



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Status of Impoverished Population and Contradiction of Economic Development in Qinling – Bashan Mountainous Area

—A Case Study of Hanzhong City, Shaanxi Province

MA Zheng-jie *

Shaanxi University of Technology, Hanzhong 723001, China

Abstract The status of impoverished population and economic development in Qinling – Bashan Mountainous area, Shaanxi is introduced based on the brief account of its general situation. Firstly, there are a large proportion of rural people and great outflow of population; a considerable proportion of the weak, the disabled, the sick and the dementia and low population quality; weak capacity of the economy to generate profit on its own and declining trend of financial self-sufficiency rate. taking into account that Qinling – Bashan Mountainous area is the poorest area with the largest impoverished population and the most complex structure of poverty, the impact of the status of the poor population in Qinling – Bashan Mountainous area on its economy is discussed; the first one is backward ecological concept and serious damage to ecological environment; outflow of excellent talents and a serious shortage of labor; the industrial structure is irrational and the resources advantage can not be transformed into economic advantage. Some corresponding measures and suggestions are proposed; the first one to build new small town so as to lessen the loss of population; the second one is to provide preferential policies so as to attract and retain qualified person; the third one to develop education and establish the concept of ecological civilization; the fourth one is to unblock the channels of information transmission and restructure the industry.

Key words Poor mountainous area, Status of population, Economic backward, Policy guidance, China

Located in Western China, Qinling – Bashan mountainous area stretches across five provinces including Shaanxi, Gansu, Sichuan, Chongqing, Hebei and Henan, covers 24 cities and 111 counties. As a region with special physical and human geography, Qinling – Bashan mountainous area is the confluence place of Yellow River culture and Yangtze River culture. Till now, it is still one of 18 contiguous poor areas in China^[1]. Within the Qinling – Bashan mountainous area, Hanzhong City is located in Southwestern Shaanxi Province, to its north is Qinling Mountain, to its south is Bashan Mountain, and adjacent to Gansu and Sichuan Province, its central region is a basin. As one of the four major rivers along the Yangtze-Huai River in ancient China, Han River flows through Hanzhong, Ankang and Jingxiang and then merges into Yangtze River, it is the longest and largest tributary of Yangtze River. The whole Hanzhong City covers 11 counties, namely Hantai, Nanzheng, Chenggu, Mian County, Yang County, Xixiang, Ningqing, Lveyang, Zhenba, Liuba and Fuping, with a total population of 3 730 000. It covers an area of 27 200 km², of which 6% basin, 36% hills, 58% middle or high-level mountains^[2]. Due to its natural and historical reasons, Hanzhong is suffering from resources shortage, environmental degradation, ecological crisis and spreading poverty and economic backward. Based on this situation, the author takes Hanzhong City, Shaanxi Prov-

ince for example, explores the status of poor population and contradiction of economic development in Qinling – Bashan mountainous area and then proposes corresponding measures, aiming at getting rid of its poverty and promoting its economic development.

1 Status of impoverished population and economic development in Qinling – Bashan mountainous area, Shaanxi Province

Qinling – Bashan mountainous area provides a natural boundary between the North and South of the country, Central Plain culture and Bashu culture merge here. The cross and marginal existence of these two cultures marks the life style and geo-culture in this region with significant regional features, thus leaving this place special physical and human geography. Qinling – Bashan mountainous area has rich natural resources, water resources and mineral resources as well as substantial plant and wildlife reserves. However, such great resources advantages haven't been transformed into economic advantages and it is still one of the poorest areas in China. Among 111 counties (cities) in Qinling – Bashan mountainous area, there are 68 national-level poor counties with a poor population of 4 000 000. 19 of the 68 counties are located in the Qinling – Bashan mountainous area in Southern Shaanxi Province involving 440 000 households with 1 900 000 poor people, accounting for more than 30% of the total population^[3]. In several seriously poverty-stricken areas the poor people accounts for as high as 74% of the total population, 10 times higher than the national average level^[1]. Huge amount of poor people and vast

Received: March 10, 2010 Accepted: March 30, 2010

Supported by Soft Science Project launched by Science and Technology Department of Shaanxi Province (2009KRM033) and Fund Project of Education Department of Shaanxi Province (09JK003).

* Corresponding author. E-mail: mazhengjie@yahoo.cn

areas of poverty-stricken regions have become the biggest obstacle restricting the sustainable development of Qinling – Bashan mountainous area.

1.1 Large proportion of rural people and outflow of large population The rural population in Hanzhong City in Southern Shaanxi Province accounts for a large proportion, according to statistics, the rural population in Hanzhong City during 2007 – 2009 is respectively 3 045 500, 3 045 800 and 3 048 400, more than 80% of total population (Table 1). The poor mountainous areas do not have their own scale leading industry, a large amount of its people migrant out, as a result, the agricultural production can not be launched, and some areas even gradually become no man's lands. What's more, in some regions although people do not work out, there is a general trend of population migration.

Table 1 Changes in urban and rural population of Hanzhong City during 2007 – 2009^[4-6]

Year	Total population × 10 ⁴	Urban population × 10 ⁴	Rural population × 10 ⁴	Proportion of rural population %
2007	379.36	74.81	304.55	80.3
2008	380.14	75.56	304.58	80.1
2009	381.55	76.71	304.84	79.9

1.2 A considerable proportion of the weak, the disabled, the sick and the dementia and low population quality Qinling – Bashan mountainous area has relative more sick people and higher prevalence, only in the Qinling – Bashan mountainous area in Shaanxi Province there are 218 000 people with mental retardation, including 66 000 mentally handicapped children, whose prevalence is 2.78%, far above the national average level of 1.2%. To take Mian County, Hanzhong City as example; the prevalence of the mentally handicapped (or the mentally disabled) is respectively 3.27% and 3.57%^[1]. Moreover, Qinling – Bashan mountainous area has a large illiterate, semi-literate population, people's scientific and cultural quality is low and the illiteracy rate of the women reaches as high as 60%^[3], the university enrollment rate is less than 5% of the city's total population, while the number of the middle school students at school accounts for less than 14%, and is in a declining trend during 2007 – 2009 (Table 2). The low quality of the large population seriously impedes current economic development.

Table 2 Number of students at school of Hanzhong City during 2007 – 2009^[4-6]

Year	The proportion of students with college or above education//%	The proportion of primary and middle school students//%
2007	0.34	13.1
2008	0.39	12.6
2009	0.38	12.2

1.3 Weak capacity of the economy to generate profit on its own and declining trend of financial self-sufficiency rate Financial self-sufficiency rate is the ratio of annual local revenue and expenditure, which reflects the capacity of local economy

to generate profit on its own. As shown in Table 3, both the financial revenue and expenditure of Hanzhong City during 2007 – 2009 increase in recent years, while the financial self-sufficiency rate is in a declining trend from 21.07% in 2007 to 12.34% in 2009 (Table 3), which proves its weak capacity of the economy to generate benefit on its own, mainly due to that the main financial source in the past is agricultural tax and the abolition of agricultural tax results in a drop in financial self-sufficiency rate.

Table 3 The financial revenue and expenditure as well as its self-sufficiency rate of Hanzhong City during 2007 – 2009^[4-6]

Year	Financial revenue// × 10 ⁸ Yuan	Financial expenditure// × 10 ⁸ Yuan	Financial self-sufficiency rate//%
2007	10.20	48.40	21.08
2008	12.33	77.72	15.86
2009	14.39	116.63	12.34

2 The impact of the status of the poor population in Qinling – Bashan mountainous area on its economy

Productivity is the capability for people to conquer and transform nature, which consists of production tools and labor force. Production tools reflect the production level, while labor force is the human element of productivity. As one of the productivity factors, the quality of labor forces also affects the improvement of productivity. Qinling – Bashan mountainous area in Shaanxi suffers from fragile ecological environment, obsolete infrastructure and single industrial structure, and the people there live very hard, its economic and social development lag far behind other regions, as a result of the status of its poor population, it has become the poorest place with the largest poor population and most complex poverty structure^[4], whose effect on local economy will not be optimistic.

2.1 Backward ecological concept and serious damage to ecological environment The extreme lack of education funds, teachers, school houses, etc, leads to the low educational level and low quality of workers in those poverty-stricken mountainous areas. The low quality of workers determines that they can only be engaged in simple production activities, as a result, the poor mountainous areas achieve their economic growth basically at the sacrifice of ecology and huge amount of resources. The predatory exploitation of natural resources causes serious damage to the ecological balance and leads to the dwindling resources, as a result, the original mountainous areas abounding with dense forest and rich resources become a barren land due to human's unrestrained deforestation.

2.2 Outflow of the excellent talents and a serious shortage of labor Employment, college admittance, army joining and outside working all lead to the outflow of the many excellent talents. Meanwhile, some rich rural labors stay in local urban areas by purchasing a house and doing business there. The moving out and migration of the people in mountainous areas will make the environment of local economic growth even worse, the remaining few labors in mountainous areas seriously affect local economic growth.

2.3 The industrial structure is irrational and the resources advantage can not be transformed into economic advantage

As shown in Table 1, although the total output value of the primary and secondary industry during 2007 – 2009 saw certain decline, it still took for a large proportion in all three industries; the proportion of the tertiary industry increases from the 37.0% in 2007 to the 41.2% in 2009, but it is still far below that

of the developed regions (65%), all above show that the industrial structure is irrational. As the site of ancient Three Kingdoms, Hanzhong City abounds in wild plants and animals and is blessed with exceptionally good conditions for developing tourism. But on account of its low quality of population and irrational industrial structure, local resources advantages cannot be transformed into economic advantages.

Table 4 Proportion of three industries of Hanzhong City during 2007 – 2009^[4–6]

Year	Primary industry		Secondary industry		Tertiary industry	
	Output value// × 10 ⁸ Yuan	Proportion//%	Output value// × 10 ⁸ Yuan	Proportion//%	Output value// × 10 ⁸ Yuan	Proportion//%
2007	67.24	23.1	116.07	39.9	107.90	37
2008	87.64	24.9	136.02	38.6	128.95	36.5
2009	91.71	22	153.00	36.8	171.45	41.2

3 Countermeasures and suggestions

Hanzhong mountainous area is stuck in poverty, because it doesn't well handle the relationship of the population, ecology, resources and economic development, as a result, it is caught in a vicious circle of ecological-economic system which is characterized by economic poverty, ecological degradation, low yield and many disasters. Therefore, it is a more difficult and tougher task to get people in these regions out of poverty. And moreover, the key to get rid of poverty is to maintain the coordinated development of population, ecology, resources and economy^[7].

3.1 Building new small town and lessening the loss of population

Residents in poor mountainous areas try to move out to the town due to the poor living conditions and inconvenient life. This in turn generates the following problems: on the one hand, the outflow of many young labors leaves large areas of lands uncultivated and brings lots of idle lands; on the other hand, a large number of people move into the town, but the limited public facilities there can not well meet their needs. The best way to solve this problem is to build new small towns. Therefore, supported by financial subsidies plus local residents' own savings, a new settlement could be built at the foot of the mountain to relocate the villagers living on the mountain so as to remove the inconvenience in their living and production, which, as a result, will not only make it possible to conduct unified planning of public facilities as well as improve their utilization, but also be in line with the concept of new rural construction and be more convenient for children to attend school nearby.

3.2 Providing preferential policies so as to attract and retain qualified person

The decreasing number of labor forces caused by migration and natural death leaves the lands in mountainous areas uncultivated, and there is a lack of able men who are good at agricultural activities. To solve this problem, on the one hand, local government should strengthen the construction of local labor forces and formulate preferential policies so as to retain those people who are familiar with local economic environment and stimulate their initiative to develop economy, activate private funds and encourage those migrant workers return back to start a venture; on the other hand, it should introduce talents from other developed and densely populated regions to support the construction in those poverty-stricken mountainous areas. At the beginning of the introduc-

tion of talents, some friction will inevitably arise between the interests of the introduced people and local residents, which will have an impact on the production effectiveness. Then the local government should act as a fair judge and balance their interests. There should be sufficient advantages to attract the "phoenix" as well as wide room left to local residents for their living and development, making the poor mountainous area a strong magnet which retains the "Yellow Crane" while attracts the "Phoenix".

3.3 Developing education and establishing the concept of ecological civilization

The poor mountainous areas should vigorously popularize compulsory education, develop vocational education, organize the training of farmers and improve the quality of population; they should also follow the path to pursue the coordinated development of the economy, population, resources and environment, the traditional development mode which is characterized by the pure pursuit of quantity growth and the satisfaction of the current generation, should be transformed into a sustainable development mode which lays emphasis on the quality of development and the well-being of the later generations. In the past, people deem themselves as the master of the nature, they do whatever they want and give themselves the right to dominant and conquer the nature at their own will, this concept, however, should be changed, people is only one member of the nature, they should establish the concept of ecological civilization that people and nature should coexist harmoniously and develop coordinately^[8].

3.4 Unblocking the channels of information transmission

Due to the low quality of population and inconvenient transportation in Qinling – Bashan mountainous areas, the people there have a weak ability to adjust to the market's restructuring of the industry. Moreover, the distribution of three industries is quite irrational. To solve this problem, local government could adopt the following measures: at first, to unblock the channels of information transmission, guide the farmers to conduct production according to market demand and avoid the blindness in industrial development; secondly, while taking full and flexible use of those beneficial policies, it should also follow the statue of mountainous areas and formulate some preferential policies and measures to promote the economic development, optimize agricultural structure and beef up the concept to pursue

(To page 21)

systems and technical support during the process of collection, storage, retrieval, dissemination and use of knowledge. It also involves construction and management of knowledge base, exploration technology of knowledge, artificial intelligence technology, experts system, knowledge network and so on.

3.2 The measures of the knowledge management research of agricultural scientific research institution We should adopt effective encouraging measures to realize the share of knowledge and management experience; accumulate and take advantage of the past experience in the process of innovation and daily business; propel the knowledge production aiming at conducting technology innovation and promoting management efficiency; make knowledge blend with the development, research and service of products in institution or industry; establish experts information and network management system of experts knowledge classification within and without the institution; build and explore different types of knowledge bases of personnel, manager and customer; choose corresponding evaluation methods and conduct quantitative analysis of the value of different types of knowledge; set up effective management system in order to optimize and use knowledge assets rationally.

4 Conclusion

As the development of knowledge management, more and more people realize the importance of knowledge management to the systematic management and high-efficiency development of institution and department. The objective of knowledge management is to obtain appropriate knowledge in appropriate time and place. So the application of knowledge management to the study of agricultural scientific research institution, and incessant improvement of business and management procedure, can stir innovative thinking and put it into practice, which will beneficial

(From page 17)

uniqueness, making the pillar industries better, bigger and stronger, and achieving a safe and ecological-friendly leading industry with high yield, high quality, high efficiency; moreover, the government should readjust and optimize agricultural structure, speed up the construction of an advantageous agricultural belt, actively develop characteristic agriculture, green food and ecological agriculture, as well as foster and expand leading industries^[9].

References

- [1] XI H. Concern the social vulnerable groups of Qinling-Bashan Mountainous[J]. West China Development, 2002(7):9. (in Chinese).
- [2] Hanzhong City Government. Overview of Hanzhong City[EB/OL]. (2005-12-30). [2010-05-23]. <http://hanzhong.gov.cn>. (in Chinese).
- [3] HE JL. Study on returning farmland to forest in Qinling-Bashan Mountainous[M]. Beijing: People's Daily Press, 2004:5-6. (in

to the enhancement of socio-economic profit dramatically.

References

- [1] FRAPPAOLO C. Knowledge management[M]. Translated by XU GQ. Beijing:Huaxia Publishing House, 2004. (in Chinese).
- [2] WITZGALL R, O'LEARY E, LEAF A, *et al.* The Kruppel-associated box-A (KRAB-A) domain of zinc finger proteins mediates transcriptional repression[J]. Proc Natl Acad Sci USA, 1994, 91:4514-4518.
- [3] MENTZAS G, APOSTOLOU D, YOUNG R, *et al.* Knowledge networking: a holistic solution for leveraging corporate knowledge[J]. Journal of Knowledge Management, 2001, 5(1):94-107.
- [4] SKYRME DJ. Knowledge networking: creating the collaborative enterprise[M]. UK: Oxford University Press, 1999.
- [5] WANG DL. IT implementation of knowledge management: simple knowledge management[M]. Beijing: Publishing House of Electronics Industry, 2003. (in Chinese).
- [6] QIU JP, CHEN JQ, LI HX. On the intellectual property protection of digital libraries[J]. Journal of Academic Libraries, 2000(4):8-13. (in Chinese).
- [7] LI SJ, ZHOU GM. Study on the management model for agricultural research information system (ARIS) in China[M]. Beijing: China Agricultural Science and Technology Press, 2002. (in Chinese).
- [8] LIU Y, LIU H. Analysis of agricultural S&T men-power resource in China[J]. Journal of Anhui Agricultural Sciences, 2006, 34(5):174-175, 181. (in Chinese).
- [9] ZHANG Q. Study on the knowledge management model of agricultural research institutions[J]. Journal of Library and Information Sciences in Agriculture, 2004, 15(7):18-20. (in Chinese).
- [10] ZHANG LJ. Consideration the Chinese about the investment of agricultural R&D: Broad financing, effective use and potential development[J]. Journal of Anhui Agricultural Sciences, 2006, 34(6):9-10. (in Chinese).
- [11] ZHANG Q. The research on some problems for the knowledge management of agricultural research institute[J]. Journal of Library and Information Sciences in Agriculture, 2004, 15(5):16-18. (in Chinese).
- [4] Hanzhong Municipal Bureau of Statistics. Statistical communique of Hanzhong City on 2007 national economic and social development [EB/OL]. (2008-03-30). [2010-05-23]. <http://tjj.hanzhong.gov.cn/tjgb/tjgb2007.htm>. (in Chinese).
- [5] Hanzhong Municipal Bureau of Statistics. Statistical communique of Hanzhong City on 2008 national economic and social development [EB/OL]. (2009-03-16). [2010-05-23]. <http://tjj.hanzhong.gov.cn/tjgb/tjgb2008.htm>. (in Chinese).
- [6] Hanzhong Municipal Bureau of Statistics. Statistical communique of Hanzhong City on 2009 national economic and social development [EB/OL]. (2010-03-24) [2010-05-23]. <http://tjj.hanzhong.gov.cn/tjgb/tjgb2009.htm>. (in Chinese).
- [7] CHEN XS. The countermeasures about the sustainable development of the population, natural resources, environment and economy in China's western areas[J]. Economic Tribune, 2004(19):22. (in Chinese).
- [8] NIE MQ. Analysis on ecological environment and economic development in China's western areas[J]. Journal of the Guizhou Municipal Party College of C.P.C, 2009(2):50. (in Chinese).
- [9] MA ZJ. Current situation and consideration of ecotourism in China [J]. Group Economics Research, 2007(1):63. (in Chinese).