

LEGAL STUDY ON THE CLIMATE CHANGE-INDUCED MIGRANTS IN CHINA

Deng Haifeng* and Zhao Yumin*

ABSTRACT: While climate change is a natural phenomenon, it has also caused a series of social problems for human society. One of the most serious repercussions of climate change is the impact on population movements. As the effects of climate change grow exponentially, the number of climate change-induced migrants will also increase.

Climate change-induced migrants are individuals who spontaneously or forcibly migrate temporarily or permanently from their hometowns to other regions under the influence of climate policies or climate-related projects. Climate change, either suddenly or gradually, negatively affected these migrants' living conditions, making it impossible to survive where they were located. China's climate is complex and its ecological environment is fragile, making it very vulnerable to the adverse impacts of climate change. Since 2012, China has suffered from frequent extreme weather conditions that have taken a heavy toll on agriculture and people's lives.

Because China has not paid adequate attention to climate change-induced migrants, migrants must deal with many legal barriers both when they leave their home and when they resettle. The main legal barriers are the obstacles encountered during the shift from urban to rural environments (or vice versa), the acquisition of interests in land, and the religious conflicts between migrants and local residents. China is currently struggling with how to support these migrants and remove the legal obstacles. At the same time, China struggles to better understand how to reduce overall migration caused by climate change. This paper will focus on China's recent efforts to remove legal obstacles for climate change-induced migrants.

This paper consists of an introduction and three chapters. The introduction describes the definition of climate change-induced migrants, China's climate, what causes the migrations, and the main regions where these migrations occur. The three chapters introduce two cases of climate change-induced migrants, analyze the main legal dilemmas they are faced with, and propose some legal countermeasures to remove these obstacles.

I. INTRODUCTION	79
II. TWO CASES OF CLIMATE CHANGE-INDUCED MIGRANTS	81

*Associate Professor, Tsinghua University School of Law, Vice Director of Center for Environmental, Natural Resources & Energy Law, Tsinghua University.

*Student at Tsinghua University School of Law.

- A. Climate Change-Induced Migrants of Tuanjie Village, Hongsipu District, NingxiaHui Autonomous Region 81
- B. Climate Change-Induced Migrants of Kaiyuan City, Yunnan Province 83
- C. Problems Encountered by the Climate Change-Induced Migrants of Tuanjie Village and Kaiyuan City 84
- III.LEGAL DILEMMAS THAT CHINESE CLIMATE CHANGE-INDUCED MIGRANTS FACE 88
 - A. The Obstacles During the Change of Identity..... 88
 - B. The Obstacles Faced During the Changes in Property..... 89
 - 1. The Changes in Property of Migrants Who Move to Rural Areas 89
 - 2. The Changes in Property of Migrants Who Move to Urban Areas 91
 - C. Religious Conflicts Between Migrants and Local Residents..... 92
- IV.LEGAL COUNTERMEASURES OF REMOVING OBSTACLES MIGRANTS FACE 92
 - A. Reforming the Current Household Registration System 92
 - 1. Establishing a Unified Identity System 92
 - 2. Improving the Current Social Security System 93
 - B. Protecting Migrants’ Rights and Interests in Land..... 95
 - 1. To Migrants Who Migrate in Rural Areas — Specify the Standard of Substitution of the Right to the Contracted Management of Land and Circulation of House Sites under Certain Conditions 95
 - 2. To Migrants Who Migrate to Urban Areas — System of Land-Use Quotas 96
 - C. Reforming the Religious Legal System..... 97
 - 1. Establishing the Importance of Freedom of Religious Belief 98
 - 2. Strengthening the Protection of Freedom of Religious Belief 98
 - 3. Adding Liability Provisions on Protection of Freedom of Religious Belief 100
- V. CONCLUSION 100

I. INTRODUCTION

China suffers from some of the world's most severe natural disasters, which are exacerbated by a fragile ecological environment and complicated climatic conditions.¹ Since 2012, extreme climate events in China have resulted in decreased agricultural production, which directly causes agricultural workers to migrate.² The increase in weather extremes, coupled with the lack of rainfall in certain regions of China, indicates that climate-induced migration will continue to rise in the coming year.³

According to the International Organization for Migration, climate change-induced migrants are:

those personnel who spontaneously or forcedly migrate temporarily or permanently from their hometown to other regions of their own countries or other foreign countries under the influence of relative climate policies or climate-related projects mainly because of negative impacts on their survival or living conditions brought about by sudden or gradual environmental changes due

1. See, e.g., MINISTRY OF ENVTL. PROT. OF THE P.R.C., 2008 REPORT ON THE STATE OF THE ENVIRONMENT IN CHINA 42 (2008), *available at* http://english.mep.gov.cn/down_load/Documents/201002/P020100225377359212834.pdf (“In 2008, about 15 million [hectares] of farmland was impacted by cold and snowstorm, leading to direct economic loss of over 159 billion Yuan. In particular, the cold and snowstorm in South China in early 2008 was most disastrous in 50 years in terms of economic loss and affected population, making it the top meteorological disaster in 2008.”).

2. THE NAT'L DEV. AND REFORM COMM'N, P.R.C., CHINA'S POLICIES AND ACTIONS FOR ADDRESSING CLIMATE CHANGE (2013) 1 (2013), *available at* <http://en.ndrc.gov.cn/newsrelease/201311/P020131108611533042884.pdf>.

3. MINISTRY OF ENVTL. PROT. OF THE P.R.C., 2012 REPORT ON THE STATE OF THE ENVIRONMENT IN CHINA (2012), *available at* <http://www.mep.gov.cn/gkml/hbb/qt/201306/W020130604382172090857.pdf> (“China experienced many kinds of climate disasters in 2012; the situation is very serious in some areas. There were thirty-eight instances of regional rainstorms nationwide. Typhoons landed frequently and intensely, and seven tropical cyclones landed China in 2012. Cold weather and snowstorms attacked many areas in northern China. Strong floods hit 2,263 counties (cities and districts), and affected 11.22 million hectares of cropland. 1.4 million hectares of the affected cropland had no harvests. These floods impacted 123.7 million people, and caused 673 deaths, 159 lost persons, and the direct economic loss of 267.5 billion Yuan. In 2012, twenty-one provinces (autonomous regions and municipalities) were affected by serious droughts, 9.33 million hectares of cropland were affected, and 373,800 hectares of cropland had no harvests. Droughts caused grain loss of 11.612 billion kilograms and the direct economic loss of 53.3 billion Yuan.”).

to climate change.”⁴

The causes of climate change-induced migration in China are mainly embodied in the following aspects: First, in rural areas of China, especially Central and West China, the monitoring and early warning system for natural disasters is underdeveloped and the prevention and control function of natural disaster prevention infrastructure is very weak. Natural disasters caused by climate change, such as moderate to severe droughts, land degradation, and land desertification, have reduced agricultural productivity and raised the possibility of migration of rural populations. Second, the burden of disaster prevention and mitigation infrastructure in many cities is increased continually through the processes of industrialization and urbanization of China. Natural disasters caused by climate change have taken a heavy toll on people’s lives in urban areas. Especially in coastal urban areas, typhoons, storm surges, floods, coastal erosion, seawater intrusion and other natural disasters related to climate change have brought about a large amount of economic loss to coastal cities, and will lead to migration of many coastal residents.⁵

Based on the impact of climate change and ecological fragility, there will be a large number of climate change-induced migrants in three areas of China. The first area is the upper reaches of the Yangtze and Yellow Rivers. Land degradation in this area may lead local residents to migrate to the Tibetan Plateau and the eastern coastal regions. The second area is West and Northwest China. Drought and desertification may lead to migration of the local farmers. The third area is the southeast coastal area. Frequent typhoons and floods may drive local residents to migrate northward.⁶

Climate change has brought about big challenges for China: mainly, how to reduce the negative effects caused by climate-induced migration through removing obstacles that migrants are faced with, and how to help migrants settle. However,

4. INT’L ORG. FOR MIGRATION, IOM POLICY BRIEF MAY 2009: MIGRATION, CLIMATE CHANGE AND THE ENVIRONMENT 5 (2009), *available at* http://www.egypt.iom.int/Doc/iom_policybrief_en.pdf.

5. Sun Ziwei, *The Study on International Climate Change-Induced Migration: The Case Study of Asia-Pacific Area* 69 (2012) (unpublished Master’s dissertation, East China Normal University) (on file with author).

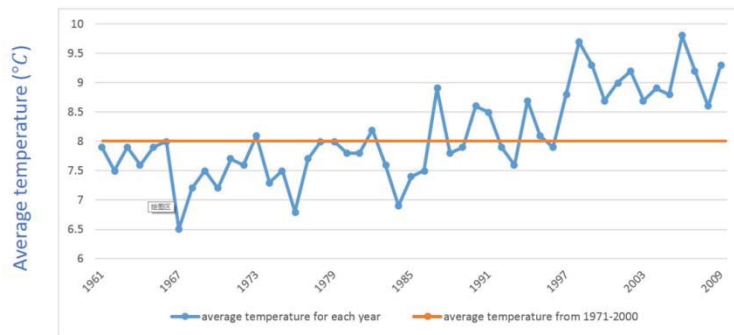
6. ASIAN DEV. BANK, *CLIMATE CHANGE AND MIGRATION IN ASIA AND THE PACIFIC* (2011).

China has so far not paid enough attention to climate change-induced migrants. Inadequate legislation and regulations contribute to many legal barriers during the migration of climate change-induced migrants. The legal obstacles that climate change-induced migrants of China are faced with are reflected in the following two cases.

II. TWO CASES OF CLIMATE CHANGE-INDUCED MIGRANTS

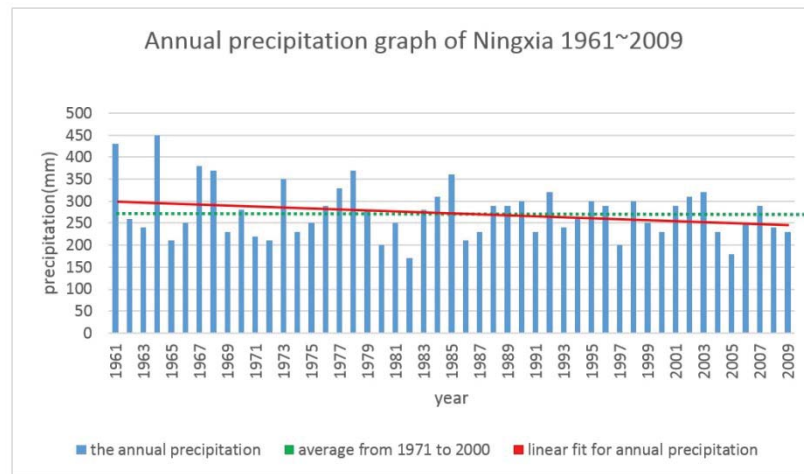
A. *Climate Change-Induced Migrants of Tuanjie Village, Hongsipu District, NingxiaHui Autonomous Region*

The annual average temperature between 2001 and 2009 in Ningxia increased by 1.5 degrees Celsius compared with the 1960s. Additionally, there were 17 warm winters in 49 years. The precipitation of Ningxia has decreased slightly since the 1960s. After an abrupt climate change, the precipitation reduced by nearly 33% in 1978.⁷ Simultaneously, the frequency and intensity of extreme weather events have increased. There are more droughts, floods, torrential rains and severe sandstorms in Ningxia in recent years.



(Fig. 1: Average Temperature Figure Curve of Ningxia 1961-2009).

7. See Figs 1 and 2. Chinese Weather Station Network of Ningxia, <http://www.weather.com.cn/ningxia/nxqh/qhgk/06/646177.shtml> (last visited Jun. 30, 2013).



(Fig. 2: Annual precipitation of Ningxia 1961-2009).

The continued deterioration of the ecological living environment and frequent occurrence of natural disasters have taken a heavy toll on agriculture in Ningxia and on its residents' lives. It prompts the poor populations of rural, mountainous regions of Central and Southern Ningxia Hui Autonomous Region to engage in long-term and large-scale migration. Relying on medium to large construction of water conservancy projects, Ningxia has helped many climate change-induced migrants settle in Hongsipu District, Tongxin County, Yanchi County, and others.⁸ Hongsipu District is located in the central arid zone in Ningxia and the counties around it are greatly affected by climate change. The increasingly severe drought makes life more difficult for residents of counties around Hongsipu. In order to achieve the goal of ecological protection and poverty alleviation, the government of Ningxia organized residents to move out of their homes.

Hongsipu District expanded the area of irrigated land gradually relying on the Yang Huang irrigation project and has accepted a large number of climate change-induced migrants from neighboring counties. It has become the largest

8. Chen Shaojun & Shi Mingyu, *The Research on the Climate Change-Induced Migration: Take the Example of the Migration of Central Arid Areas in Ningxia Hui Autonomous Region*, 10 ACADEMICS, 63-67 (2012) (P.R.C.).

migration zone in Ningxia.⁹ Tuanjie Village is a typical immigrant village located in the southeastern region of Hongsipu District. As of the end of 2010, there were 8,313 people in Tuanjie Village, and all of them are climate change-induced migrants from neighboring counties such as Tongxin County, Xiji County, Haiyuan County, and Pengyang County.¹⁰

B. Climate Change-Induced Migrants of Kaiyuan City, Yunnan Province

The meteorological elements of Yunnan Province, such as temperature and precipitation, have changed significantly since 1961 due to climate change. The annual average temperature has increased by 0.74 degrees Celsius from 1961 to 2010. During the same period, the annual precipitation in Yunnan Province has decreased by about 39 mm. The average number of days of snowfall and solar radiation have also shown a decreasing trend since 1961. The frequency of extreme weather events such as extreme low temperature events have been increasing.¹¹

Due to climate change, the residents who lived in extremely harsh environments moved into Kaiyuan spontaneously. Although Kaiyuan is a city of only 30 million people, it has accepted thousands of climate change-induced migrants and settled them in different towns and villages. Many villages, such as Malip and Longshupo, accepted dozens of immigrant families. These two villages accepted nearly seventy Hmong migrant families from Yanshan, Guangnan, and Wenshan Counties over thirty years.¹²

9. HISTORY OF MIGRATION AND DEVELOPMENT OF HONGSIPU 37 (Light of Hongsipu Board of eds., 1st ed. 2009).

10. Ma Cuicui, The Research on Hui Muslim Migrants' Social Identity Under the Perspective of Social Interaction: Take the Example of Tuanjie Village, Hongsipu District, Ningxia Hui Autonomous Region 12 (2011) (unpublished Master's dissertation, Ningxia University) (on file with author).

11. Long Hong et al., *The Analysis of Adaptation Strategies to Climate Change of Yunnan Agriculture*, 4 YUNNAN AGRICULTURAL SCIENCE AND TECHNOLOGY 27 (2010) (P.R.C.).

12. ZHANG TIWEI, THE ANALYSIS ON THE CONSTRUCTION OF SOCIALISM NEW COUNTRYSIDE IN SETTLEMENTS OF MIGRANTS WHO MOVE SPONTANEOUSLY IN WESTERN ETHNIC AREAS (2011).

C. *Problems Encountered by the Climate Change-Induced Migrants of Tuanjie Village and Kaiyuan City*

First and foremost, climate change-induced migrants are unable to fully enjoy the rights and interests on land.¹³ For obvious reasons, migrants are unable to move their cultivated land and houses when they migrate. Additionally, they cannot smoothly transfer their original land rights to their resettlement areas because of an inadequate land management system.¹⁴ Because land in the rural and suburban areas of China is owned by collective economic organizations, membership in the organizations is the fundamental prerequisite to obtaining the right to use house sites and the rights to the contracted management of land.¹⁵ And because many climate change-induced migrants have little chance to become members of the collective economic organizations in the places they move to, they often fail to obtain land rights and interests. Even if migrants do become members of the collective economic organizations, the high quality land has already been allocated to older members. Consequently, migrants usually acquire low quality land that is far away from residential areas.

13. See XIANFA [Constitution] art. 10 (2004) (P.R.C.), *translated at* http://www.npc.gov.cn/englishnpc/Constitution/node_2825.htm (“Land in the cities is owned by the state. Land in the rural and suburban areas is owned by collectives except for those portions which belong to the state in accordance with the law. House sites and privately farmed plots of cropland and hilly land are also owned by collectives. . . . The right to the use of land may be transferred according to law.”); See also PROPERTY RIGHTS LAW OF THE PEOPLE’S REPUBLIC OF CHINA art. 47, *translated at* http://www.lehmanlaw.com/fileadmin/lehmanlaw_com/laws__regulations/Propoerty_Rights_Law_of_the_PRC_LLX_03162007.pdf (“Urban lands shall be owned by the state. Lands in the rural areas and suburban areas that shall be owned by the state as prescribed by law belong to the state.”).

14. See PROPERTY RIGHTS LAW OF THE PEOPLE’S REPUBLIC OF CHINA arts. 124-25, 135, 152. See also LAND ADMINISTRATION LAW OF THE PEOPLE’S REPUBLIC OF CHINA arts. 14-15, 62 (2004), *translated at* http://www.npc.gov.cn/englishnpc/Law/2007-12/12/content_1383939.htm.

15. See XIANFA art. 8 (“Forms of cooperative economy in rural areas, such as producers’, supply and marketing, credit and consumers’ cooperatives, belong to the sector of socialist economy under collective ownership by the working people.”); See also AGRICULTURE LAW OF THE PEOPLE’S REPUBLIC OF CHINA art. 2 (2012), *translated at* http://www.china.org.cn/china/LegislationsForm2001-2010/2011-02/14/content_21917090.htm (“The agricultural production and operation organizations as mentioned in this Law include the rural collective economic organizations, specialized cooperative economic organizations of farmers . . .”).

Ma Mingyi moved into Tuanjie village in 2004. His family's contract is for more than ten acres of irrigated land located more than eight kilometers from their house, making it extremely inconvenient for them to cultivate the land. To make a living, Ma Mingyi earns income through selling cattle in addition to farming. Other climate change-induced migrants of Tuanjie Village encounter the same predicament: it is hard for them to survive by depending solely on agriculture.¹⁶ Tao Jinyu is a villager of Pingtoushan village in Kaiyuan. She and her family share a cottage less than ten square meters with her family because she did not acquire a collective economic organization house site in Pingtoushan village. Before the family moved into this small cottage they lived in a tent made of plastic sheeting.¹⁷

Second, it is extremely hard for climate change-induced migrants to register as residents in resettlement areas. These migrants, as non-residents, usually receive unfair treatment in terms of political rights and social life.¹⁸ Wang Wenming is a farmer who lives in Pingtoushan village. He and his family could not apply for identity cards without residence registration. Without identity cards, they can only do odd jobs or scavenge near Kaiyuan as their primary source of income. They are not entitled to the right to vote or the right to run for an elected position. They have never participated in any election of the collective economic organization, which is the main reason why he and his family fail to integrate into the collective.¹⁹

Worst of all, children of climate change-induced migrants who are not residents cannot receive education. Yang Youlin and his son Yang Tianyong moved to Matoupo village from Pinbian County in 1990. Yang Tianyong studied hard and did

16. See REGIONAL DEVELOPMENT AND REFORM COMMISSION OFFICE OF NINGXIA HUI AUTONOMOUS REGION, THE ELEVENTH TOPIC ON RELOCATION FOR POVERTY ALLEVIATION OF NINGXIA HUI AUTONOMOUS REGION: THE OUTSTANDING PROBLEMS AND COUNTERMEASURES IN THE MIGRATION PROCESS OF ECOLOGICAL MIGRANTS IN NINGXIA HUI AUTONOMOUS REGION.

17. *More than 6,500 Migrants in Kaiyuan City, Yunnan Province Have No Residence Registration and Have Been 'Forgotten' for a Long Time*, PEOPLE'S DAILY ONLINE (P.R.C.), August 19, 2011 [hereinafter *More than 6,500 Migrants*], available at <http://finance.people.com.cn/nc/BIG5/15456144.html> (last visited Sep. 23, 2013).

18. See Xiao Haiying, *The Semantic Analysis on Population, Household and Residence Registration*, 2 PUBLIC SECURITY SCIENCE JOURNAL, 19-20 (1999) (P.R.C.).

19. *More than 6,500 Migrants*, *supra* note 17.

very well in school, but he was prohibited from continuing his middle school education without residence registration. As a climate-induced immigrant, he was not entitled to residence registration, and therefore he could not continue his education. This situation is very common in Kaiyuan city where many climate change-induced migrants are illiterate due to their lack of education, further hindering the long-term development of climate change-induced migrants.²⁰

Wang Wenming and Yang Youlin are not alone among climate change-induced migrants in Kaiyuan city. Migrants there face insurmountable difficulties when integrating into resettlement areas. They are unable to enjoy policies that otherwise benefit farmers and agriculture or take part in the new rural cooperative medical care system. Additionally, they cannot obtain funds from poverty alleviation and disaster relief, and their reproductive rights are not legally safeguarded.

Though climate change-induced migrants have made great efforts to register as residents, the outcomes are less than ideal. Compared to other residents, climate change-induced migrants are marginalized in social activities, which results in a threat to public security management.²¹

20. *Id.*

21. Liao Guilian & Zhang Tiwei, *The Analysis on the Factors Which Restrict the Construction of Socialism New Countryside in Settlements of Migrants Who Move Spontaneously in Western Ethnic Areas*, 3 ECONOMIC RESEARCH GUIDE 36, 36-37 (2008) (P.R.C.).

Marginalized Migrants in Social Activities

Social Activities	Performance	Reason
Economic Activity	Poor quality of cultivated land, water shortage, high cost of renting land	Unable to get the right to the contracted management of land
Democratic Rights	Not entitled to vote and be elected, unable to participate in the democratic activities of the village	No residence registration
Development Opportunities	Be restricted in children's education, health care and social security	No identity cards
Cultural Development	Emigration culture is subculture	Self-enclosed

Table 1

Finally, religious conflicts exist among migrants. Though the climate change-induced migrants of Tuanjie village are all Hui Muslims, they follow in two denominations within Islam—Al-Ikhwān and Al-Salafiyyah. Al-Salafiyyah is a denomination that is separate and distinct from Al-Ikhwān. These two denominations have many contradictions in terms of doctrine and ceremonies.²² For instance, Al-Salafiyyah insists that Allah created the earth and that Allah is detached from creatures, whereas Al-Ikhwān deems this circumscription to be contrary to the traditional definition. In terms of worship, the believers of Al-Ikhwān say “Allahu Akbar” and raise their hands once during each worship, while the believers of Al-Salafiyyah say “Allahu Akbar” and raise their hands three times.²³ In order to hold their own religious ceremonies, the believers of Al-Ikhwān and Al-Salafiyyah want to build their own mosques. Ma Xingwang has been an Imam²⁴ in Lizhaikexi Mosque since moving to Tuanjie Village in 2005. When he

22. Ma Ping, *Explore the Problem of Islamic Rising Sect and Menhuan of Contemporary Northwest Region of China*, 4 JOURNAL OF HUI MUSLIM MINORITY STUDIES, 108 (2005) (P.R.C.).

23. MA TONG, THE HISTORY OF CHINESE ISLAMIC SECT AND MENHUAN 111-12 (3rd ed. 2000).

24. “Imam” is a Farsi word that means a teacher or scholar. Hui Muslims call the people who preside over religious ceremonies in mosques “imam”.

moved, there were more than 20 mosques in Tuanjie Village. And because all of the mosques hold religious activities individually, this situation leads to wasted resources and conflicts between immigrants.²⁵

III. LEGAL DILEMMAS THAT CHINESE CLIMATE CHANGE-INDUCED MIGRANTS FACE

According to the above analysis, climate change-induced migrants living in Ningxia and Yunnan will suffer from many difficulties during migration. What follows are the fundamental legal reasons that create the foundation of their suffering and indicate the challenges, both political and geographic, to alleviating their challenges.

A. *The Obstacles During the Change of Identity*

China's household registration system deprives migrants of the possibility to register as residents in resettlement areas. The current system plays a role in protecting citizens' health, education, employment, and social security through registering their basic information.²⁶ The household registration system has become the main factor that limits population mobility.²⁷

Generally, the climate change-induced migrants who migrate under the government relocation plan will not encounter obstacles acquiring residence registrations after resettlement.²⁸ Climate change-induced migrants who migrate spontaneously, however, will experience obstacles when attempting to register their new residence. Migrants who are

25. Cuicui, *supra* note 10, at 39.

26. LU YILONG, BEYOND THE RESIDENCE REGISTRATION: INTERPRETATION OF CHINESE HOUSEHOLD REGISTRATION SYSTEM 1 (2004).

27. The Chinese household registration system serves to restrict movement of the population. See THE HOUSEHOLD REGISTRATION ORDINANCE OF THE PEOPLE'S REPUBLIC OF CHINA art. 10 (1958); NOTICE OF THE GENERAL OFFICE OF THE STATE COUNCIL ON ACTIVELY AND STEADILY PROMOTING THE REFORM OF THE HOUSEHOLD REGISTRATION SYSTEM arts. 3-4. According to these regulations, China's household registration system has strict conditions for acquiring residence registrations. The climate change-induced migrants generally can't meet these criteria so they are unable to acquire residence registrations in their settlements.

28. Zhou Jian et al., *The Analysis of Policies and Their Effects on the Ecological Migrants: Take the Example of the Ecological Migrants of Lun Tai County in Tarim Basin of the Xinjiang Uygur Autonomous Region*, 27 JOURNAL OF ECONOMICS OF WATER RESOURCES 68 (2009).

outside of the government relocation plans are unable to obtain the same rights and interests to land, political participation, democracy, health care, education and employment in their resettlement areas because of the household registration system's restrictions.

B. The Obstacles Faced During the Changes in Property

Climate change-induced migrants are unable to secure the land in their original residence. If they cannot obtain the corresponding rights and interests to land in resettlement areas, it will be hard for them to survive. The following analysis outlines the different obstacles migrants face in both urban and rural areas.

1. The Changes in Property of Migrants Who Move to Rural Areas

Obtaining the right to land management contracts in resettlement areas seriously affects the survival of climate change-induced migrants. In the government-led migration process, migrants move according to the government's relocation plan. The nullification of migrants' rights and land interests is the reasonable arrangement of laws and regulations. Ningxia had climate change-induced migration early on, which was also known as Ecological Migration.

Other areas can learn from Ningxia. The Standing Committee of the Tenth People's Congress of Ningxia Hui Autonomous Region passed "Ningxia Hui Autonomous Region People's Congress Standing Committee's decision on issues of ecological migrants' land in counties of central arid zone" (hereinafter referred to as 'the Decision') on May 30, 2008. The Decision included provisions on guaranteeing migrants' rights to land management contracts and the use of land for

constructing the collective economic organizations.²⁹ Based on the Decision, the People's Government of Ningxia Hui Autonomous Region made "several opinions on disposal of ownership of land in ecological immigrant regions of central arid area of Ningxia" (hereinafter referred to as the "Opinions") to resolve the land tenure issues of ecological immigrant regions.³⁰ "Implementation measures on disposal of ecological migrants' ownership of land of Ningxia Hui Autonomous Region," (hereinafter referred to as the "Implementation Measures"), made further provisions on the approval authority and compensation expense of land replacement.³¹

29. See NINGXIA HUI AUTONOMOUS REGION PEOPLE'S CONGRESS STANDING COMMITTEE'S DECISION ON ISSUES OF ECOLOGICAL MIGRANTS' LAND IN COUNTIES OF CENTRAL ARID ZONE ("The Self-developed land out of land management contracts should be taken back by collective economic organizations from individual farmers in ecological migrants' resettlement areas The land taken back from the famers should be used for settling down the ecological migrants. The index of rural construction land of the collective economic organizations which ecological migrants migrate from can be exchanged for new index of construction land in their resettlement areas If all the members of the collective economic organization migrate together, all the land (including house sites of the villagers) of the former collective economic organization will be owned by the state, and will be used for vegetation restoration and improving ecological environment. The resettlement areas of the ecological migrants can replace migrants' rights and interests on land in the former collective economic organization with the new one in their resettlement place, and give the farmers whose land is taken back appropriate compensation according to different categories and grades of their land.").

30. See SEVERAL OPINIONS ON DISPOSAL OF OWNERSHIP OF LAND IN ECOLOGICAL IMMIGRANT REGIONS OF CENTRAL ARID AREA OF NINGXIA ([Year]) ("[T]he government of Ningxia Hui Autonomous Region develops and consolidates land of ecological migrants' resettlement areas Taking a village as a unit, the government should organize the exchange of interests and rights on land in migrants' hometown and resettlement areas. The county-level governments of the migrants' resettlement areas can organize the exchange of interests and rights on land according to the categories, grades of land and other technology standards issued by the department of land and resources of Ningxia Hui Autonomous Region The members of the new collective economic organizations should sign new land contracts with the new collectives to notarize their right to the contracted management of land. The old land contract in migrants' hometown should be terminated at the same time.").

31. See IMPLEMENTATION MEASURES ON DISPOSAL OF ECOLOGICAL MIGRANTS OWNERSHIP OF LAND OF NINGXIA HUI AUTONOMOUS REGION ("Related to arable land occupation, the county-level governments of the migrants' resettlement areas should fulfill the obligation of balancing occupation and retrieval of cultivated land. . . . Migrants who suffer losses due to land replacement should be compensated, if there is demand for standards for grants of land compensation fees from the autonomous region government, the autonomous region government should establish detailed compensation standards.").

Although these provisions prevent the government from abusing its power to infringe upon the property rights of migrants to some extent, migrants in the Ningxia region are still vulnerable. First, the Decision and Implementation Measures are merely local normative documents with low potency, and they are not applicable nationwide. Second, these documents are only aimed at government-led cultivated land replacement of migrants, and are not applicable to other types of land replacement. Third, these documents do not have detailed standards for land replacement or compensation standards for migrants who suffer losses due to land replacement. Under the Decision, migrants cannot exchange their rights and interests on their previous land for the same rights in the areas to which they relocate. Because of this, migrants cannot retain the value of their property when they move, and consequently they have to start over. It also hinders efficient allocation and intensive use of land.

Compared to the government-led climate change-induced migrants, it is harder for climate change-induced migrants who migrate spontaneously to obtain the right to use house sites and the right to the contracted management of land. To avoid land redistribution and to save administrative costs, the governments of migrants' new areas are unwilling to take the initiative to give migrants the rights to use house sites or the rights to the contracted management of land.³² Many migrants have to cultivate wasteland, swidden, and even abandoned land without ownership certification because they are unable to obtain land management contracts.

2. *The Changes in Property of Migrants Who Move to Urban Areas*

When migrants from rural areas move to urban areas, they should return their contracted land to the collective economic organizations and receive some financial compensation or appreciation income within a certain period.³³ However, there

32. Bai Jinyan & Zhang Tiwei, *The Analysis on the Advantages and Disadvantages and Development of the Migration of Migrants Who Move Spontaneously in Western Ethnic Areas of China: Take the Example of Migrants in Yunnan Province*, 5 JOURNAL OF YUNNAN UNIVERSITY OF FINANCE AND ECONOMICS, 88-91 (2010) (P.R.C.).

33. Sang Minlan, *The Research on the Ecological Migrants and Urbanization Development of Ningxia Hui Autonomous Region*, 1 Northwest Population Journal 37 (2005) (P.R.C.).

is no legal provision for how migrants who move to urban areas can acquire the right to use land for construction. This situation results in migrants in urban areas being unable to construct a new home, which hinders their ability to reestablish a new life in the urban setting.

C. Religious Conflicts Between Migrants and Local Residents.

As demonstrated in the above analysis of Hui Muslim migrants of Tuanjie village, climate change-induced migrants will encounter obstacles regarding their religious beliefs during integration into their resettlement areas. To remove the obstacles, the religious legal system should be reformed.

IV. LEGAL COUNTERMEASURES OF REMOVING OBSTACLES MIGRANTS FACE

A. Reforming the Current Household Registration System

A unified urban and rural household registration system should be built and the social security system should be improved to address migrants' dilemmas caused by the existing household registration system.

1. Establishing a Unified Identity System

In light of the difficulties in obtaining residence registrations in resettlement areas, a unified identity system needs establishment. Citizens should not be divided into "urban accounts" or "rural accounts." Rather, migrants, once part of the rural social security system, should be admitted into an urban social security system, allowing equal enjoyment of social security rights and public services. This reformation would also ensure migrants who are unable to integrate into urban areas could return back to rural areas.

With such a system in place, China's labor resources could flow more easily between urban and rural areas.³⁴ The Government could assist climate change-induced migrants in properly establishing themselves with equal rights and

34. Wang Caiyan, Research on the Transference of Right to the Use of the Collective Construction Land, 47 (2013) (unpublished Master's dissertation, Tsinghua University) (on file with author).

opportunities rather than forcing them to return to their hometowns. Collective economic organizations should also accommodate migrants who move to rural areas. Collective economic organizations can give these migrants residence registrations of the villagers' collectives so long as it is within the carrying capacity of the land. Giving resident registrations would lay the foundation for obtaining valuable rights and interests, for these rights are based on the membership in a collective economic organization. Once conditions mature, China should abolish the current distinction between rural and urban household registration systems and set up a system of urban residence certificate, which is both fair and flexible.³⁵

2. *Improving the Current Social Security System*

In order to ensure that urban and rural residents have equal access to the social security system, China should focus on (1) reforming pension insurance and (2) revising urban social security and agricultural insurance.

First, the basic pension insurance system should be reformed. With the current limitations of the household registration system, climate change-induced migrants who move to urban areas cannot partake in the city's pension system. Therefore, city pension systems should accommodate migrants that move from the countryside to cities.³⁶ Additionally, a unified Chinese coordinating pension fund could solve urban residents' pension problems.³⁷ Rural pension insurance needs reform as well, and all stakeholders, including

35. *Visiting the Ministry of Public Security — Comprehensive Interpretation of the Timetable of Household Registration System Reforming, a New Household Registration System Will be Established in 2020*, PEOPLE'S DAILY ONLINE <http://house.people.com.cn/n/2013/1219/c164220-23886817.html> (last visited Dec. 22, 2013). ("When talking about household registration system reforming, an official of the Ministry of Public Security said that China would eliminate the differences in identity of urban and rural residents and establish a system of urban residence certificate."). According to this report, China is making efforts on household registration system reforming. *Id.* However, there is no implementation plan and specific scenario for climate change-induced migrants at present, and it will last from 2013 to 2020, thus the reforming still has a long way to go to.

36. LIU CUIXIAO, *BIG THINGS — RESEARCH ON CHINESE RURAL SOCIAL SECURITY SYSTEM* 125 (China Law Press 2006).

37. Deng Haifeng, *Restrictions to the Trade Market of the Right to Land Contractual Management from Household Registration System and the Improvement*, CHINA POPULATION, RESOURCES & ENV'T, July 2010, at 100.

the government, enterprises, and individual farmers, must work together to solve rural residents' pension problems. Landless peasants are especially vulnerable, and these peasants need introduction into the national unified insurance system.

Second, focus should to be directed towards reforming the urban social security system and improving the legal system of agricultural insurance. The key point of the urban social security system reform is opening it to the farmers who move from rural areas to urban areas. Currently, the social security for farmers is informal; land is the basis for eligibility. However, after transferring their rights on land, farmers would not be able to obtain urban social security due to a lack of residence registration in cities they migrate to. Therefore, requirements of current household registration should be abolished, allowing migrant farmers from the rural social security system integration into the urban social security system.

Likewise, migrants who move from urban areas to rural areas should be accepted by the rural social security system. However, due to the incompleteness of China's current agricultural insurance legal system, it is only a proposition at present. China's Insurance Law requires that laws and administrative regulations shall provide agricultural insurance.³⁸ Yet, it does not provide any specific provisions to setup agricultural insurance. Therefore, to ensure that migrants who exit from the urban social security system can enroll in a rural social security system, provisions that setup agriculture insurance should be added in Insurance Law as soon as possible.

38. Insurance Law (amended by Standing Comm. Nat'l People's Cong., Feb. 28, 2009, effective Oct. 1, 2009), art. 186, *translated in* <http://www.lawinfochina.com/display.aspx?id=7346&lib=law> (China) ("The state shall support the development of insurance business which serves the agricultural production. Agricultural insurance shall be provided for separately by laws and administrative regulations. For compulsory insurance, where laws and administrative regulations provide otherwise, such provisions shall apply.").

B. Protecting Migrants' Rights and Interests in Land

1. To Migrants Who Migrate in Rural Areas —Specify the Standard of Substitution of the Right to the Contracted Management of Land and Circulation of House Sites under Certain Conditions

Climate change-induced migrants' cultivated land in their hometown is different from cultivated land in their resettlement areas both in categories and grades and should be calculated during the substitution process. For instance, the exiting of migrants will play a significant role in ecological restoration of their hometown. The ecological value of cultivated land in their hometown should be part of the calculation.

The Department for Land Administration can establish a national database to calculate differential values of land based on China's land resources inventory. The root directory of the database can classify China's land into different categories according to different functions, then reclassify similar types of land according to differential values. Based on this data, the governments of incoming areas can calculate the substitution value of cultivated land and confer the interests in land to climate change-induced migrants.³⁹

Another use of rural land comes into play through a policy of house sites. A house site refers to the land for construction of the collective economic organizations for villagers to build their houses and ancillary facilities.⁴⁰ China's Land Administration Law defines that the holder of the right for house sites must be a member of the collectives.⁴¹ The right to use house sites can

39. Deng Haifeng, *The Deconstruction and Reconstruction of Legal Order of Land Management — Take the Restriction and Narrowing of the Land Expropriation System as the Center*, TSINGHUA J. OF RULE OF L., Nov. 2012, at 218–36.

40. Property Rights Law (promulgated by Standing Comm. Nat'l People's Cong., Mar. 16, 2007, effective Oct. 1, 2007), art. 152, *translated in* <http://faolex.fao.org/docs/pdf/chn72735.pdf> (China) [“The holder of the right to use house sites shall be entitled to possess and use collectively-owned land, and to make use of the land for constructing residential houses and their affiliated facilities.”].

41. Land Administration Law (promulgated by the Standing Comm. Nat'l People's Cong., June 25,

only be circulated within the collective economic organizations, which limits house sites right holders' ability to seek profits from and transfer house sites. Allowing the circulation of rural lands for construction will increase the value of migrants' land property. It will also revitalize the stock of land resources, improve the efficiency and effectiveness of land use, and relieve the pressure of urban residential land. Currently, several provinces have been actively trying to circulate the right to use land for construction of collectives.⁴²

The circulation of the right to use house sites should be divided into three stages. First, the legislature should further amend the Land Administration Law. Rather than limit the circulation of house sites, there needs to be expansion of house site circulation. Second, the supporting system of house sites circulation should be improved. A national platform of land registration and circulation should be built to ensure registration requirements are met. Third, house sites should be circulated subject to certain umbrella restrictions. For instance, changes in property rights relationship should not conflict with land-use plans, national development plans, and special requirements of some mandatory rules.⁴³

2. *To Migrants Who Migrate to Urban Areas —System of Land-Use Quotas*

Migrants who migrate to urban areas can acquire the right to use land for construction through the system of land-use quotas. Under the land-use quotas system, which is based on

1986, revised Dec. 29, 1988, Aug. 29, 1998, and Aug. 28, 2004, effective Aug. 28, 2004) art. 62, translated in <http://www.lawinfochina.com/display.aspx?lib=law&id=3673&CGid=> (China) (“One rural household can own one piece of land for building house, with the area not exceeding the standards provided for by provinces, autonomous regions and municipalities . . . The use of land for building houses should be examined by the township (town) people’s governments and approved by the county people’s governments. Whereas occupation of agricultural land is involved the examination and approval procedure . . . is required. The application for housing land after selling or leasing houses shall not be approved.”).

42. Shenzhen Municipal Government held a news conference and declared that part of the construction land of collective economic organizations can be traded under certain conditions in Shenzhen. Shēn zhèn huò guó tǔ bù tè pī nóng cūn jí tǐ tǔ dì fāng, SINA FIN., (Jan. 18, 2013, 12:55 PM) <http://finance.sina.com.cn/china/dfjj/20130118/125514331787.shtml>.

43. Caiyan, *supra* note 34, at 39–41.

the urban population and urban land stock, the government endows every urban resident with 'virtual house sites' for free to protect urban residents' right of residence. In its operation, the government can figure out the average population volume rate based on the quotient of the total area of housing land and the total urban population. The government may then use this result as basic land-use quotas of every urban resident.⁴⁴ Urban residents can obtain basic and free land-use quotas supplied by the government upon birth. They can acquire realistic quotas after calculating differential values of land. Land-use quotas of different areas can be converted by setting a national system of differential values of land calculation.⁴⁵

Thus, the governmental departments should establish a nationwide market of land-use quota circulation. This would allow land-use quotas to be circulated as a type of property right. The land-use quota circulation market can eliminate legal barriers on interchange between urban and rural land; realize the inter-regional interchange of urban housing land-use quotas and the right to use house sites; and promote the deconstruction of the dual structure of town and country in China.⁴⁶

C. Reforming the Religious Legal System

As a multi-religious country, comprehensive law and corresponding local regulations must be enacted to prevent serious religious conflicts⁴⁷ in the process of integrating climate change-induced migrants with local residents. China's religious legal system should: (1) establish the importance of freedom of religious belief, (2) strengthen the protection of freedom of religious belief, and (3) add liability provisions on protection of freedom of religious belief.

44. Haifeng, *supra* note 39, at 218–36.

45. Lu Jingni, Research on the Urban Residential Land Quota System 23 (2013) (unpublished Master's dissertation, Tsinghua University) (on file with author).

46. Jingni, *supra* note 45, at 24.

47. Wang Zuoan, *The Review and the Consideration on the Religious Legislation of Our Country*, 3 *STUD. IN WORLD RELIGIONS* 11 (2008).

1. *Establishing the Importance of Freedom of Religious Belief*

Article 36 of the People's Republic of China's Constitution endows citizens with the fundamental right to enjoy freedom of religious belief, and any normal religious activity is protected by the state.⁴⁸ The Constitution claims that every citizen must perform the duty of respecting other citizens' freedom of religious belief. Therefore, freedom of religious belief is an important principle in the administration of religious affairs. According to the above principle, the governments of climate change-induced migrants' resettlement areas should encourage the essential understanding of freedom of religious belief between climate change-induced migrants and local residents and guide different groups to respect each other's religious beliefs. This approach would prevent disputes caused by different religious beliefs.

2. *Strengthening the Protection of Freedom of Religious Belief*

First, in line with the Chinese Constitution, the Chinese government should protect normal religious activities. Normal religious activities include holding religious ceremonies, publication of religious books, religious endowments, and selling religious articles. These activities must be approved by religious organizations and the government beforehand, and religious believers must carry out these activities within the limitations prescribed by law. Any state organ, public organization, or individual may not interfere with the above normal religious activities. Religious believers must respect other citizens' freedom of religious belief while carrying out their own normal religious activities and may not conduct illegal and criminal activities under the banner of religion.⁴⁹

48. Xinfra art. 36 (2004) (China). ("Citizens of the People's Republic of China enjoy freedom of religious belief. No state organ, public organization or individual may compel citizens to believe in, or not to believe in any religion; nor may they discriminate against citizens who believe in, or do not believe in, any religion. The state protects normal religious activities. No one may make use of religion to engage in activities that disrupt public order, impair the health of citizens or interfere with the educational system of the state. Religious bodies and religious affairs are not subject to any foreign domination.").

49. Ma Ling, *The Exercise of the Right to Enjoy Freedom of Religious Belief*, NANJING U. L. REV. 136 (1999).

Second, the right to conduct normal religious educational activities of professional religious personnel should be protected. Professional religious personnel refer are those who have been recognized and recorded by lawfully registered religious organizations and have been put on record by the state bureau of religious affairs.⁵⁰ Professional religious personnel's duties include managing property of religions, enrolling believers, presiding over religious educational activities, and other legitimate activities. These activities should be protected by legislation and proper execution.⁵¹

Finally, pseudo-religious activities should be proscribed by law. China's ethnic issues and religious issues overlap, and religious conflicts usually result in ethnic conflicts directly. It is difficult for the government to deal with this complicated problem. In recent years, some ethnic separatists have used religious passions and sentiments to create clashes among different religions, denominations, and even among believers of the same religion. This has triggered a series of serious incidents and harmed social stability. The ethnic separatists who carry out pseudo-religious activities should be prevented from doing so and punished severely. Unfortunately, as China's religious legal system is not complete, criminal suspects involved in such activities receive only criminal penalties.⁵² In order to prevent pseudo-religious activities, specific regulations on religious criminal prevention should be added to the religious legal system.

50. Regulation on Religious Affairs (promulgated by State Council, July 7, 2004, effective Mar. 1, 2005) art. 27, *translated in* http://www.sara.gov.cn/gb/zcfg/20100423-01-37d8114b-0a1c-11da-9f13-93180_af1bb1a.html (China) ("A religious worker may engage in religious affair activities after he has been confirmed by the religious body and archived in the department for religious affairs under the people's government at the county level or above."). [hereinafter, Regulation on Religious Affairs]

51. Regulation on Religious Affairs, *supra* note 51, art. 29 ("Religion undertaking personnel shall be protected by law when presiding over religious activities, holding religious ceremonies, arranging religious codes and records, and carrying our religious and cultural researches, etc.").

52. Wu Mu, *The Study on Legal System of Religion Freedom* 33–38 (2006) (unpublished Master's dissertation, Suzhou University) (on file with author).

3. *Adding Liability Provisions on Protection of Freedom of Religious Belief*

No liability provisions on violations of freedom of religious belief exist in China's existing laws and regulations. China's Criminal Law merely has a provision on the criminal liability of workers of state organs who illegally deprive citizens' right to religious beliefs.⁵³ Also, there are no specific provisions in Criminal Law, General Principles of the Civil Law, or Administrative Procedure Law regarding the same infringement acts of other social organizations and individuals. In this situation, the people who infringe upon other people's freedom of religious belief bear no criminal, civil or administrative liability. Thus, provisions of liability on infringing upon another citizen's freedom of religious belief should be added into the existing religious legal system to more effectively protect the freedom of religious belief.⁵⁴

V. CONCLUSION

Both climate change and immigration are major issues of concern in the international community. Moreover, these major issues intersect in generating climate-induced migrants. The stability and security of China and the international community must take seriously the problems introduced by these climate-change induced migrants.

Currently, China does not give enough attention to climate change-induced migrants. Related legislation and regulations are insufficient, and there are only a handful of scholars who conduct research on the status of Chinese climate change-induced migrants. To understand the challenge brought about by climate change-induced migration comprehensively, reasonably, and correctly, this paper focuses on the legal barriers during the migration of climate change-induced

53. Criminal Law (promulgated by the Standing Comm. Nat'l People's Cong., July 7, 1979, revised Mar. 17, 1996, effective Mar. 17, 1996) art. 251, *translated in* <http://www.china.org.cn/english/government/207334.htm> (China) ("Workers of state organs who illegally deprive citizens' right to religious beliefs or who encroach on minority nationalities' customs or habits, if the case is serious, are to be sentenced to two years or fewer in prison or put under criminal detention.").

54. Ma Jijun, *The Brief Talking About the Issue of Legal System Construction of Minority Religious Belief*, NAT'LITIES RES. IN QINGHAI, Feb. 2001, at 75.

migrants and the legal countermeasures in removing these obstacles.

By analyzing the concrete problems in the migration process of climate change-induced migrants of Tuanjie village and Kaiyuan city, a summary of three legal barriers that Chinese climate change-induced migrants face is shown. These barriers consist of obstacles during the change of identity, change of property and religious conflicts between migrants and local residents.

The obstacles during the change of identity are reflected in the limitations of current household registration system. It is extremely difficult for climate change-induced migrants to obtain residence registrations in resettlement areas. Consequently, climate change-induced migrants usually suffer from unfair treatment in terms of political rights and social life. They are faced with insurmountable difficulties in the process of integrating into the resettlement areas.

The obstacles during the changes in property are caused by the current land management system of China. Climate change-induced migrants are unable to move their real estate, such as cultivated land, house sites and land for construction, out of the places from where they migrate. The limitations of the household registration system and land management system prevent climate change-induced migrants from obtaining the corresponding rights and interests on land in their resettlement areas. This has a negative impact on the survival and development of migrants.

In addition to the obstacles during the change of identity and property, religious beliefs can create additional obstacles for climate change-induced migrants during integration into their resettlement areas. Because China is a multi-religious country, there is a high likelihood of serious religious conflicts among climate change-induced migrants and local residents.

Based upon this in-depth analysis of the legal barriers that Chinese climate change-induced migrants are faced with, this paper tries to propose some legal countermeasures to remove these obstacles. In addressing the obstacles during the change of identity, a unified identity system should be established wherein the citizens should not be divided into “urban accounts” or “rural accounts.” This would allow all farmers to enjoy equal social security rights and public services as their urban counterparts. Similarly, the basic pension insurance system and the urban social security system should be

reformed. Additionally, the legal system of agricultural insurance should be improved simultaneously to ensure that farmers who exit from the rural social security are accepted by the urban social security system, while migrants who exit from the urban social security system are likewise admitted into rural social security system. Once conditions mature, China should abolish the current household registration system and establish a system of urban residence certificates, which would be fair and flexible.

With regards to removing the obstacles during changes in property, the specific standard of substitution of the right to the contracted management of land should be specified. Articles that limit circulation of house sites should be amended by the legislature, in order to provide a legal basis for circulation of house sites under certain conditions. To facilitate the transaction of the right to use house sites, a national platform of land registration and circulation should be built. To promote the deconstruction of dual structure of town and country in China, and realize the interchange between the right to use land for construction and the right to use house sites, the system of land-use quotas should be established. Under the land-use quotas system which would be based on the number of urban population and urban land stock, the government would endow every urban resident with "virtual house sites" for free in order to protect urban residents' right of residence, and promote the circulation of land-use quotas in the land market.

Finally, the paper provides legal countermeasures for removing the religious obstacles. These countermeasures include establishing the importance of freedom of religious belief, strengthening the protection of freedom of religious belief, and adding liability provisions for the protection of freedom of religious belief, which are aimed at reducing religious barriers for upcoming large-scale climate change-induced migration in China.