ISSN 1712-8358[Print] ISSN 1923-6700[Online] www.cscanada.net www.cscanada.org

The Poverty Alleviation Model of Local Government Inclusive Innovation: A Case Study on Contiguous Poor Regions in China

ZENG Zhihong^{[a],*}; WANG Zhizhang^[b]; ZENG Xiaoying^[c]

Supported by the National Natural Science Foundation of China. The project is entitled of "Breakthrough and Innovation: A Study on poverty alleviation and development mode of growth inclusive in Contiguous poor regions of China". The item number is (12ASH004)

Received 15 May 2013; accepted 12 August 2013

Abstract

Due to the natural, historical, ethnic, religious, political, social and other reasons, the destitute areas covering China's poor 70%, economic growth driven function is not strong, the conventional means of poverty alleviation work slowly, poverty alleviation and development cycle is longer, poverty is still serious. 14 destitute areas now determined have become the main battle field of poverty alleviation in China. Contiguous poor regions have experienced decades of development, the problems of survival, food and clothing of rural residents have been basically solved. The remarkable achievements have been gained in education, health care, public services, and environmental protection. But there are still several critical problems which hinder its development. This paper sums up these problems from micro, meso and macro aspects, and analyzes the reasons of them.

This paper builds a theoretical framework to analyze inclusive innovation of poverty alleviate for local government. Inclusive innovation as a new theory aims to get more performance for less cost for more people. Inclusive innovation is to promote economic development results to benefit the majority of society engines, is to promote sustainable economic development and effective way. Inclusive innovation is to make all of the people, especially disadvantaged groups to participate

in innovation activities, so that innovations spread to all of the people, to increase people's opportunities for innovation and creativity, and make everyone benefit from innovation activities. Through the expansion of productive employment, increase poverty-stricken areas of infrastructure and investment in education and human resource development and other means, people can balance sharing opportunities, enhance the ability to escape poverty and be rich.

Key words: Inclusive innovation; Poverty alleviation; Contiguous poor regions in China; Local government

ZENG Zhihong, WANG Zhizhang, ZENG Xiaoying (2013). The Poverty Alleviation Model of Local Government Inclusive Innovation: a Case Study on Contiguous Poor Regions in China*. *Cross-Cultural Communication*, *9*(4), 30-35. Available from: http://www.cscanada.net/index.php/ccc/article/view/j.ccc.1923670020130904.2648. DOI: http://dx.doi.org/10.3968/j.ccc.1923670020130904.2648.

INTRODUCTION

14 contiguous poor regions of China, the per-capita net income of farmers is RMB2,676 yuan, equivalent to only half of the national average. Ranked the lowest of 600 counties in China, there are 521 within the areas, accounting for 86.8%. Delineation of a number of destitute areas nationwide, concentrated force give priority support, is in favor of the new mechanism for deep exploration of regional development and poverty alleviation, efforts to solve major problems restricting the development, improve the effectiveness of poverty alleviation and development; is conducive to the promotion of the most difficult areas of economic and social development, the release of the potential of these areas, improvement the coordination of regional development; is propitious to old revolutionary base areas, ethnic minority areas, border areas, sharing the fruits of reform and development, promoting social harmony and stability; is helpful to

[[]a] Lecturer. School of Political Science and Public Management, Southwest University, Chongqing, China.

[[]b] Professor. School of Economics and Management, Southwest University, Chongqing, China.

[[]e] Graduate. School of Political Science and Public Management, Southwest University, Chongqing, China.

arouse the enthusiasm of the protection of the ecological environment in these areas, to build a national ecological security barrier.

1. THE BASIC SITUATION OF THE CONTIGUOUS POOR REGIONS

Based on "China Rural Poverty Alleviation and Development Outline (2011-2020)", according to "contiguous concentrated, focus, the national coordination, zoning integrity" principle, correlated with poverty indicators as the fundamental basis with three years of 2007-2009, such as per capita county GDP, per capita county general budgetary revenue, county per capita net income of farmers, considering increasing support requirements in the revolutionary areas, ethnic minority areas and frontier areas, 14 contiguous focus special difficult areas was divided in China, including 680 counties, as the main battlefield of poverty alleviation during the new phase.

1.1 The Basic Properties of Contiguous Poor Regions

14 contiguous poor regions are inter-provincial, these areas from a political point of view, mostly old revolutionary areas, ethnic minority areas, frontier areas; From the perspective of physical geography, including the Qinghai-Tibet Plateau, desertification area, Loess Plateau and Southwest Rocky and other natural conditions especially with harsh; from the development stage, epitomized by weak infrastructure, social undertakings lags behind, the lack of public services, insufficiency of industrial development.

1.2 Basic Characteristics of Contiguous Poor Regions

Contiguous poor regions are mainly characterized by "centralized contiguous" and "special difficulties", in a word, featured by a large area and population sunk in poverty. In addition, poverty in these areas is persistent, intergenerational, and highly transitive. Most of the regions are concentrated in mountainous areas, hilly areas, and restricted development zones. The causes of poverty are very complicated; there are natural, social, ethnic, religious, historical, political, and system factors. Therefore, the task of poverty alleviate is arduous. The means of poverty governance should be comprehensive.

2. ANALYSIS ON PROBLEMS IN POVERTY ALLEVIATION IN CONTIGUOUS POOR REGIONS

2.1 The Progress of Government Poverty Reduction

Since reform and opening up, poverty reduction process is roughly three different stages in China: 1) 1978-1985, System reform to promote poverty alleviation; 2) 1986-2007, Special programs to promote poverty alleviation and development; 3) A system of basic cost of living allowances was established in all rural areas of china. Our poverty reduction program has entered the development-oriented poverty reduction stage and poverty-relief stage. Table 1 briefly draws a conclusion of progress along the road of the poverty alleviation and development. Poverty alleviation process can have several landmark time points in China which is shown in Table 1.

Table 1
Development of Poverty Alleviation of Chinese Government

Time	Affairs about poverty alleviation
1949	China is one of the poorest countries in the world. China's national income per head was\$ 27, less than half of the \$57 India.
1978	2500 million of the rural population hadn't solved the problem of feeding and clothing.
1985	The per-capita net income of farmers grew more than 2.6 times in 1978, the absolute poor population decreased from 25.00 million to 12.50 million.
1986	The absolute poverty standard had been set, and counties on the state priority list had been determined.
1994	Formulated and promulgated the "national eight seven poverty alleviation program (1994 - 2000)" to basically resolve the problem of feeding and clothing therural poor by 7 years.
2000	Absolute poverty in rural was reduced to 32.09 million. The objective of poverty alleviation was basically attained.
2007	Absolute poverty standard was adjusted for RMB785, and low income standard is adjusted for RMB1067 yuan. As of end of the year, absolute poverty was reduced to 14.79 million.
2008	Absolute poverty standard and low income standard rolled into one, which was the annual per capita income of RBM1067 yuan (Since then the standard adjusted annually). The poverty reduction target covered 40.07 million people.
2010	Poverty alleviation standard is for the annual per capita income of less than RMB1274 yuan, and the poverty population is 26.88 million in this standard.
2011	The new standard of Poverty Alleviation has implemented—the annual per capita income of less than RMB2300 yuan in china. According to the new standard, China still has 128million people living in poverty, accounting for 13.4% of the rural population.

2.2 Principal Problems in Poverty Alleviation in Contiguous Poor Regions

The achievements have been made in poverty reduction in contiguous poor regions, but there are also many difficulties. It is summarized in the perspective of the micro, meso and macro aspects. In micro aspect, the problems of poverty individual in education, housing, transportation, information, opportunities for development and livelihood capital, are quite serious. For example, most peasants lead hard lives with adobe or firewood real, deficiency of clean water, inaccessible to road, shortage of medical equipment and nursing staff, inadequate of education teaching equipment and faculty. In meso aspect, the key features of contiguous poor areas include: 1) Restricted scale industry, imperfect industrial system, scattered manufacturing capabilities, and insufficient industry competence. 2) Limited market capacity and lower market-oriented degree. 3) Uneconomic spatial pattern. In macro aspect, district the economy failed to integrate into the global, national and even regional economy circulation, did not form the independent economic system, and also couldn't establish a place in the regional, national and global division of labor system. Lack of viability has already been the root causes of poverty in the contiguous poor regions.

2.3 Analysis of the Causes of Poverty in the Contiguous Poor Regions

2.3.1 Non-Equalization of Basic Public Services, Weak Self-Competence of Peasants Out of Poverty

Because of the harsh natural, climate and living conditions, the cost of basic public services in the rural is higher than in the urban. So, improving the infrastructure of poor regions needs more money. Because of the insufficient financial investment of the government, and the poor foundation conditions of the regions, the disparity between rural especially in the contiguous poor regions and urban is so vast. There are several problems influenced peasants' living and transport, such as unsafe water and house, poor road, suffering hunger and poverty. They are inaccessible to knowledge and skills to make money, deprived of life insurance, education, health care and good environment, keeping out of advanced consciousness. Therefore, they are leading inefficient producing pattern and laggard living style.

2.3.2 Urbanization Forces Fragmented, Local Government Fragmentation

The urbanization forces fragmented and local government fragmentation are due to the following reasons: 1) Poverty is highly permeable and indivisible during a number of administrative regions. For example, Wumeng Mountain Area covered 38 counties and cities in Yunnan, Guizhou and Sichuan. Qin Ba Mountain Area covers surrounding six provinces administrative divisions. 2) Poverty involves multiple stakeholders in many administrative regions, so it is very hard to accommodate the disparate needs and

interests of different areas. 3) Different government has different force of local protectionism in many aspects such as conducting market, attracting investment, and it leads to spectacular waste of resources and redundant construction. These conditions have severely hampered economic development of poor areas. 4) The benefits of each region's economy aren't as clear-cut, while the resources of poverty alleviation are limited. So, it is very difficult to construct a reasonable framework of productivity layout and industrial structure in an effort to form an industrial development pattern featuring theinteraction between urban and rural areas. Especially, we lack industrials featuring high scientific and technological content, good economic returns as well as wide scale of beneficiaries; in addition, we need to develop local distinctive industries, such as culture, tourism, agriculture, industry and etc. Due to the former causes, governance of Contiguous poor areas should be adopted cross-domain management. Only under the condition of cross regional governance can achieve poverty reduction. Cross-border management of pro-poor policies to address the current administrative structure under different administrative center of the main gathering scrambles for resources and industrial layout problem of convergence.

2.3.3 Limited Intelligent Information, Difficult to Integrate Into the Global Economic Circle Quickly

Because of limited information technology equipment, there are many places in the contiguous poor areas still without network, communication, and even the energized state. As a result of high cost and low efficiency become the root cause of the poor development. Due to the factors of information occlusion, traffic inconvenience, low quality of farmers, the areas are not proficient in attracting investment of cross-regional or cross-border. Meanwhile the demand of globalization and regional integration are short of ample funds and extensive financial support. Therefore, it is very difficult for contiguous poor areas to integrate into the regional, national and global economic circle.

2.4 Summary

This chapter leads a specific case study on governance among local governments in contiguous poor areas. Through the tentative analysis of the developmental model, the paper holds that poverty alleviation all in this zone is a coexistence of achievements and problems, which means a vast space for further optimization. Under the analytical framework, based on the practical, the current problems for poverty alleviation are in the micro about weak poverty individual, meso about imperfect industrial system and macro about deficiency of independent economic system. Corresponding to the problems, the paper attributes the causes to three respect, namely the first nonequalization of basic public services, weak self-competence of peasants out of poverty; the second urbanization forces fragmented, local government fragmentation; and third limited intelligent information, difficult to integrate into the global economic circle quickly.

3. INCLUSIVE INNOVATION: THE NEW PATH OF POVERTY ALLEVIATION AND DEVELOPMENT IN CONTIGUOUS POOR REGIONS

Pro-poor innovation, the innovation that serves the needs of poor, is currently discussed in various spheres including management, development and innovation studies. There are many emerging concepts such as "Bottom/Base of

Pyramid (BOP)" (Prahalad,2004), "grass roots innovation" (Gupta, 2000), and "below the radar innovation" (Kaplinksy etal. 2010; Kaplinsky, 2011). Based on the theoretical framework, the paper elaborates on the basic countermeasures to improve the poverty alleviation model of Local government inclusive innovation in Contiguous poor regions. Figure 2 briefly illustrates the poverty alleviation model of Local government inclusive innovation in Contiguous poor regions.

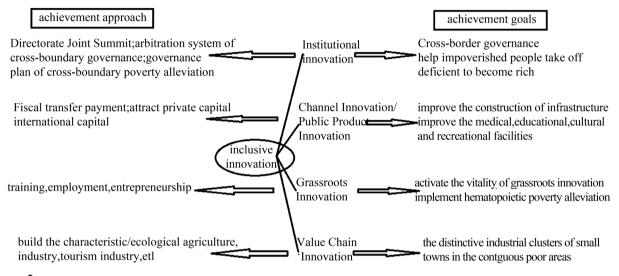


Figure 2
The Poverty Alleviation Model of Local Government Inclusive Innovation in Contiguous Poor Regions

From the Figure 2, we can conclude that local government inclusive innovation in contiguous poor regions for poverty alleviation consists of inclusive institutional innovation, inclusive channel innovation/public product innovation, grassroots innovation and inclusive value chain innovation.

3.1 Inclusive Institutional Innovation

Cross-boundary governance in contiguous poor regions can learn from the experience of economic cooperation, in order to achieve large-scale poverty alleviation governance taking inter provincial area as organizational unit, in order to help impoverished people take off deficient to be rich. Firstly, establish Joint Chiefs led by ministries and commissions, to improve the lateral interaction during decision-makers. Secondly, set up Regional Committee consisting of ministries of liaison, specific business departments, county leadership, adjacent to the Regional Coordinator, to optimize business network in management. Thirdly, build up regional policy cooperation between adjacent counties, to plan industrial layout, infrastructure, public services and social security. The last but not the least, erect the higher arbitration system, to solve many conflict issues. Beyond that, there are four pillar systems of inclusive system innovation: property rights system innovation, distribution system innovation, Sustainable development system innovation and the social management system innovation (Chang, 2012).

3.2 Inclusive Channel Innovation/Public Product Innovation

Inclusive innovation needs financial support from several channels. Presently, its funding is mainly from fiscal transfer payment, but it is not enough to stimulate inclusive innovation. So, we should mobilize the mass participation including Private capital and foreign capital to meet the different needs of different groups of people, especially grassroots. In addition, non government channels should be added, such as the local community, business association, NGO. The public products or services should be affordable with low cost for the poor people, who have few money, tend not to buy new products or services with high price, nor to involve in innovative activities with higher costs. Therefore, innovative products or services for low income groups should be based on ensuring the quality and function, the relatively low price, and low-cost and easily acceptable techniques and tools for their participation in inclusive innovation.

3.3 Grassroots Innovation

The poor have low incomes and lower levels of consumption than those who are not living in poverty. The poor are characterized by their lack of purchasing power in the market and by human underdevelopment, they are generally socially excluded and have minimal access to education, health and other forms of social welfare enjoyed by others in their society who are not poor; they suffer relative depravation and are generally marginalized in the decision making processes. They generally lack marketable skills and have few employment opportunities. The poor lack access to savings and capital and generally experience high levels of vulnerability to changes in market conditions. The result is that their basic needs are not met and do not have a state of well-being. Their condition is sometimes referred to as "ill-being".

In order to realize inclusive growth, the government must pay attention to cultivating the capital and ability of poor people, in order to form a virtuous circle mechanism, which can improve the poverty groups participation in economic growth, gaining reap profits, production of human capital ability. Specific measures include spreading of knowledge and information; holding professional training; providing financial support to encourage innovation.

3.4 Inclusive Value Chain Innovation

Because of the complex natural conditions in contiguous poor regions, the breakthrough space obstacle and greatly developing characteristic gardens& zones so as to centralize industrial blocks, developing characteristic industry, is the basic strategy and fundamental motivation of reform and development for small town employment. The first is vigorously developing the ecological agriculture and ecological industrial intensification, specialization, the formation of "one town one product", "one village one product" brand differentiation, and establishing the base for deeply processing of territorially agricultural products, developing agricultural by-product processing and storage industry, to extend the industrial chain, to build specialized small towns. The second is through the innovation of land transactions system and compensation mechanism, to encourage competitive enterprises settled in the small town, establishing the agricultural ecological industrial park, developing intensive agriculture, livestock farming, territorial crop planting, establishing a mode of green production, green living, green consumption, green trade, green tax, green audit, green education, to create a natural landscape characteristics of small towns. The third is to actively develop characteristic tourism relying on local human resources and the natural landscape, to create personalized distinctive leisure self-cultivation garden small town. The fourth is the implementation of "the rural eco-typical industry project", the assembly information technology, enhancing the intelligence level. The government grants preferential policies, such as reducing and waiving taxation in fund-raising, management, personnel training, to create characteristic agricultural industrial towns.

DISCUSSION AND CONCLUSIONS

Do innovation and the resulting technological change necessarily lead to increased inequalities? Do policies aimed at supporting innovation foster inequalities in revenues, rewarding only the best trained and most skilled with access to resources? To what extent can innovation be mobilized to improve the life conditions of the lower income groups ("inclusive innovation") (OECD, 2012)? Often individuals and communities trapped in a cycle of poverty and disenfranchisement are classified as living at the base of the pyramid (BoP) (Prahalad, 2004). Inclusive innovation can create or enhance opportunities to improve the social and economic wellbeing of those at the BoP or disenfranchised members of society. Inclusive innovation is sure to become increasing important as all emerging markets begin to find ways to bring poor and rural people into their economies.

The practice of China's inclusive innovation in contiguous poor regions has not formed a complete system, presenting diversified characteristics. (1)Inclusive innovation in contiguous poor regions is lack of overall arrangement in the national policy; (2) Inclusive innovation hasn't improved the life of farmers for its overemphasizing the promotion and popularization of science and technology in the content; (3) Inclusive innovation involves products innovation not business model innovation in the method, so it does not meaningfully contribute to grass innovation but is just a bonus. Therefore, it should be seen in the following aspects in order to promote inclusive innovation development: (1) Government should encourage and support inclusive innovation in policy aspect, and supply the enterprises which produce innovative products for the low income group with tax breaks or a loan at the most favorable rate. (2) We should tap the actual and potential demands of the poor people in the contiguous regions, to provide data raw material for inclusive innovation. (3) We should work hard to improve professional skills and capabilities of the poor to escape poverty.

All in all, inclusive innovation in contiguous poor regions of China still emphasizes the following points: let the poor participate effectively in the production process; benefit from it in terms of income generated; and experience welfare improvements as measured by consumption.

REFERENCES

Prahalad, C. K. (2004). *The fortune at the bottom of the pyramid: Eradicating poverty through profits.* Philadelphia, PA:Wharton Business School Publishing.

Kraay, A. (2006). When is growth pro -poor? Evidence from a panel of countries. *Journal of Development Economics*, 80, 198-227.

- InfoDev (2007). ICT, Innovation, and Economic Growth in Transition Economies: A Multi-Country Study of Poland, Russia, and the Baltic Countries, Washington, DC.
- Adler, R. and M. Uppal (2008). M-powering India: Mobile communications for inclusive growth. *Report of the third annual joint roundtable on communications policy*. The aspen institute India.
- Loayza, N., & C. Raddatz (2010). The composition of growth matters for poverty alleviation. *Journal of Development Economics*, 93, 137-151.
- Confederation of Indian Industry Centre of Excellence for Sustainable Development (CII CESD) (2011), Sustainable and Inclusive Innovation. Strategies f or Tomorrow's World, CII CESD
- Halme, M., Lindeman, S., & Linna, P. (2012). Innovation for inclusive business: Intrapreneurial bricolage in multinational corporations. *Journal of Management Studies*, 49, 743–84.
- Gerard George, Anita M. McGahan, & Jaideep Prabhu (2012, June). Innovation for Inclusive Growth: Towards a Theoretical Framework and a Research Agenda. *Journal of Management Studie*, 49(4), s661-s683.
- Ansari, S., Munir, K. and Gregg, T. (2012). "Impact at the "bottom of the pyramid": the role of social capital in capability development and community empowerment. Journal of Management Studies, 49.813–842.
- Hall, J., Matos, S., Sheehan, L., & Silvestre, B. (2012). Entrepreneurship and innovation at the base of the pyramid: a recipe for inclusive growth or social exclusion?. *Journal of Management Studies*, 49, 785–812.
- Radjou, N., Prabhu, J., & Ahuja, S. (2012). Jugaad innovation: Think frugal, be flexible. *Generate Breakthrough Growth*. New York: Jossey-Bass.
- OECD. (2012). Innovation and Inclusive Development CONFERENCE DISCUSSION REPORT Cape Town, South Africa 21 November 2012.
- Arocena, R., & Sutz, J. (2012). Research and innovation policies for social inclusion: An opportunity for developing countries. *Innovation and Development*, 2(1), 147-158.

- Smith, A., Around, E., Fessoli, M., Thomas, H., & Abrol, D. (2012). *Grassroots innovations for sustainable development: Some enduring dilemmas.* STEPS Centre and SPRU.
- Shariff, Abusaleh, Prabir Ghosh, & Samir K. Mondal (2002, November). Indian Public Expenditures on Social Sector and Poverty Alleviation Programmes during 1990s. Working Paper, 169. Overseas Development Institute.
- Ali, Ifzal and M. Pernia (2003, January). Infrastructure and Poverty Reduction: What is the Connection? *Policy Brief Series* (No.13). Economics and research Department (ERD), Asian Development Bank. Available at : http://www.adb.org/Economics/default.asp.
- Paul Collier & David Dollar (2002). Aid allocation and poverty reduction. *European Economic Review*, 45(1), 1-26.
- Fan, S., Zhang, L. X., & Zhang, X. B. (2002). *Growth, inequality and poverty in rural China: The role of public investments* [Research Report. Number 125]. Washington, D.C.: International Food Policy Research Institute.
- Mukherjee, Anit, & Bandyopadhyay, K. R.(2004, May). "Rethinking rural poverty alleviation", an opinion piece in the column. *From the ivory tower.* Financial Express.
- Bardhan, P., & Mookherjee, D. (2006), Pro-poor targeting and accountability of local governments in West Bengal. *Journal of Development Economics*, 79, 303-327.
- Ravallion, M. (2009). Decentralizing eligibility for a federal antipoverty program-a case study for China. *The World Bank Economic Review*, 23(1), 1-30.
- Skoufias, E., & Coady, D. (2007). Are the welfare losses from imperfect targeting important. *Economic*, 74, 756-776.
- Chang, X. Z. (2012). Inclusive innovation of system—— Theoretical study on Chinese reform, Cross-strait Integration and New Universal Civilization. *Journal of Shanghai University (Social Sciences)*, (5), 1-15.
- Wu X. B., & Jiang Y. B. (2012, Nov.). Where inclusive innovation emerges: Conceptual framework and research agenda. *Journal of Systems & Management*, 21(6), 736-747.