and social disarticulation as a result of loss of ethnic culture and identity, family separation, and uneven integration to the Han society.

CONCLUSION: While the state logics behind "development through assimilation and integration" are still debatable, it was crucial to question whether ongoing development projects such as sedentarization provides a rewarding or a marginal experience to the affected population. Based on this study, we conclude that: 1) the state mentality to create a "homogeneous" society implies embedded prejudice against ethnic culture and pastoral livelihoods; 2) sedentarization involves much more socio-political issues than physically settle pastoralists into villages; 3) top-down implementation of sedentarization largely ignores the expectations of a population with different attitudes and abilities to give up the mobile lifestyle. Accordingly, we argue for integrating diverse perspectives in policy design and implementation, especially the desires of pastoral households, to ensure long-term benefits and avoid unexpected consequences for ethnic populations. Thus, the decision-making processes should be made transparent and inclusive of the affected population. More flexibility should be granted to the sedentarization project so as to allow for external investigations and timely adjustment. Post-sedentarization support and social services are crucial to facilitate successful socio-cultural transformations and adaptations in sedentarized communities.

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