

Can China's Reservoir Resettlement Promote Urbanization? A Case Study

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This paper investigates displacement and resettlement in China induced by hydro-engineering projects. In this current transitional period of urbanization, the form of rural to urban reservoir resettlement studied in this paper is exemplified by the resettlement practices induced by the Qingshanzui reservoir project in the Yunan province. This paper contends that in practice, the new approach to resettlement has relieved short-term pressure on the associated reservoir project and has successfully improved living conditions and stimulated the recovery of the livelihoods of those resettled. However, instances of insufficient preparation before the resettlement, distribution of collective property, and social adaptation have resulted in negative consequences arising from resettlement. The results or as well as the decisions prior to resettlement have also been drastically affected by differing local conditions.

Keywords: *reservoir resettlement; rural-to-urban; planning; practical consequences; urbanized*

The paper looks at China's "reservoir resettlement" – local farmers were displaced and resettled to an urban area to make way for the construction of the Qingshanzui reservoir in Yunnan province. This paper does not intend to compare how China's reservoir resettlement differs from other types of resettlement, but aims to examine whether such resettlement fulfills its intended purpose of promoting local urbanization. In order to achieve this, we must investigate the resettlement process and practical consequences to pursue a better understanding of the conjunct practices of reservoir resettlement and urbanization.

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“Reservoir resettlement” (*Shuiku Yimin* in Chinese) is a term widely used not only in academic publications, but also in policy and media reports, referring either to the displacement and resettlement induced by dam and reservoir projects, or the persons affected by such resettlement. Conventionally, such resettlement occurs when the affected population is arranged to move to another rural area in order to make way for a development project. This process, however, is sometimes hampered by difficulties to satisfy the conditions of rural-to-rural relocation. In these circumstances, a limited amount of urbanized resettlement has also been practiced. For such rural-to-urban resettlement, including those resettled into urban or peri-urban areas, the displacement scale of population, compensation, public participation, and gender issues have all been raised as issues needing careful consideration to the administrative powers and financing players (World Bank, 2003). Encouragement of urban resettlement normally refers to the opportunities for development, particularly to enhance higher-quality housing and land consolidation (World Bank, 2003) which are closely relevant to urbanism (Ma, 2002).

To hit two birds with one stone, the promotion of urbanization is becoming another aim of local governments, associated with reservoir resettlement. Predicted to reach an urbanization rate of 60% by 2020 (Chang, 2012), China is facing an obvious regional imbalance in its “urbanization” trend (Xinhua, 2012b). The level of urbanization in Eastern and North-eastern China has exceeded 55% (Chai, 2010) while the goal for the Midwestern region is set at 45% in 2015, when the “Twelfth Five-year” Plan of Western Development period ends (NDRC, 2012). Some areas that have lagged behind, for example the Yunnan province (Huang, et al., 2010), Guizhou province (Wang, 2006) and Chongqing municipality (Xinhua, 2012a), have put forward corresponding policies to advance the rural population’s gradual movement to urban areas. Therefore when available, rural to urban displacement and resettlement are encouraged by local governments.

In the Yunnan province in south-western China, the resettlement practice induced by *Qingshanzui* (hereinafter as Q) reservoir project has been officially publicized as an “innovative” resettlement strategy in urban apartments (*Chengshi loufang anzhi*, In Chinese) (Zheng et al., 2011). This literal translation is too obscure to describe the approach adopted in Q reservoir resettlement properly. Thus we define this approach as rural-to-urban resettlement-in-group which will be elaborated upon below.

Based on an overview of the common practices of reservoir resettlement in China, we can trace the overall process of Q reservoir resettlement to examine the resettlement results and what is new in practice. Based on secondary literature (Wang, 2012, Zheng, 2011, Huang et al., 2010), media reports and fieldwork conducted in 2012 including observation in resettlement and project sites, as well as interviews with the affected persons, local officials, and randomly selected citizens, we can generate a general review of China’s reservoir resettlement from the characteristics and the conventional notion of rural-to-rural resettlement to some experiments of rural-

to-urban resettlement. We then explore the Q reservoir project in a more regional context before summarizing relevant national and local regulations, and clarify local resettlement set-ups which have been markedly revised after a small scale pilot rural-to-rural resettlement. We then go on to explore the implementation of the new rural-to-urban plan with urbanization considerations from decision makers.

CHINA'S RESERVOIR RESETTLEMENT

The Characteristics of Reservoir Resettlement in China

Development activities can cause displacement and resettlement (De Wet, 2006, McDowell, 1996) and pose impoverishment risks with adverse impacts on the involuntarily affected people (Cernea, 2000, 1999). Though this form of development-induced displacement may also provide an opportunity for improvements, termed as resettlement with development (McDonald et al., 2008). In order to protect the affected people, influential organizations, for instance the World Bank (2003), have compiled sets of safeguard policies with three key guidelines proposed for both the planning and implementation of resettlement activities. These three principal guidelines are to minimize negative impacts on re-settlers; to enhance individual participations; and to support livelihood recovery and increase living standards of the affected population.

China's reservoir resettlement has so far been in accordance with the conditions set by the nation. In recent years, the country has required an increasing amount of resources to sustain its rapid economic growth (Klare, 2006) and has led to the emergence of large numbers of hydro-engineering projects nationwide for the purposes of electricity generation, water supply, flood control and so forth. Such projects, normally large-scale and tagged as development, not only require significant investment and resources, but also are always accompanied by large amount of land acquisition, housing demolition, and massive population relocation. This is exemplified by the Three Gorges resettlement, where official records of the affected population who lost land and/or left their homes predict the number to be in the realm of 1.13 million. This number is often debated by scholars and reporters of which some have estimated larger numbers, even around 2 million (Webber, 2012). Furthermore as estimated, China's population affected by displacement and resettlement directly induced by reservoir projects has reached a total of 19.3 million by the end of 2008 (Xinhua, 2010).

Like other reservoir resettlement experiences in the world, China's reservoir resettlement cases are also involuntary. In the literature, reservoir resettlement is classified as one form of forced migration (Boyle et al., 1998) and is treated as a result of development (Li et al., 2001). Li et al. (2001) further claim that reservoir resettlement is different from other types of forced or involuntary migration caused by

political or environmental reasons: firstly, governments are more influential in resettlement induced by development activities, particularly in infrastructure projects, in which they often act as major project planners and decision makers; secondly, a typical reservoir resettlement can be planned with negotiation and schedules along with the project's progress, avoiding sudden changes caused by political conflicts and environmental disasters; thirdly, reservoir resettlement is irreversible as reservoir inundation land has been submerged and re-settlers would never be able to return to their homeland. Thus, China's reservoir resettlement is more complicated with a broader influence than just what the numbers imply, represented by and not simply the Three Gorges resettlement. However, there remains a dilemma of rural-to-rural resettlement and the urbanization trend are calling for proper changes and transitions.

Policy Orientation and Practical Limitations

Large hydro-engineering projects are normally constructed in rural areas and therefore local residents form the majority of those affected. *Regulations on Land Requisition Compensation and Resettlement for Construction of Large and Medium-sized Water Conservancy and Hydropower Projects* (Decree of the State Council, No.471) (State Council, 2006a) is a national policy guiding reservoir resettlement. Within this, article 13 indicates the underlying principle of rural resettlement planning in that agricultural production is to be maintained with full concerns of local factors, seeking not only better production and livelihood conditions but also taking into consideration environmental protection. If the conditions permit, the rural resettlement plan can be made associated with small town building. Additionally, article 24 specifies that local governments of resettlement sites above the county level are responsible for the organization and implementation of reservoir resettlement. Hence, rural-to-rural resettlement led by local governments, with land allocated as the means of production, has been the dominant approach for reservoir resettlement in China.

However, such resettlement is now facing difficulties in terms of the contradiction between people and land, unbalanced demand and supply of rural infrastructure, and labor migration. Firstly, China's human-land relationship is strained in that the per capita area of cultivated land is less than 40 percent of the world's average amount. The total area of high quality cultivated land is decreasing sharply with extensive management, with further problems caused by illegal land use activities that are prevalent (Xinhua, 2008). Further, considering realistic conditions, the difference between resettlement approaches can also cause problems: short distance rural-to-rural resettlement can lead to restricted land resources that unable to support the livelihood restoration of affected people, while long-distance rural-to-rural resettlement can bring social, economic and cultural difficulties simultaneously (Li et al., 2001). Secondly, a lack of rural and agricultural infrastructure can occur. This can be shown for instance, in the Yunnan provincial government which sets the building of drinking water supply network, irrigation and conservancy works,

transportation and other infrastructure types as major objectives in increasing rural livability (Yunnan Daily, 2014). Thirdly, non-agricultural employment in cities and towns of the displaced rural labor force is outstanding posing the institutional dilemma in that it has become difficult to justify the rationality and feasibility of designing rural resettlement for these people. Thus, the comprehensive difficulties of rural resettlement have on occasion caused the experimental practices of urbanized resettlement.

Encountering Urbanization: Experiments of Urbanized Reservoir Resettlement

To address the problems of rural-to-rural resettlement, rural-to-urban resettlement has been proposed and experimented either in a dispersed or small-scaled manner in the areas with comparatively good socioeconomic conditions and insufficient per capita cultivated land, particularly south-eastern regions (Guo, 2006). Examples include the resettlement induced by the Feilai Gorge reservoir (Zeng, 1999), Shanxi reservoir (Han, 2007; Du, 2007), Three Gorges reservoir (Wilmsen et al., 2011, Brown et al., 2008) and others. Small cities and towns are usually the recipient sites where secondary industry and tertiary industry are to be improved. This is accompanied by the reconstruction of the livelihoods of the affected people, with high-quality, high-productivity, and high-efficiency agricultural production modes. However, Li et al. (2001) reveal that the rural-to-urban resettlement caused by the Three Gorges Project has in practice resulted in a limited ratio of re-settlers' attaining successful employment. The cause of this appears to be local protection of original urban dwellers, and some institutional problems against the population registered as rural in the *Hukou* system. Wilmsen et al. (2011) points out that in some resettlement sites, the Three Gorges benefit-sharing activities for re-settlers have resulted in inequality and poor livelihood recovery. In general, the income of the resettled is barely enough to afford basic living expenses and their employment in local enterprises is unstable and unsustainable. Thus, generally speaking, urbanized reservoir resettlement in China has been trialed in small numbers and has faced unclear challenges. In short, it demands new explorations and attempts to adjust the need to resettle a considerable amount of affected people to the nationwide government-led urbanization.

Q RESERVOIR PROJECT AND ITS REGIONAL CONTEXT

Qingshanzui reservoir, built mainly for urban flood control and irrigation, as well as urban industrial water supply, is located in Chuxiong city, 14.5 km² from the city Centre, in Yi Autonomous Prefecture of Chuxiong (hereinafter as Chuxiong prefecture), Yunnan province. With an inundated area of 7.7 km² and a storage capacity of 108 million m³, Q reservoir is a large scale project approved by the National Development and Reform Commission (NDRC) as one of the 12 key projects in

western China. As Table 1 shows, the project's preliminary design was approved by the Ministry of Water resources in January 2007. One month later, main construction works started and in accordance with the project schedule, the planned year of completion had been 2009 which had been achieved.

Table 1: Progress of Q reservoir project

Time	Project progress
May of 2003	Project proposal approved by NDRC, as a regional key project
October of 2005	Feasibility study approved by NDRC
January of 2007	Preliminary design of the reservoir approved by Ministry of Water resources
February of 2007	Main work of the reservoir construction started
August of 2009	Reservoir impoundment

Source: YNWCB (2009)C; Yunnan MOFCOM (2011); and interviews.

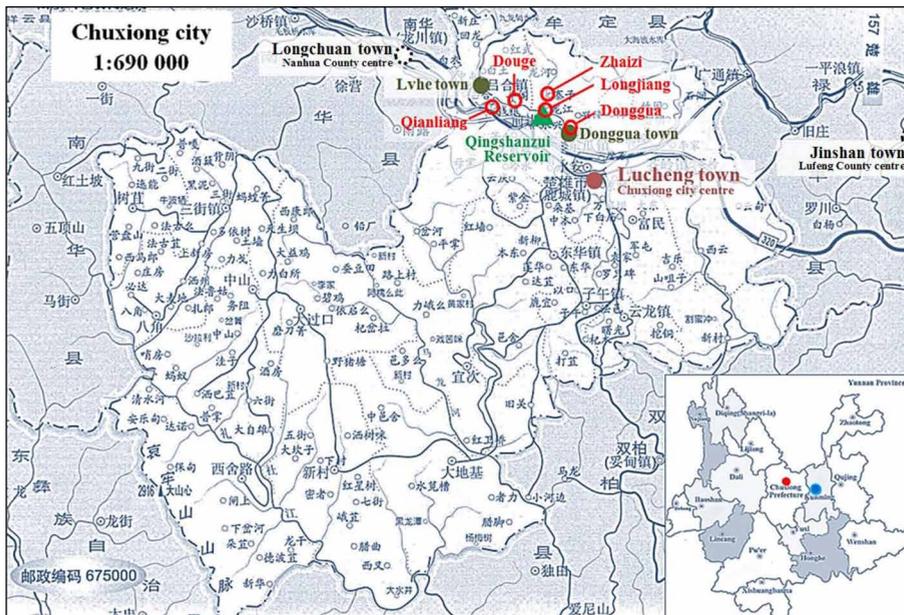


Figure 1: Geographical location of case study area

Figure 1 and Figure 2 show the project location and built-up scene of the Q reservoir. The project has displaced households from 5 villages of Lvhe town and Donggua town. Rural-to-urban resettlement-in-group has been practiced to resettle

the major population affected with a resettlement site built in Lucheng town, the prefectural seat, before the project's completion in 2009.

Close to the provincial capital of Kunming, Chuxiong prefecture is located in the watershed area upstream of Jinsha River and Yuan River with more than 20 different ethnic minorities in the region. Chuxiong city is the prefectural capital which means that according to the administrative division, Chuxiong city is the core area of the broader Chuxiong prefecture.



Figure 2: Q reservoir

Lucheng town is Chuxiong city's central area where the rural-to-urban resettlement site is located (Chuxiong, 2014b). According to local statistical data, the area of mountainous land in Chuxiong city makes up 91.9% of its administrative area which is 4,433 km² and makes this region dependent largely on its agricultural economy. Major economic crops include edible mushrooms and camellia (Chuxiong, 2014b). As a result, the urbanization rate of Chuxiong city was just 45.5% in 2010, below the national average. The local government aims to achieve a goal of 55% by the end of 2015 (Chuxiong, 2014a), while the 2015 goal of Chuxiong Prefecture is to reach 40% (Li, 2012).

Q RESERVOIR RESETTLEMENT: RURAL TO URBAN RESETTLEMENT AS AN ALTERNATIVE

After a small scale pilot in 2006, the Q reservoir resettlement project has encompassed three years from 2007 to 2009. On its completion, 1,833 households containing 7,249 persons had been resettled from 5 villages in 2 towns, which are the villages of Qianliang, Douge, Zhaizi, Longjiang and Donggua, as well as the towns of Lvhe and Donggua. After a failed plan to relocate people in the rural area of Chuxiong City, Nanhua County and Lufeng County, a rural to urban resettlement plan was proposed and the majority of re-settlers had finally been resettled in Liziyuan community in Chuxiong city Centre. Something to note however, is that though termed as resettlement-in-group, the affected people in this case have been resettled in urban apartments within one administrative community constructed on determined purpose for Q reservoir resettlement, not in the form of scattering them around the city (see the locations in Figure 1 and the timetable of resettlement practice in Table 2).

Table 2: Progress of Q reservoir resettlement

Time	Project progress
2006	Pilot rural-to-rural resettlement
2007.5-7	Affected people refused to be rural-to-rural resettled
2007.8-2008.10	Negotiation and revision of resettlement plan
2009	Resettlement completed

Source: Interviews.

National and Provincial Policy of Reservoir Resettlement

At the national level, governmental policies to regulate reservoir resettlement practice in China, apart from broader laws and regulations relating to land, water, forestry, agriculture, environmental protection, minorities, preservation of antiques, etc., include two direct-relevant regulations about reservoir resettlement. One refers to the *Regulations on Land Requisition Compensation and Resettlement for Construction of Large and Medium-sized Water Conservancy and Hydropower Projects* (Decree of the State Council, No.471) (2006a). This regulation, based on the Land Administration Law and Water Law, have been enacted to guide compensation standards of land requisition and resettlement, this is to safeguard the rights of the population affected by water conservancy and hydropower engineering projects. Another such regulation is the *Advice on Improvement of Follow-up Support Policy for Large and Medium-sized Reservoir Resettlement* (GF [2006], No.17) (2006b). This policy is aimed at offering long-term support specifically for reservoir resettlement projects in order to aid in the recovery and pursuit of sustainable development. A notable means written in the Advice is that it is going to provide CNY 600 per capita annually for a period

of 20 years for each person resettled for reservoir projects. Further detailed rules and regulations have been set up in this aspect, albeit at a regional level.

The policy basis for reservoir resettlement in the Yunnan province includes its 1999 Land Administration Regulations, 1997 Forestry Administration Methods, 1996 Regulations on Basic Farmland Protection, etc. For reservoir resettlement, there are four specific rules, these regard resettlement management (YZF [2005], No. 81), the standards of resettlement compensation and land requisition (YZF [2003], No.53; YYJ [2007], No. 159), and further opinions on implementation practice (YZF [2008], No.24) respectively¹.

Rural resettlement plan dissatisfaction and responses from the local government

The initial plans included thirteen rural and two urban resettlement sites, referring to six rural and two urban resettlement sites in Chuxiong City, two rural resettlement sites in Nanhua County and five rural resettlement sites in Lufeng County respectively². Only the two urban resettlement sites in Chuxiong City are without attached cultivated land. Such arrangements were made as planners believed that land-based resettlement could secure quicker livelihood recovery of the affected rural population in consistence with past experience.

However, something went wrong. From May to July in 2007, when the local government organized a series of activities to mobilize the rural affected people to move to rural resettlement sites, the majority of affected people refused to move out. Some even refused cross town resettlement within Chuxiong City. In the meantime, local residents in Nanhua County and Lufeng County refused to welcome the re-settlers and they proposed additional conditions to accept the relocation, for instance more infrastructure input and a higher price for local land acquisition which were not directly involved with the Q project. Thus, local governments could hardly satisfy both sides with the affected population proposing that they would rather be relocated in Chuxiong urban/suburban area. In order to secure the reservoir construction and broader public interests, in August, the Chuxiong city government and resettlement Bureau of Chuxiong Prefecture proposed a new method to relocate the population to direct-built urban apartments. This proposal, with other supplementary options for affected households to select, was reported as the Urban Apartment Resettlement Plan of Qingshanzui Reservoir Project (*Qingshanzui Shuiku Jianshe Banqian Chengshi Loufang Anzhi Fangan*, in Chinese), and approval by the government of Chuxiong prefecture in December, 2007 in the document of CZF [2007] No. 90. In 2008, supported by explanation meetings and household negotiations organized local officials, each affected household agreed to the conditions, selected the resettlement method and signed the Agreement on the Displacement and Resettlement induced by Qingshanzui Reservoir Project in Chuxiong Prefecture (*Chuxiongzhou Qingshanzui Shuiku Gongcheng Yimin Banqian Anzhi Xieyishu*, in Chinese).

Table 3: Resettlement options and selections by re-settlers

Resettlement option	Major measure	Re-settled population	Ratio (%)
Urbanized resettlement	<p>Urban resettlement in L community</p> <p>Annual living subsidy of CNY 250 per capita for 20 years; Large and Medium-sized Reservoir Resettlement Follow-up Support for original re-settlers⁴;</p> <p>Frontage shops in resettlement community as collective property to support living subsidy payment;</p> <p>35 square meters apartment area per capita at cost price and excess area at market price;</p> <p>Diversified training to enhance livelihood skills for employment.</p>	6,679	92.6
Rural resettlement	<p>Urban land-parcel resettlement</p> <p>Allocate land for house sites of re-settlers based on land acquisition in urban areas</p> <p>Re-settlers build their own houses according to integrated planning</p> <p>Recover production based on land adjustment</p>	356	4.9
Monetized resettlement	<p>Resettlement based on re-settlers with one-off monetary payment of personal property and compensation</p>	33	0.5
Total	--	7,214	100

Revised Resettlement Options, Selection and Implementation

According to its original resettlement plan, in the planning year of reservoir inundation, the planned resettlement population is 6,818 with 5,578 affected persons to be resettled in rural areas; a ratio of 81.8%. Other proposed supporting resettlement methods include relocation to other towns and cities, monetary resettlement and backward resettlement. Resettlement implementation has been divided into three phases. The first pilot phase was started in January 2006 with 234 persons resettled in rural areas. However, though the second phase of resettlement was scheduled to begin in February 2007, the Nanhua-Lufeng incident occurred and the majority of those to be re-settled refused to be moved into rural areas of other administrative zones. Those affected appealed for higher compensation standards and requested to be urban resettled².

In order to catch up with the progress of reservoir construction, local authorities were forced to rethink and reassess the resettlement plan. As a result acceptable to both sides, rural-to-urban resettlement-in-group has been proposed. The urban resettlement site, Liziyuan community (hereinafter referred to as L community) is located in the urban construction area of Lucheng town, where Chuxiong city government's headquarters is located. Based on the free choices of households, by the end of June 2009, it completed the displacement and resettlement of 1,831 households, and relocated 7,214 persons in total. See in Table 3 for explanations of all options and the selections of affected people.

PRACTICAL CONSEQUENCES OF Q RESERVOIR RESETTLEMENT

Reservoir resettlement practices share similarities. However, experimental attempts can always bring particular results beyond the original plans. Hence, it is important to find out key impacts and problems caused by the Q reservoir resettlement.

Direct Impacts on Re-Settlers

Housing impact and community infrastructure improvements

Housing is fundamental for daily life and a shining point of the new practice according to local officials. It has adopted normal urban community planning in the design and construction of the resettlement apartments, with three area types available which are 70 square meters, 105 square meters and 140 square meters. Each re-settler can purchase 35 square meters of area at cost price. If the re-settled family selects a larger apartment than the basic 35 square meters, they can purchase the excess area at market price. Compared to their mud farmhouses and wooden houses, re-settlers are now living in modernized apartments accompanied with an

exclusive kindergarten (Figure3 and Figure4). Additionally, in terms of community management, safeguard and emergency mechanisms have been established to call on re-settlers to enhance public participation and share feedback. Secondly, a special community management committee has been formed since the relocation. With partially open recruitment, it can also provide employment opportunities for re-settlers to engage in community affairs. The committee has thus far worked positively and helped set up several service branches in the community, including a community service centre, health clinic, employment information office, etc. Furthermore, as re-settlers in the community encompass ten different ethnic groups, the local government and management committee takes ethnic minority issues seriously. For instance, they help organize the left-foot dance team of the Yi minority in the community, and have built a mosque for the Hui (Muslim) minority (Figure 5). Though the local government has not yet fully addressed all the issues regarding ethnic minorities beyond physical needs, the building of infrastructure is an important first step.



Figure 3: L community



Figure 4: Kindergarten on the resettlement site



Figure 5: Mosque on the resettlement site

Livelihood impact

Every re-settler worries about his/her livelihood recovery and would like to restore the pre-settlement level. Furthermore, the purposes of resettlement are not only to move people out, but also to maintain the original living standards and pursue sustainable livelihoods of the affected population (Cernea, 1999). First for the Q reservoir resettlement, three methods have been developed to secure the livelihoods of re-settlers (see details in Table 4). Frontage apartments have been released to retailers as the community's collective property to earn rent as collective income. Secondly, as they have begun to face urbanized resettlement which lacks attached farmland, the community committee has organized specific activities to increase employment opportunities, as well as skill training courses for different groups of re-settlers, categorized by gender and age in order to transfer to other areas of employment. In addition, led by the local government, re-settlers' livelihoods recovery have also been tied to the development of local small firms. According to the 2012 statistics, in the sectors of mushroom cultivation and ethnic-style embroidery, it has successfully employed 4,044 re-settlers, taking up 96% of the resettled labor force.

Inadequate Preparation for Resettlement in Newly-built Urban Apartments

The resettlement plan for the L community was created with no alternative options as it was born as a last minute product, pressured by the time limitation to secure reservoir construction. Therefore, as a result of game equilibrium, it can hardly escape some endogenous weaknesses. The key concerns of the project regard execution efficiency of resettlement policies, inappropriate fund management, and the lack of a proper means to protect re-settlers' rights. A major problem is that the hasty decision of the L community construction, mainly due to financial difficulties

in fulfilling land-transferring fees, land-use fees, and community construction payments, has resulted in irregularities and the occasional bent rule. This has resulted in re-settlers not being able to transact their property certificate of the apartments as scheduled. Additionally, the *de facto* status of such rural to urban re-settlers can also be viewed as landless farmers. This has the potential of causing controversy and could be problematic, particularly regarding the gap and non-equivalence between re-settlers' former "endless" rights to the use of their original rural homestead, and the limited period of ownership of their new urban housing property.

Table 4: Supporting methods to restore livelihoods in Q reservoir resettlement

Item	Beneficiary objects	Methods	Financial sources
Living subsidy	All re-settlers	CNY 250 per capita per month for 20 years; increased to CNY 300 in 2012	Land acquisition compensation,, reservoir earnings, financial support from local governments
Collective income	All re-settlers	Equally share to individuals and mainly to pay community management cost	Community frontage rents or operative income (Fig.6.)
Follow-up support	Re-settlers registered as agricultural population	CNY 600 per capita per year for 20 years	Appropriation from central government



Figure 6: Frontage shops

Lack of Cohesive Mechanism to Enhance Rural to Urban Transition

Urbanization is a hugely complex project (Lin, 2007) which does not end simply after moving the rural population to urban areas, but also encompasses economic structural reform, industrial upgrades and sustainable development. Rural to urban re-settlers are facing many transitions, that of identity, economic conditions and social status. However, the objective existence of rural-urban gaps creates potential obstacles in the future. Generally speaking, it may affect the income, education, healthcare, daily consumption, employment, and public finance of those re-settled (Xiong, 2006). In many regions, dual structural policies and regulations are enlarging the imbalance. Therefore, the new practice, which was created under considerable time pressures, will unquestionably face multiple challenges from the aforementioned aspects affected by resettlement. The inadequacy of a consistent mechanism will further question long-term resettlement outcomes and the transition of regional economic restructure.

Changing the status of affected people from agricultural to non-agricultural?

In China's transition, many efforts have been put forward to turn certain types of villages into urbanized areas, particularly those villages-in-the-city (Chung, 2010). However, a major obstacle to this is the confusing identity of rural to urban landless re-settlers, particularly in terms of their status, agricultural or non-agricultural registered in Hukou, the Chinese household registration system (Qin and Zhang, 2014). Aiming to solve this problem, the Yunnan provincial government issued the *Opinions on Strengthening Urban-rural Overall Development to Promote the Transfer of Resettled Agricultural Population to be Urban Citizens* (YZF [2011] No. 188) (Chuxiong Prefecture, 2012) in September 2011 which encourages the change of population status after relocation and loosens relevant administrative conditions. According to specific regulations applied for the Q reservoir resettlement, re-settlers and their family members can settle down in their residential placements. Therefore, it enables the clear identification of the status of re-settlers and has settled the base for further urbanization. However the eligibility for re-settlers to continue their income from resettlement follow-up support requires the agricultural status of their *Hokou*. Thus, it comes with a double-edged situation for re-settlers: whether to give up the subsidizing money or become a landless urban settler with an agricultural status.

Lagged distribution of surplus collective-owned resources and property

Although original residential villages have been flooded as the reservoir area, the distribution of fishery resources and land resources above submerged line could be more controversial. Given this concern, the Chuxiong resettlement bureau has compiled the *Compensation and Distribution Methods of Surplus Resources in Qingshanzui Reservoir Area* (Chuxiong, 2011). However, inadequate fiscal support at higher levels and re-settlers' disagreements on compensation standards proved such methods as

ineffective and have actually induced instability. In the meantime, re-settlers have appealed to process the compensation of collective-owned properties before resettlement, for instance ponds, irrigation canals and ditches³.

In the resettlement community, handling surplus apartments after relocation is an issue that is facing disputes over distribution. Local authority wants to sell them by means of open bidding, auction and listings and wish to use the revenue to support the owed payments of community construction. However, re-settlers have their own ideas over the bidding price. Many insist that surplus apartments shall be sold to the affected persons at market price equivalent in the resettlement year. Up to the time of authors' fieldwork, over three years after relocation, this problem yet has not been resolved. Later by the end of 2013 local report indicates that such apartments have been opened to the public for low-rent dwelling (Chuxiong, 2013).

Uniqueness of social adaptation

Compared with other urban communities, aside from the design and construction, resettlement communities are special in regards to the concept of social adaptation. After relocation, re-settlers, differed in terms of age, gender, education, ethnicity and group, etc., need to adjust their perception, behavior and even daily habits. In other cases the new involuntarily settled urban residents would like to depend largely on local authority and compare their situations unrealistically with the affected people. Apart from the arguments around the responsibilities of local government and some others, such behavior and ideas cannot enhance re-settlers' effective adaptation. In the Q reservoir resettlement, some re-settlers refused to finish their apartment purchase payments after moving in which then broke the capital chain of construction fund repayment with cascading effects. This ended up being an important factor that delayed the processing of apartments' property certificate. The 'urbanized' life-style changes also matter, which has been featured with higher basic living cost and utility fee, as well as social network reconstruction of individuals.

DISCUSSION AND CONCLUDING REMARKS

For the Q reservoir resettlement, as an 'innovative' practice, its short-term outcomes have been widely acknowledged by the interviewed re-settlers. The practice, created as an alternative method in an emergency situation, was hard to fulfill yet has satisfied the follow-up progress of the Q reservoir construction. Having avoided a huge amount of construction costs that would've been needed to meet any project delay, it has allowed the relocation work to proceed in order and has those affected acting in a comparatively harmonious manner. Compared with the World Bank's guidelines, the Q reservoir resettlement was strongly supported by the local government with careful responses to affected people's appeals and considerations about

age and gender of individuals. Therefore it has so far been generally recognized as an effective experiment.

However, whether the practice has promoted urbanization is hard to answer. Since the end of 2011, several re-settlers have successively gone to their local government to make complaints on the lack of efficient solutions to solve leftover problems. This indicates that the completion of displacement and relocation is far from the end of resettlement. For the case of the Q reservoir, the resettlement bureau of Chuxiong City has taken the responsibility and has paid serious attention to the problems. The exposed twenty detailed problems⁴ focused on four aspects; including the concerns about identity status, standards and payment of compensation and living subsidies, surplus resources and property, and improvement of community supporting projects. Hereto, grassroots officials and employees of community management shall take trans-positional consideration of re-settlers and develop practical solutions. If local conditions allow, it shall be helpful to introduce the mechanism of monitoring and evaluation of re-settlers' livelihood recovery in a certain time range to secure safe and steady urbanized transitions. In addition, for long-terms safeguards of re-settlers, policy continuity, changes of administrative personnel, reasonability of fixed standards and funding source security of living subsidies over 20 years, etc., can be critical and risky. Additionally, the latest report indicates that in 2014, the Chuxiong Resettlement Bureau has invested CNY 16 million to construct a market for the L community, as well as CNY 2 million for an agricultural project and CNY 3.58 million to support local mushroom cultivation (Zhang, 2015). Thus, the subsequent financial issues arising can also be critical for examination.

Secondly, in terms of follow-up promotion of such a practice, it needs to be assessed dialectically case by case. Essential local conditions to rural-to-urban resettlement-in-group need to be recognized and summarized. After that, measurements ought to be adjusted for every case to meet the local environment. Therefore, with dual goals to achieve smooth resettlement and to enhance local urbanization, local governments are required to become the major actor to understand applicable conditions of this resettlement method, including supports for local industries, appropriate regional development planning, and matched supply of land resources. Accompanied by localized human-centered operation and careful problem treatments, it can be an opportunity to acquire beneficial outcomes.

The last concern goes to the recent State Council (2014) distributed *Opinions on Further Advancement of Household Registration System Reforms*. The new national policy, released in July 2014, is aimed at strengthening citizenship of the population who are eligible for stable urban employment and urban life, and to carry forward the complete coverage of basic public services, including compulsory education, employment services, basic pension, medical and health services, and housing security, step by step, for becoming de facto urban residents, regardless of their status listed in the household registration system (2014). It has also called for the revision of the household relocation system, innovative population management, legal right safe-

guards of agricultural to non-agricultural transferred population and other residents, and the capacity building of organizational leadership. Hence, it is now a good time to review the Q reservoir resettlement to figure out its advantages and disadvantages, to learn from its lessons, to explore the adaptability for other projects, and to further consider whether and where to promote this practice.

NOTES

1. Information collected during interviews. Specific location of initial resettlement site has not been obtained.
2. Information collected in interviews during the author's field work in August 2012.
3. Information collected through interviews with local resettlement officials.
4. Information collected through interviews.

ACKNOWLEDGEMENT

The authors appreciate the Chinese Scholarship Council for its support of this study.

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