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China's poverty alleviation resettlement: Progress, problems and solutions



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ABSTRACT

Poverty alleviation resettlement (PAR) is a national rural development policy which uses resettlement as a tool for addressing environmental and poverty-related concerns in a rapidly changing world in China. It is regarded as one of the effective ways for the poor shaking off poverty in the implementation process of targeted poverty alleviation (TPA) strategy. Notable progress has been made in poverty alleviation for poverty-stricken people living in regions deemed unable to support sustainable livelihoods while problems have arisen during the process of its implementation. Based on literature review and a field survey, this paper attempts to conclude the beneficial policy as well as typical modes, problems and suggestions which might provide successful experience for regions to effectively implement the PAR projects and promote the management of rural resettlement. This article will offer a holistic and systematic research about China's PAR policy, which will make up for the lack of PAR researches in the context of targeted poverty alleviation. It will offer international experience for ending poverty by 2030 to achieve the Sustainable Development Goals (SDGs).

1. Introduction

The largest scale of development-induced displacement and resettlement (DIDR) is seen in the world's most densely populated countries: China and India (Stanley, 2004; Terminski, 2013; Xue, Wang, & Xue, 2013). It is estimated that more than 70 million people were displaced in China by development projects during 1950–2008 (Maldonado, 2012); 1.3 million have been displaced and resettled by the Three Gorges Dam alone (Tan, Hugo, & Potter, 2013). The development projects in China during the nineties displaced approximately 10.3 million people (Robinson, 2004). Most of these resettlement programs have been involuntary or forced (World Bank, 2004). Displacement and resettlement in China has attracted a particularly large amount of research attention.

In recent years, resettlement has also been increasingly adopted as an effective way for poverty alleviation (Merkle, 2003) or ecologica-l/environmental restoration (Rogers & Wang, 2006). Poverty can be connected closely to environmental and geographic conditions, particularly the "spatial poverty traps" of remote mountainous or arid and semi-arid areas (Bird, Hulme, Moore, & Shepherd, 2002; Bird & Shepherd, 2003; Liu & Li, 2017; Pani & Carling, 2013; Ravallion & Wodon, 1999; Zhou, Li, & Liu, 2019). A major reason for the slow socio-economic development of poverty-stricken and underdeveloped

areas is the vicious cycle of poverty and ecological environment degradation (Cavendish, 2000; Dasgupta, 2003; Dasgupta, Deichmann, Meisner, & Wheeler, 2005; Liu, Wang, & Deng, 2008; Todaro, 1992). Owing to harsh ecological conditions, development of production factors and construction of infrastructure are slow in these areas, so implementing in-situ poverty alleviation in poverty-stricken areas can be extremely difficult. In turn, poverty also contributes to ecological degradation, like land degradation (de Sherbinin et al., 2008), due to the use of low-input agriculture in environmental marginal areas. China's rural poverty, with a distinct spatial agglomeration feature, is mainly concentrated in the remote deep rocky mountainous areas, border areas and minority areas of central and western China and gradually gathers towards the southwestern region (Liu, Liu, & Zhou, 2017). The distribution of poverty in ecologically fragile areas in China presents a geospatial coupling, and negative feedback loops not only jeopardize local ecological protection but also restrain local economic development (Tong & Long, 2003). Villages in mountainous areas or deep valleys with atrocious natural conditions, like China's Karst areas in the southwest and Qinba Mountains in the northwest, are always economically fragile (Liu & Li, 2017). By relocating people from ecological poverty-stricken areas to places with better development conditions, ecological resettlement can achieve several goals at the same time, such as the

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Y. Yang et al.

improvement of production and living conditions, the alleviation of poverty, the development and utilization of land resources and the protection of ecological environment. In China, to prevent further environmental degradation and reduce dust storms, many people in northern and northwestern China have moved away from environmentally fragile regions. These environmental resettlement programs in China have a dual focus of environmental improvement and poverty alleviation (Rogers & Wang, 2006). The focus on poverty alleviation is closely related to the World Bank's policy of resettlement with development, which advocates regarding resettlement operations as opportunities for development. This approach, adopted by China into its own resettlement framework, assumes that resettlement should be more development-oriented, requiring an integrated approach to help resettlers rebuild a self-sustainable production base and habitat (Cernea, 1997). Poverty alleviation resettlement (PAR) is one of China's key poverty reduction initiatives as one national rural development policy which uses resettlement as a tool for addressing environmental and poverty-related concerns in a rapidly changing world. Through this state-led resettlement program, the government aims to improve the living standards and access to infrastructure and services for the rural

Poverty eradication is the first goal of the UN-defined Sustainable Development Goals (SDGs). By the end of 2013, China has completed the registration of the poor population nationwide and identified 128,000 impoverished villages, 30 million poor families and 70 million people (Zhou, Guo, Liu, Wu, & Li, 2018; Liu et al., 2016). China takes the elimination of poverty and the eradication of hunger as primary tasks, while SDGs propose to eradicate poverty in all its forms around the globe, eradicate hunger, realize food security, improve nutritional status, and promote sustainable agriculture by 2030. China also proposes to eliminate absolute poverty and to ensure the entry of all impoverished areas into a well-off society by 2020. To achieve this ambitious goal, China has implemented the Targeted Poverty Alleviation (TPA) strategy and defined the most central poverty alleviation goals during the 13th Five-year Plan (FYP) period as "two-worry-free & three-guarantee" (i.e., to ensure the basic needs of food and clothing for those living in poverty and to guarantee that they have appropriate access to compulsory education, basic medical care, and safe housing). The specific measures of TPA include five measures (the "Five Batches") and one is relocating 10 million of the rural poor in remote areas with harsh living condition to livable places (Wang, 2016; Zhou et al., 2018). As one of China's flagship programs in poverty alleviation (Lo & Wang, 2018), PAR projects involve relocating the rural poor away from their original home to a centralized resettlement site with better facilities and a more accessible location (Liu, Xu, & Li, 2018). In the principle of voluntariness, PAR could improve the living standards, incomes, and the access to infrastructure and services by poor rural people living in areas deemed unable to support sustainable livelihoods (Lo & Wang, 2018).

Over the past years, extensive international researches have focused on development-induced resettlement (Jackson & Sleigh, 2000; Wilmsen, Webber, & Yuefang, 2011; Tilt & Gerkey, urbanization-driven resettlements (Liu, Zhang, & Lo, 2014; Qian & Xue, 2017) and ecological resettlements (Fan, Li, & Li, 2015; Schmidt-Soltau, 2003), little attention has been paid to the PAR policy in the context of targeted poverty alleviation (Rogers, Li, Lo, Guo, & Li, 2019; Zhao & Li, 2018) and limited studies have focused on the PAR program. In particular, few are the English-language literature related with poverty resettlement. So "poverty alleviation resettlement" was used to retrieve all periodical literature by means of "theme", "keyword" and "title" based on relevant literature on China's CNKI (http://www.cnki.net/), respectively. Clearly corresponding to the national implementation of PAR policy, relevant academic studies have been developing very slowly after 2000. It was in the 2002 that the term "poverty alleviation resettlement" first started to appear in scientific publications, the second year after the PAR pilot program was launched. The number of relevant studies did not increase substantially until 2016 (Fig. 1). On the whole

research of PAR started late and developed slowly in China. Extant studies contributed to understanding the PAR's concept definitions and the implementation schemes (Zhao & Li, 2018), identification of poverty alleviation relocation households (Yin, Wang, & Wang, 2017), influencing factors of household participation (Guo, Yang, & Chi, 2017), impact on rural livelihoods (Fan et al., 2015; Li et al., 2018; Liu et al., 2018; Rogers & Xue, 2015), and residents' voluntariness (Lo & Wang, 2018; Shi & Zhou, 2018; Wilmsen & Wang, 2015). Besides, most of the existing studies are based on local practices and case studies and there is a lack of holistic research about this special rural resettlement policy. Currently, the country's PAR programs have made remarkable achievements, yet problems have been increasingly prominent that hinder the effective implementation of the PAR and also affect resettlers' sense of gain. This paper therefore means to make up for the insufficiency of systematic study on PAR's entire progress. It sheds light on the process of PAR policy implementation, attempts to investigate the typical modes and main problems from the nationwide scale, and in particular, puts forward corresponding solutions and suggestions by integrating the data from literatures, online materials and field survey. The second section proposes the method adopted in this article. The third section summarizes the PAR's research progress and evolution stages, with emphasis on the PAR policy in the context of targeted poverty alleviation. The fourth section proposes typical PAR models and the fifth section analyzes the possible risks and existing problems of PAR. This article will provide international experiences for ending poverty by 2030 to achieve the SDGs.

2. Method

This article combines the methods of literature research and field investigation to sum up the progress, typical modes, main problems and corresponding solutions of China's poverty alleviation resettlement. The analysis of introducing China's PAR policy is based on literature review and a quantitative analysis of policy texts including government regulations, national plans, regional programs and official statistics. Besides, an intensive fieldwork was conducted in January 2017 to evaluate the effectiveness of national targeted poverty alleviation work and part of this investigation was to collect data for exploring the possible risks and problems of PAR. It was a questionnaire-based survey about PAR based on structured interviews with resettled households. Interviewees tended to be the heads of household or family members who well master family information. A total of 1,611 valid questionnaires related with PAR were collected in 21 provinces in central and western China, including Anhui (37), Gansu (59), Guangxi (139), Guizhou (73), Hainan (7), Hebei (2), Henan (94), Hubei (240), Hunan (112), Jilin (55), Jiangxi (25), Neimenggu (56), Ningxia (10), Qinghai (49), Shanxi (13), Shaanxi (200), Sichuan (220), Tibet (75), Xinjiang (1), Yunnan (57), and Chongqing (87). The questionnaire related with PAR focused on the progress of this policy implementation and consisted of two parts: (1) Family characteristics, including household size, population structure, family income and earnings structure (family business income, wage income, property income and transferred income); (2) Resettlement situation, including resettlement time, area of new resettlement housing, cost of the new housing (government subsidy, self-collected money and loan), demolition of old houses, and follow-up support measures taken by the government after resettlement (i.e., education, health care and employment). In addition, secondary data was collected from local officials and online (guidelines, media reports, etc.).

3. China's poverty alleviation resettlement

3.1. The evolutionary characteristics of the PAR policy

PAR policy saw its earliest rudiment in local government practice at the beginning of China's reform and opening-up. The "Three-West (Hexi and Dingxi in Gansu Province, Xiji-Haiyuan-Guyuan Area in Ningxia Hui

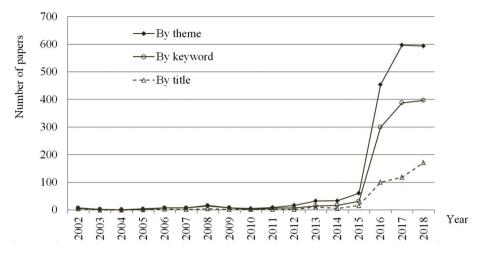


Fig. 1. The statistical charts about "poverty alleviation resettlement" in CNKI during 2002-2018.

Autonomous Region)" agricultural construction plan, introduced in the early 1980s, was a preliminary exploration of PAR. In 1983, in view of the severe drought, water shortage and survival difficulties in the "Three-West" regions, the central government explored the implementation of the "Three-West Village-scale Resettlement" poverty alleviation plan to improve local productive and living conditions and alleviate the degree of poverty; this plan achieved sound economic, social and ecological benefits, and became the pioneer of PAR in Chinese and even world history. In 1994, the government launched the "Seven-Year Priority Poverty Alleviation Program", aiming to solve the subsistence problem faced at the time by 80 million poverty-stricken people in China's rural areas within seven years (1994-2000). During the implementation of this program, PAR became one of the basic ways of carrying out poverty alleviation development and solving the poverty problem in rural China. By 2000, China had made some beneficial explorations of PAR but, on the whole, due to its narrow scope and low national investment, the influence of the program remained very limited (He & Zhang, 2017).

In 2001, the State Development Planning Commission (SDPC) formally proposed the concept of "poverty alleviation resettlement", launched pilot poverty alleviation resettlement in four provinces (autonomous regions)-Inner Mongolia, Guizhou, Yunnan and Ningxia-and later expanded it successively to 17 provinces (autonomous regions/municipalities directly under the central government). In the period of 2001-2010, PAR policy was gradually transformed into a systemic program of overall planning and scheduled implementation. The PAR policy clearly specified the dual goals: eliminating poverty and improving ecology. PAR is both a basic strategy of carrying out targeted poverty alleviation as well as a special support measure aimed at the poverty relief of poverty-stricken people living in regions deemed unable to support sustainable livelihoods. In the 12th FYP period (2011-2015), contiguous poor areas became a priority for poverty alleviation and thus PAR policy was further strengthened. The new idea of non-agricultural resettlement was presented in this period as well. At the end of 2013, the state proposed the strategy of targeted poverty alleviation. In this context, PAR gradually became important ways of poverty governance in terms of realizing targeted poverty alleviation. PAR constituted an important component of the "Five Batches" of TPA in China in the 13th FYP period (2016–2020). To be specific, resettlement attempts to eliminate the causes of poverty from the source, so that rural inhabitants can eliminate poverty caused by the harsh natural conditions in remote and isolated corners thoroughly. According to the national poverty line of 2,300 RMB (2011 constant prices), at the end of 2015, China still had 56.30 million recorded poverty-stricken people, concentrated primarily in the mountainous, hilly and plateau areas of Central China and West China. Their spatial distribution was largely

coupled with ecologically fragile areas. On account of historical, natural, social and many other factors, these poverty-stricken areas have mostly arduous survival conditions, seriously underdeveloped infrastructure and sociocultural construction and low socio-economic development levels on the whole. According to the archival information system of the Leading Group Office of Poverty Alleviation and Development (LGO-PAD) of the State Council, the total number of recorded poverty-stricken people to be resettled roughly amounts to 9.81 million. Based upon previous research (Wang, Fu, & Zhang, 2017; Zou & Xiang, 2017), this study has divided China's poverty alleviation resettlement since its implementation into four stages: the policy rudiment stage (1983-2000), the pilot exploration stage (2001-2010), the comprehensive promotion stage (2011-2014) and the priority poverty relief stage (2015-) (Fig. 2). Since the exploration of PAR was launched in the early 1980s, China's PAR policy has gone through an evolutionary process from targeting only a few regions, through expanding to multiple regions and ultimately to conducting overall design and comprehensive promotion at the national level (Lu & Oin, 2015; Xu & Xiong, 2018).

Since 2001, the PAR-related population scale and investment scale have both presented a trend of rapid expansion (Table 1, Fig. 3). In the 13th FYP period, the total number of recorded poverty-stricken people to be resettled amounts roughly to 9.81 million, 1.44 times the total number of people resettled in the 15 years prior. The investment scale of PAR has experienced an annual average growth of 26%. The investment amount in the 13th FYP period is about to reach five times of the total investment in the 15 years prior (He & Zhang, 2017). From the 10th to the 13th FYP period, central government investment has experienced an annual average growth of 14.2%. Seen from per capita central government investment, the per capita total investment in the 13th FYP period has witnessed substantial growth. The 10th FYP period was the first five-year plan period for PAR in China. In this period, all the PAR funds came from central government investment. From the 11th FYP period onwards, the investment from the central government budget continuously drove more funds from different channels to support PAR construction jointly. From the 10th to the 13th FYP period, the amplification factor of the investment under the central government budget (the ratio of total investment to the investment under central government budget) has risen from 1 to 7.4 and the investment through the central government budget is playing an increasingly significant role in driving other central government funds, local government funds, credit funds and self-raised public funds. After more than three decades of practice, the connotation and extension of PAR has been constantly innovated and PAR itself is playing an increasingly important part in poverty alleviation in China.

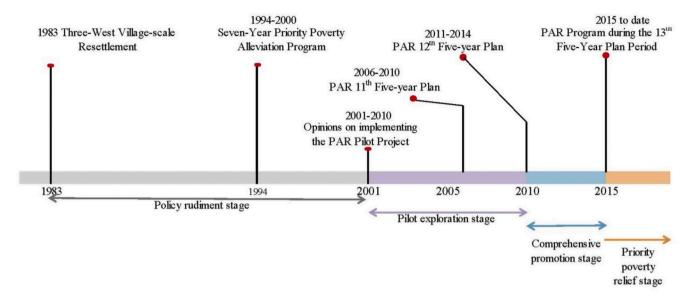


Fig. 2. A timeline of critical policy events in poverty alleviation resettlement.

Table 1 PAR-related people and investment in China since 2001^a.

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Period	Years	Number of resettled people (10,000 people)	Central government investment (100 million RMB)	Per capita central government investment (RMB)	Total investment (100 million RMB)	Per capita total investment (RMB)
10th Five- year Plan	2001–2005	122	56	4590	56	4590
11th Five- year Plan	2006–2010	163	76	4671	106	6515
12th Five- year Plan	2011–2015	394	231	5863	1031	26168
13th Five- year Plan	2016–2020	981	800	8155	5922	60367

Note: In the 13th FYP period, the investment under central government budget only targets recorded poverty-stricken people, so the data in the table uses the number of recorded poverty-stricken people and the corresponding total investment.

3.2. Poverty alleviation resettlement in the 13th FYP period

According to China's current poverty standard, many recorded rural poverty-stricken people live in relatively remote areas with relatively underdeveloped infrastructure, a serious incongruity of land and water resources, extremely fragile ecological environments and frequent natural disasters (such as flood, drought and debris flow). These are exemplified by the Qinghai-Tibet Plateau region, the northwest Loess Plateau region, the southwest rock desertification region, the east acid soil region, the alpine cool region, etc. Conducting PAR to relieve a group of people from poverty constitutes a critical measure in implementing TPA. Accelerating the implementation of the PAR program can fundamentally address the poverty relief and development problems faced by poverty-stricken people.

In the 13th FYP period, a total of 9.81 million recorded resettled people are distributed in about 1,400 counties (cities/districts) of 22 provinces (autonomous regions/municipalities directly under the central government) nationwide (Fig. 4). The poverty-stricken people to be resettled on record can be classified according to environmental conditions as follows: (1) About 1/3 of them (3.16 million) live remote mountains, rocky mountains, remote alpine regions, desertificated regions, regions with serious soil erosion, regions without basic development conditions and regions whose water and soil conditions or photothermal conditions cannot meet the demands of agricultural production; (2) roughly another 1/3 (3.4 million) live in regions lacking transportation, water conservancy, electricity, communication or other

infrastructure, or regions with a serious shortage of basic public service capacities (education, health care, hygiene, etc.); (3) about 1/6 (1.57 million) live in water source reserves, biodiversity reserves, wetland reserves or other prohibited development areas or restricted development areas specified in the National Principal Functional Region Plan; (4) the remainder (1.14 million) live in regions with severe endemic diseases or frequent geological disasters. Seen from the perspective of regional distribution, 12 provinces (autonomous regions/municipalities) in West China have about 6.64 million recorded resettled people, accounting for 67.7%. Six provinces in Central China have about 2.96 million recorded resettled people, accounting for 30.2%. Four provinces in East China (i.e., Hebei, Jilin, Shandong and Fujian) have about 210,000 recorded resettled people, accounting for 2.1%. Provincial key counties in poverty alleviation development account for 12%. Counties within contiguous poor areas and national key counties in poverty alleviation development account for 72% and other counties account for 16%. Considering that the natural environment and development conditions of various areas of origin are somewhat homogenous, the unrecorded people living in the same area of origin need to be resettled at the same time and various regions have arranged the simultaneous resettlement of 6.47 million people according to their own actual plans. The simultaneously resettled people are able to share infrastructure and basic public service facilities in the area of destination with recorded people but they are not entitled to related housing construction subsidies provided by the central government. In the 13th FYP period, a total of 592.2 billion RMB is planned to be invested in the resettlement of

^a Data are from National Plan of Poverty Alleviation Resettlement in the 11th, 12th and 13th FYP period, respectively. The data in the 10th, 11th and 12th FYP periods refer to the actual data while the data in the 13th FYP period refer to the planning data.

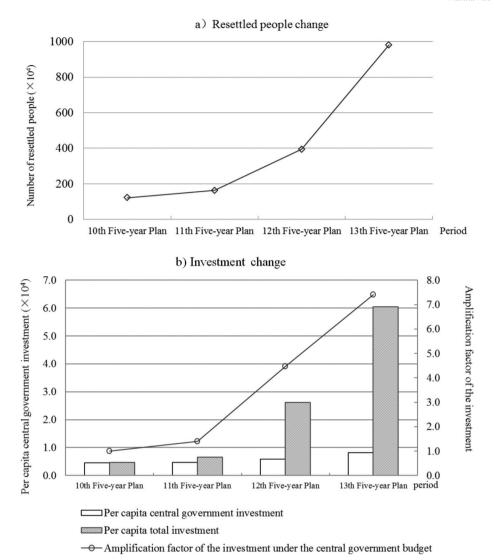


Fig. 3. PAR in various periods: a) population change; b) investment change.

recorded people. The PAR tasks, investment and construction in the 13th FYP period are mainly concentrated within the period of 2016–2018 (Table 2 and Fig. 5) and the program investment completion rate in the three years is 85% (He & Zhang, 2017).

The PAR program in the 13th FYP period, has presented some new characteristics in comparison to previous programs: (1) a greater number of resettled people; the number of people scheduled to be resettled for poverty alleviation in this new era has exceeded the total number of people resettled since the launch of PAR in the early 1980s in China. The aim is to ensure that all of the nearly ten million recorded people to be resettled will have been included in the resettlement plans and actually resettled by 2020. (2) Strict control of resettlement housing areas, improvement of the subsidy standard and significant reduction in the self-raising cost of resettled households; according to the policy, the per capita housing construction area for recorded poverty-stricken households receiving central government subsidies may not exceed 25 m². The subsidy standard per household will be significantly elevated to lower the self-financing per household below 10,000 RMB. (3) High fund input and diversified fund channels; besides the funds under central government budget, full consideration should also be given to the "joint participation" of local finance, financial capitals and other funds in the construction of the PAR program. In addition, the government has expanded the scope of surplus index transactions for the link between urban-land taking and rural-land giving at the provincial level. This

expansion of the urban-rural linkage surplus index provides important support for the construction of the RAP program, providing loan repayment channels to areas affected by poverty. (4) A wider and more comprehensive input scope; different from previous PAR programs (which focused mainly on housing construction), the PAR program in the 13th FYP period not only takes resettlement housing construction into account but also implements measures to build supporting infrastructure for the area of destination (like water, electricity, road, garbage treatment, sewage treatment and other facilities, example is shown as Fig. 6), implements perfect public service facilities around the resettlement site, consolidates, restores and reutilizes the land according to consolidation in the area of destination and the housing plots abandoned in the area of origin, and provides ecological restoration for the unavailable land in the area of origin (Zeng & Wang, 2017). Compared to previous programs, the PAR program in the new era is characterized by higher requirements for poverty alleviation, more burdensome resettlement tasks, more poverty-stricken objects of resettlement and more complicated contents. Through taking into account input in the production and living conditions of resettled people and implementing a series of follow-up assistance measures to help poverty-stricken households get rid of poverty, PAR has completed its transition from a "blood transfusion type" to "blood production type" and implementing PAR has become an important means of realizing targeted poverty alleviation.

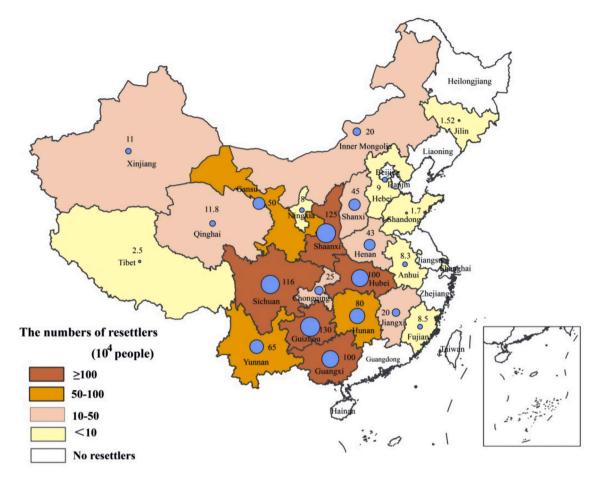


Fig. 4. Distribution of PAR tasks nationwide in the 13th FYP period (NDRC, 2016; Zhou et al., 2018).

 Table 2

 Recorded people and investment in the 13th FYP period.

Index	2016	2017	2018	2019	2020	Total
Recorded resettled people (10,000 people)	249	340	280	100	12	981
Proportions of recorded resettled people by years	25%	35%	29%	10%	1%	100%
Total investment (100 million RMB)	1463	1939	1625	683	212	5922
Proportions of total investment by years	25%	33%	27%	12%	4%	100%

4. Typical PAR modes

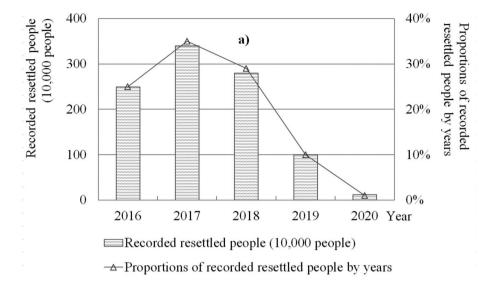
The essence of PAR requires the provision of livelihood space reconstruction, land reallocation, industry reconstruction and spatial capital remodeling for poverty-stricken people; the spatial reconstruction of population-land-industry factors. Such reconstruction should include social, economic, ecological and many other factors (Xing, refers which to the "three-dimensional" production-life-ecology) spatial reconstruction (Lo, Xue, & Wang, 2016). As a basic link in poverty alleviation resettlement, resettlement relates to whether the peasant households to be resettled can move out and settle down. Ideally, PAR is supposed to help resettled poverty-stricken people realize multi-aspect and multi-level transformation and optimization of their livelihood (Xing, 2016). PAR has a diversified range of specific forms: the state requires that the site selection of the area of destination should be convenient for the production, living and employment of resettled people, be close to a central village, small town, industry park or scenic spot to avoid secondary

resettlement. It is also encouraged that the centralized resettlement-based mode integrating centralized resettlement and dispersive resettlement be adopted to guide the nearby employment of resettled people in the area of destination. The selection of a resettlement mode reflects the willingness and preferences of the local government, resettlers and other institutions, and is a result of mutual consultation among various parties concerned. According to the geographical locations and resettlement characteristics of various areas of destination, the PAR modes in China can be classified into the following four types based on the typical modes in different regions. \(^1\)

4.1. The urbanization integration mode

Relying on urbanization construction, this mode (Fig. 7) takes PAR as an opportunity for improving the local urbanization level and guides resettled households to purchase commercial housing, seek convenient employment, improve their living conditions and realize household registration transfer in towns or urban areas with better infrastructure and public services (Chen & Li, 2018). This mode applies mainly to regions with a low urbanization rate, weak strength and insufficient investment in public service construction. This mode is suitable for the adaptable young and middle-aged people who have pressing needs for urbanization and are capable of quickly blending into city/town life and

¹ Materials are mainly collected from our field investigations. Websites with important reference value are as follows. http://www.shiyan.gov.cn/ztzl/shengeng/xp/201710/t20171018_1235534.shtml http://www.cnbz.gov.cn/xxgk/2/18/1/2017/08/150224715795328.shtml http://www.nmg.gov.cn/art/2016/7/25/art_1570_177199.html.



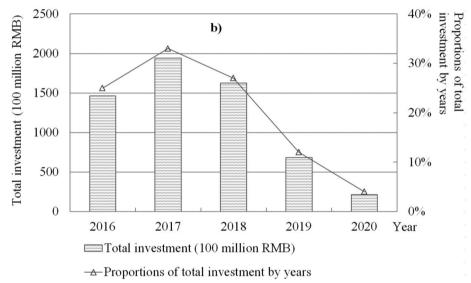


Fig. 5. The situation of poverty alleviation resettlement in the 13th FYP period: a) population change; b) investment change.





Fig. 6. The Phoenix Mountain relocation area in Zhongcun village, Fangxian County of Hubei province, China (Taken by the first author) Note: The open space shown in the right picture is for resettlers to plant the vegetables based on the local rural residents' living habits.

finding stable employment there. In this mode, peasant households enter towns or industrial parks for employment and disperse house purchase and, relying on a combination with the "accessorial system" of commercial housing development in towns, this mode can effectively promote the "destocking" of real estate in towns. Considering that it costs

less to enter small towns than to enter small and medium-sized cities and that there are more employment opportunities in small towns than in rural areas, entering towns via household registration transfer has become the choice for many resettled people. This mode generally produces a relatively high resettlement cost, significantly changes the

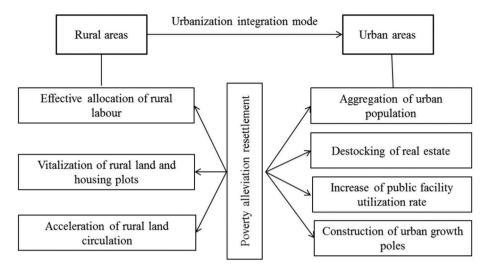


Fig. 7. The urbanization integration mode.

production mode and lifestyle of peasants, creates more non-agricultural employment opportunities, and facilitates the shift of rural resettlers' means of employment from primary industries to secondary and tertiary industries. In this mode, the area of destination is usually located in the proximity of a small town or industry park so as to quickly aggregate city (or town) population via PAR, expand city (or town) scale, create an agglomeration effect, enrich the contents of cities (or towns), increase the utilization rate of public facilities and strengthen the self-service connotation and self-growth potential of cities (or towns). In addition, PAR also creates numerous opportunities for urbanization construction. Relying on rational guidance, the government can promote the establishment of a market-oriented new urbanization construction mechanism, enhance the commercial circulation capacity of towns, promote economic development and ultimately accelerate the creation of new urbanization growth poles.

4.2. The nearby resettlement mode relying on means of production and characteristic industries

Focusing on industries and their development which help poor people to cast off poverty, this mode locates the resettlement site around an industrial base, so that the driving role of leading enterprises and specialized cooperatives can be developed. In addition, in this mode, those living in resettled households can not only become shareholders through land circulation but can also obtain income as workers in the industrial base and thereby broaden their employment channels. Thus, this mode is a centralized resettlement mode (Fig. 8). This applies to able-bodied laborers who have sufficient endogenous development power and can improve their living conditions through employment. Through coordinating PAR and industry development, this mode takes industry development as the key to helping resettled households achieve prosperity and strive to become affluent. It creates the development pattern of "cooperatives (companies) + base + resettled households", so that those resettled households can become shareholders through land circulation, participate in industrial base construction and management and increase their employment opportunities and income. Thus, this mode enhances the "blood making function" of resettled peasants. In this mode, efforts should be made to improve the production technology and professional skills of peasants, enhance their enthusiasm for production and elevate their comprehensive quality.

4.3. The resettlement mode of dismantling old households to make room

This mode relies on the construction of a new type of rural community. In terms of resettlement site selection, the mode targets

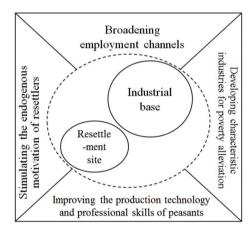


Fig. 8. The nearby resettlement mode relying on means of production and characteristic industries.

primarily central villages or old villages with complete supporting public service facilities (such as water, electricity, roads and networks), and fully utilizes the resource advantages of such central villages and old villages (old courtyards, old schoolhouses, etc). The aim is to avoid or reduce the encroachment on basic farmland and cropland, on the one hand, and to save the funds for supporting infrastructure construction and address the needs of simultaneously resettled households on the other hand. This mode applies to people who are reluctant to part with rural life or an agricultural mode of production. It produces a relatively low resettlement cost and changes the production mode and lifestyle of peasants only in minor ways; after resettlement, agriculture still remains the primary source of resettlers' livelihood. In addition, it guarantees that the infrastructure of the area of destination is more complete than that of the area of origin. However, in this mode, resettled households may often feel like "outsiders" and, besides the difficulty of blending into local social life, it takes a long time for them to communicate and fit in with indigenous people. Thus, the integrative adjustment and cultural adaptation of the relationship between resettled households and indigenous people pose one of the great challenges to resettlement work. In addition, this resettlement mode requires land readjustment which might result in a shortage of land and other resources in the area of destination. So it is very important to properly deal with related problems after resettlement, such as neighborhood disputes, unclearly defined property rights and violation of the interests of indigenous people by resettled poverty-stricken households in the area of destination, etc.

4.4. The resettlement mode of public rental and zero rental affordable housing

This mode targets poor rural households and rural "households enjoying the five guarantees (the aged, the infirm, old widows and orphans are taken care of by the people's communes in five ways: food, clothing, medical care, housing and burial expenses)", which lack labor capacity and house-building capacity and have poor housing conditions and a weak economic basis, as well as to rural elderly people who have children but whose children are incapable of caring for them. Safe and affordable houses owned by collective ownership are uniformly built. Then resettled households could relocate directly without self-financing by adopting the centralized resettlement way. For instance, in Inner Mongolia, PAR is combined with mutual-aid happy homes and nursing homes. However, in this mode, elderly people who have gotten used to their long-term living habits may not be able to adapt effectively to the new environment, not to mention the high cost of housing preservation and other related problems.

Table 3 provides the characteristics of the four typical resettlement modes and existing challenges. As regards the selection of specific areas of destination, it is necessary to take into account resettler qualities, group characteristics, resettlement costs, government administration costs, land resources, the natural environment, economy, transportation and many other factors (Zhang, Wang, Zhang, & Xue, 2014), thus guaranteeing that peasant households can realize livelihood optimization at economic, social and ecological aspects. In fact, resettlement has revitalized rural land, housing plots and other resources, accelerated rural land circulation, catalyzed modern agriculture parks, family farms, large producer-households and other business patterns and has promoted the stable development of regional characteristic economies. With the further advance of PAR, numerous resettled people have migrated into urban communities and experienced substantial changes in their residential manner, living costs, neighborhood relationships and so forth, so it is of vital importance to effectively safeguard the rights and interests of resettled people and enhance their sense of belonging.

5. The possible risks and problems of PAR

Resettlement is not only the spatial relocation combined with material transfers, but a complex process with major challenges emerging immediately after displacement (de Sherbinin et al., 2011). The World Bank identified eight major social and economic risks and impoverishment processes in displacement or resettlement by constructing the Impoverishment Risks and Reconstruction (IRR) Model: loss of land, employment, shelter, and access to common property/services; marginalization (reduced economic mobility); increased morbidity and mortality; food insecurity; and community disarticulation (Cernea, 2000). The evidence suggests that resettlers at different locations may experience some or all of the eight basic risks. There are ways to reduce the hazards and socioeconomic adverse impacts of the involuntary resettlement induced by development-related displacements. While there are clear distinctions between PAR and other types of resettlement programs, the voluntary PAR also presents its risks and problems after the resettlers' relocation although the majority of resettled population has greatly benefited from this resettlement.

5.1. The deviation between the resettlement policy implementation and the poverty alleviation goals

Theoretically, PAR must adhere to the principle of "giving priority to disaster avoidance and poverty alleviation". However, in the course of specific implementation, there are deviations from policy goals. On the one hand, PAR requires peasant households to self-raise some funds, who remain challenged by a weak economic basis. So the peasant

 Table 3

 Typical modes of poverty alleviation resettlement.

Typical modes of poverty alleviation resettlement.								
Mode	Main applicable groups	Characteristics	Challenges					
Urbanization integration mode	Young and middle-aged people who have imperious demands for urbanization and are capable of quickly blending into city life and finding stable employment there.	Enjoyment of complete infrastructure and public services; Increase of nonagricultural employment opportunities; Promotion of industrial agglomeration and population concentration	 High resettlement cost; Changes of the production mode and lifestyle of peasants; Shift in ways of employment from primary industries to secondary and tertiary industries 					
Nearby resettlement mode relying on means of production and characteristic industries	Able-bodied laborers who have sufficient endogenous development power and can improve their living conditions through employment	Broadening of income sources and channels; Minor change of the resettlement production mode and lifestyle of peasants	Improvement of the production technology and professional skills of peasants					
Resettlement mode of dismantling old households to make room	People who are reluctant to part with rural life or agricultural production modes	Low resettlement cost; Full utilization of existing resources, avoiding or reducing the encroachment on basic farmland and cropland; Saving of funds for supporting infrastructure construction; Minor change to the resettlement production mode and lifestyle of peasants	 Integrative adjustment and cultural adaptation of the relationship with indigenous people; Land readjustment and resettlement and resources allocation 					
Resettlement mode of public rental and zero rental affordable housing	Poor rural households and rural "households enjoying the five guarantees," which lack labor capacity and house- building capacity and have poor housing conditions and a weak economic basis and rural elderly people who have children but whose children are incapable of caring for them	Centralized resettlement and provision	① Inability of the elderly people (who have gotten used to their long-term living habits) to adapt effectively to the new environment; ② High cost of housing preservation					

households are incapable of either bearing resettlement cost or completing resettlement on their own due to a lack in fundraising channels. As a result, peasant households that are truly poverty-stricken usually choose to stay in their area of origin, while those with better economic conditions choose to resettle and thus benefit most from such resettlement (Tang, Lin, & Li, 2005). On the other hand, there is a phenomenon called "elite capture" during the implementation of PAR policy (Wu, Yang, & Wang, 2020). That is, elite peasant households having close relationships with village cadres will get preferential resettlement qualifications, while ordinary peasant households will be marginalized, losing the opportunity for preferential resettlement and will remain trapped in their poor and remote village life (He & Dang, 2015; Yao, 2019). Some studies show that there is an obvious phenomenon of "elite capture" in the recording of people to be resettled in Yunnan, Guizhou and Sichuan, and that, in some cases, the "elite capture" rate can reach as high as 25% (Hu & Wang, 2017). Due to restriction by all kinds of factors, the PAR program has effectually ruled out the most poverty-stricken households, which have the weakest affordability and most urgently need preferential resettlement (Lo et al., 2016). In addition, the effects of administrative pressure and universal policy have given rise to the misplacement of targeted identification in PAR (Xu & Xiong, 2018). In this context, it is difficult for the subjects of resettlement to enjoy fair policy treatment, which further obstructs the balanced development of resettlement and eventually weakens policy credibility (He & Dang, 2015).

5.2. The financial pressure imposed by high resettlement funding demand on local governments and poverty-stricken households

According to current policy, PAR funds come from two sources: the fiscal subsidies provided by the government and the funds self-raised by poverty-stricken households. As far as poverty alleviation in China is concerned, all the relocation areas are located in centralized contiguous poor areas and are characterized by a low local finance self-sufficiency rate, an insufficient contributive capacity and input, single source funding and channels thereof and a weak absorptive capacity for financial resources, which jointly restrict the advance rate of the implementation of the PAR strategy (Liu, 2015). In addition, poverty-stricken households in need of resettlement live mostly in remote mountainous areas and depend on engagement in agriculture or industry for their income. As a result, most of them have no capital accumulation and they usually fall into debt to raise the resettlement funds. Although the PAR project has reduced the financial burdens on those resettled (Rogers et al., 2019), there is still much pressure on the very poor. According to the field survey, 16.33% of peasant households (263) had a debt of above 10,000 RMB as a result of the resettlement and the main income sources of peasants were engagement with industry and agriculture. The increase of income was relatively small, while the pressure of debt repayment was high.

5.3. The influence on the sustainable livelihood of households after poverty alleviation resettlement

After resettlement, peasants separate themselves from the natural environment on which they used to depend for their survival and their livelihood capitals experience significant changes, which unavoidably exerts some influence on the sustainable livelihood of peasant households (Cernea, 1997). After resettling in an area of destination, poverty-stricken people still enjoy the same systems, subsidies and preferential policies. However, after resettlement, some previous livelihood activities have to halt for some resettlers, which means the reduction of income channels and the increase of production and living costs. For instance, in the area of origin, a courtyard economy can supply their daily living needs for vegetables and firewood. However, in the area of destination, the new courtyard, because of its limited area, can no longer sustain a courtyard economy, which further increases their

daily living cost (Tian, 2017). After resettlement, only a few nearby resettlers can carry on with their traditional agricultural production, while most resettlers can hardly find a job that suits their employability, mainly due to their low cultural quality, lack of non-agricultural vocational skills and other adverse factors (Xu & Shen, 2018). As a result, it is difficult to sustain the original production mode and the number of unemployed people in villages is constantly on the rise (Jackson & Sleigh, 2000). Of the 1,611 peasant households investigated in relation to PAR (Fig. 9), 60.77% (979) had an annual per capita net income of less than 3,000 RMB/person after poverty alleviation resettlement. Those in the intervals of 3,000–5,000 RMB, 5,000–8,000 RMB and \geq 8, 000 RMB accounted for 12.41% (200), 13.47% (217) and 13.35% (215), respectively. Households relying on engagement in industry for their primary income accounted for 60.46%. Those relying on planting and animal husbandry for their primary income accounted for 21.54%. Those relying on all kinds of subsidies (such as endowment insurance and subsistence allowance) for their primary income accounted for 16.08%. Those relying on land circulation, interest and dividend, on operating shops (supermarkets) and so forth for their primary income accounted for 0.74%, 0.62% and 0.56%, respectively. As many as 595 households, accounting for 36.93%, reported the absence of supporting measures after resettlement. Those reporting the development of agriculture and forestry and those reporting the arrangement of labor service and employment accounted for 23.03% and 21.48%, respectively. Those reporting minimum social security accounted for 12.54%. Those reporting assets income and those reporting engagement in service industry only accounted for 3.97% and 1.30%, respectively. Large-scale PAR has posed severe challenges to the resource environment carrying capacity in areas of destination. In some areas of destination, in face of a shortage of land resources, resettlers have begun excessive deforestation to meet their survival needs, which causes ecological damage to areas of destination, weakens the resource environment carrying capacity of these areas and ultimately influences their own production and life by making it impossible to sustain their livelihood (Zhu, 2016). Housing, education, health care, employment and entrepreneurship should be provided for the resettlers at the same time (Liu & Li, 2017).

5.4. Problems with the social integration and community management of resettlers after resettlement in a new community

In poverty alleviation resettlement, settlers face the reality of leaving their hometowns and the inevitable ending or the degradation of traditional village communities. As a result, the original social network and social structure of villages are broken and the original social capital of resettlers experiences substantial change, which requires the construction of new social networks, influencing both the adaptability of resettlers to new communities and their future welfare therein (Mcmichael & Manderson, 2004; Zhou & Mao, 2017). Existing resettlement policy selectively resettles some poverty-stricken people from a village, which damages their original residential manner. For this reason, PAR should consider the opinions of poverty-stricken people and relocate those living in the same village or having the same neighborhood relationship network into the same area of destination as far as possible (Yin, 2014). In addition, after PAR, some people are relocated into town communities, which means substantial changes in production mode and lifestyle, making it difficult for people (especially for the elderly) who have gotten used to rural life to adapt and inevitably produces a sense of alienation (Evrard & Goudineau, 2004). In some cases, people choose to move back. In the case of centralized resettlement, a resettlement site frequently comprises people from different natural villages. In this case, the multiplied population density, relatively complex population structure, habits and notions and increased community management workload and work difficulties can very easily lead to poor social security status and new social problems (Baird & Shoemaker, 2007; Xu & Shen, 2018). For some minority resettlers, there are also the predicaments of ethnic cultural differences, emotional self-isolation and so

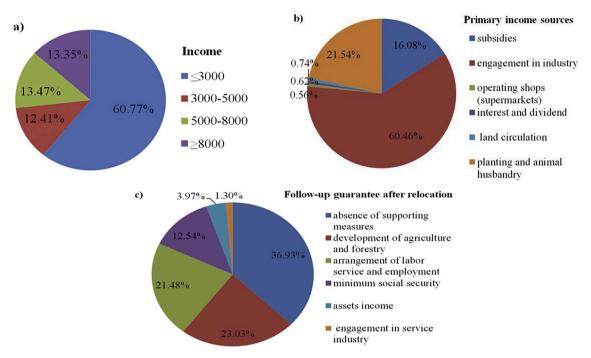


Fig. 9. Types of household income after PAR (a), primary income source (b), and follow-up guarantee (c).

forth (Xu, 2011).

6. Suggestions for improving the implementation of PAR policy

The PAR program is a comprehensive poverty alleviation strategy and a substantial challenge in priority poverty relief. The program plays an essential role in promoting the poverty relief of all poverty-stricken people and building a moderately well-off society in an all-round way by 2020. In this course, the "Five Batches" serve as mutual support. In the post-resettlement stage, focus should be placed on the employment of the resettlers, industry development, skills training and other related aspects. As an important measure and means of TPA, PAR faces great pressure and challenges in the new context of poverty alleviation. For the purpose of better-implementing PAR, this paper offers the following suggestions.

6.1. Establishing follow-up and feedback mechanisms and the third-party evaluation

Third-party evaluation is a major innovation for performance management introduced by the present government. As required by the Criteria for Evaluating the Performance of Provincial Party Committees and Governments in Poverty-reduction and Development issued by the General Office of the CPC Central Committee and the General Office of the State Council, the performance of the party committees and governments of 22 provinces (autonomous regions/municipalities) in Central and West China in poverty alleviation is evaluated annually from 2016 to 2020. By means of conducting a sampling survey in the provinces, this evaluation aims primarily to appraise the performance of the party committees and governments according to the following criteria: the identification accuracy rate of poverty-stricken people, the withdrawal accuracy rate of poverty-stricken people, and the degree of public satisfaction with assistance work provided according to village and household realities. According to this evaluation, the identification accuracy rate of povertystricken people continues to maintain a relatively high level, the phenomena of mistaken identification of poverty-stricken households are obviously reduced and poverty-stricken people have an elevated sense of gain. Seen from the results of the sampling survey, during the implementation of the PAR program, local governments have achieved a high identification accuracy rate of identifying poverty-stricken people and the misplacement of targeted identification in PAR is rare. In this case, establishing a third-party evaluation mechanism for the PAR process can provide an important penetration point for supervising policy implementation and effectively avoid the disadvantages of top-down bureaucratic policy implementation. In addition, constructing a policy follow-up and feedback mechanism helps to implement PAR policy smoothly and effectively analyze the PAR policy before and after implementation in terms of its rationality, operability, adaptability, stability, coordination and responsiveness (Chen, 2017). To enhance the effect of targeted poverty alleviation in centralized contiguous poor areas, it is necessary not only to closely follow up on the negative influences of the implementation deviation of resettlement policy but also to consistently enhance policy implementability. In this case, third-party evaluation can effectively promote policy implementation at the local level

6.2. Selecting resettlement modes according to local conditions, household realities and poverty-stricken households' ability to make a living

Considering the differences among resettled people in terms of family structure, ability and other aspects, the mode of gradient resettlement should be adopted according to local conditions and household realities, so as to offer more available resources to resettled households. The aforementioned four typical resettlement modes could be selected and adopted in accordance with local conditions. Based on the actual demands of poverty-stricken groups, resettlement should follow the principle of voluntariness, analyzing the differences among different subjects of PAR in family structure and economic ability, holding joint discussions with poverty-stricken people in determining the resettlement mode and strengthening their right to agency in their own resettlement. Moreover, technical training, industry development and other measures should be implemented to enhance the endogenous power of poverty-stricken people. As regards poverty-stricken people who can find stable employment in towns, they should be preferentially resettled into towns and provided with necessary skill training and jobs. This, in turn, is related to both the degree of local urbanization and employment opportunities created by non-agricultural industry development. As regards those lacking labor capacity and relying solely on agriculture for

their livelihood, the mode of nearby centralized resettlement should be primarily adopted. In addition, agricultural and non-agricultural industry support, adaptable to local conditions, should be provided to avoid simple urbanization resettlement that is based on a single resettlement mode and that offers no employment security.

6.3. Promoting the integration of poverty alleviation resettlement and rural revitalization

The Strategy Plan for Rural Vitalization (2018-2022) issued by the CPC Central Committee and the State Council has been introduced in case it is necessary to relocate villages with harsh survival conditions, a fragile ecological environment, frequent natural disasters or villages facing especially serious population loss. As per the plan, modes of poverty alleviation resettlement, ecologically livable resettlement and rural concentrated resettlement can be adopted to implement village resettlement and merger, thereby solving the livelihood, ecological protection and other problems faced by peasants comprehensively. In the process of implementing the rural revitalization strategy, the central government has deployed village resettlement and merger, and has proposed to combine village resettlement and merger with new-types of urbanization and agricultural modernization, relying on suitable regions for resettlement and avoiding the creation of new isolated village-type resettlement communities. The starting point and foothold of rural revitalization lie in bringing industrial development to towns, creating a prosperous and contented life for residents, building housing-industry symbiosis and continuously meeting "the people's ever-growing needs for a better life" (Liu, 2018). In this case, solving the housing problem of resettlers constitutes the primary task in implementing the PAR program. To realize the sustainable development of peasant households in poverty alleviation resettlement, great importance should be attached to both comfortable housing and stable employment, as embodied mainly in the following three aspects: a) Great efforts should be made to improve the residential environment of the resettlement site, accelerate the perfection of related supporting infrastructure and service functions on site and preferentially build and relocate schools, hospitals and other facilities that have a close bearing on the interests of poverty-stricken people. In addition, it is also important to elevate the public service supply capacity and level on site and to solve the education and health care problems of resettled people timeously, to address the water and electricity problems in the area of destination, etc. b) To promote multi-channel employment and wage income increase and highlight the poverty relief function of employment, suitable industries should be selected for the resettlement site according to the individual situations of resettled people, the demands of the market and the characteristics of the poverty-stricken workers to be resettled and priority should be given to the development of labor-intensive and environment-friendly industries. Financial support should be offered preferentially to agriculture throughout the entire agricultural value chain, so as to solve the financial and employment problems faced by resettled poverty-stricken people. The measures that can be taken in this aspect include employment in industrial parks and scenic spots, service posts on resettlement sites, engagement in service industry in towns, entrepreneurship and employment subsidized by financial poverty alleviation, participation in skills training, employment in labor service, etc. c) In on-site poverty alleviation resettlement, local governments should promote traditional ethnic and folk culture, skills and arts in areas of origin and ensure their continuation, not only so as to protect cultural heritage but also to provide an opportunity for resettled people to begin cultural entrepreneurship and find employment relying on their ethnic cultural resources.

7. Conclusion

Poverty alleviation resettlement (PAR) is a key element in China's poverty reduction initiatives. This article constructs and presents a complete frame to introduce China's PAR policy by summarizing its

research progress and evolution, proposing its typical models, analyzing the possible risks and existing problems, and finally making practical suggestions. Results show that: 1) China's PAR policy since its implementation could be divided into four stages: the policy rudiment stage, the pilot exploration stage, the comprehensive promotion stage and the priority poverty relief stage; 2) Compared to previous programs, the PAR program during the 13th FYP period is characterized by higher requirements for poverty alleviation, greater resettlement levels, selection of the poorest of the poor, higher fund input and diversified fund channels; 3) Typical PAR modes include four types, i.e., the urbanization integration mode, the nearby resettlement mode relying on means of production and characteristic industries, the resettlement mode of dismantling old households to make room, and the resettlement mode of public rental and zero rental affordable housing. It is important to rationally choose the suitable PAR mode based on local conditions after deeply understanding the resettlers' preference and respect their willingness to relocate; 4) The possible risks of PAR include its deviations from poverty alleviation goals, the financial pressure imposed by high resettlement costs, the influence on the sustainable livelihood of households after resettlement, and problems with the social integration and community management of resettlers in a new community; 5) For improving the implementation of the PAR policy, this paper argues that it is necessary to establish follow-up and feedback mechanisms and third-party evaluation, select suitable resettlement modes according to local conditions, household realities and poverty-stricken households' ability to make a living, and promote the integration of PAR and rural revitalization.

CRediT authorship contribution statement

Yuanyuan Yang: Investigation, Data curation, Writing - original draft. **Alex de Sherbinin:** Writing - review & editing. **Yansui Liu:** Conceptualization, Investigation, Supervision, Project administration.

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