

Research on the development strategy of talent cultivation in Shaanxi province under the background of Silk Road Economic Belt

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Abstract

Under the background of Silk Road Economy Belt, the paper analyzes the talents state in science and technology of Shaanxi province and other regions along the Silk Road in china. Analysis shows that Shaanxi is abundant in resources of science and education, technologists and military resources, which play an important role in promoting the construction of the Silk Road. While there are a series of problems, such as inefficiencies in technological achievement transformation, the capability of independent innovation needs improving, a serious brain drain and lack of high skilled talents exist in talent training. Based on the research above, the paper put forward some relevant measures to improve talent training strategy.

Keywords

the Silk Road Economic Belt, Shaanxi province, talent training.

1. Introduction

Silk Road Economic Belt is a new "corridor type" strip economic development area based on the ancient Silk Road, which includes Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang five northwestern provinces and Chongqing, Sichuan, Yunnan, Guangxi, southwest provinces of china. Countries and regions along the Silk Road are rich in natural resources, mineral resources, energy resources and land resources, but poor in economy and education. Talent is a key factor in the development of the Silk Road Economic Belt. Located in the northwest of China, Shaanxi province is not only an important base of tertiary education, scientific research, national defense science and technology, industry and high technology industry, but also a national innovative pilot city and reform demonstration base of science and technology resources. As the starting point of the Silk Road, Shaanxi province has the absolute advantage of talent resources.

2. The status quo analysis of the talent resources in Shaanxi Province

Innovation is an important driving force of regional development. In the research of innovation-driven, Xiatian divided Driving process into front end driver, process driver and back-end driver. Front end driver is based on knowledge innovation and basic science innovation, which demands more educational conditions and knowledge infrastructure. And research shows that innovation-driven power mainly comes from the accumulation of human capital and knowledge acquisition, production, trading and distribution. Shaanxi province, which is rich in science and education resources, should build itself into a center of the national talent, and output talent for the countries along the Silk Road.

2.1 The current situation comparison of talent resources among the western provinces

The economic in western region starts late and develops slowly. Since the implementation of the strategy of the development of china's west in 2000, the economy and technology developed rapidly. Relative to other western areas, Shaanxi province has advantages in science and education resources and research and development (R&D) talent resources, shown as the Table 1.

Table 1 shows that the number of colleges and universities in Shaanxi province and Sichuan province is significantly more than that of other regions in the area of science and education resources. Education is relatively backward in Qinghai and Ningxia. The number of enrollment postgraduate

and R&D personnel of industrial enterprises above designated in Shaanxi province is the largest. In terms of scientific and technological achievements, there are 43608 patents applied and 55794 patents granted in Shaanxi province, which are far more than that of other regions, such as Gansu, Qinghai, Ningxia, Xinjiang, Yunnan and Guangxi.

Table 1. Comparison of science and education resources among west provinces in 2012

Province (city)	Number of Regular Higer Education Institution (unit)	Total enrollment (10000 persons)	Number of Enrollment postgraduate (person)	R&D personnel of industrial enterprises above designated (person)	Number of patents applied (piece)	Number of patents Granted (piece)
Shaanxi	91	102.63	94294	55794	43608	14908
Gansu	42	59.02	29412	10473	8261	3662
Qinghai	9	6.19	3276	2889	844	527
Ningxia	16	10.02	5000	4039	1985	844
Xinjiang	39	28.42	15456	6723	7044	3439
Chongqing	60	67.02	46569	45912	38924	20364
Sichuan	99	122.37	85626	49818	66312	42218
Yunnan	66	51.22	29246	12300	9260	5853
Guangxi	70	62.92	23545	52200	13610	5900

(data from provincial statistical yearbook 2013)

2.2 The analysis on the advantages of talent resources in Shaanxi province

By the end of 2012, Shaanxi has 91 regular higher education institutions, of which 8 are "985" or "211". Among all the universities, undergraduate colleges accounted for 65%, and academy accounted for 35%. There are 1.0263 million students, 61500 full-time teachers, 52 postgraduate training institutions, 18 institutions of higher education for adults, 928 scientific institutions with R&D activity and 220279 personnel engaged in scientific and technological activities. In 2012, Shaanxi published 64336 technical and scientific papers and 1516 kinds of scientific books. Those R&D personnel created a wealth of achievements for Shaanxi province. Rich human resources and innovation ability are the potential core competitiveness for Xi'an to become an international metropolis.

Shaanxi province is an important national defense industrial base, excellent in nuclear industry, aviation, aerospace, weapons and ship. Yanliang is the most complete industrial system in china including aircraft design institute, manufacturing, flight-test and teaching. It is also a weapon industry development base, such as nuclear fuel, Military electronics and ship.

3. The inadequacies of current development on talent

Although Shaanxi is rich in talent resources comparing with the other western regions, the deficiencies are still notable especially under the background of the Silk Road Economic Belt.

(1) inefficiencies in technological achievement transformation

In growing process of several years, Shaanxi has acquired a glorious technological achievement, while the ratio of R&D achievement to talent in quantity is low. The difference in per capita GDP among provinces, such as Qinghai, Ningxia, Xinjiang and Chongqing is not obviously in 2012. (The result is shown in Fig.1). It said just about 22.2% percent of all employed workers in 2012 were

engaged in tertiary industry, which indicates human resources advantage is not translated well into industry competitive advantage.

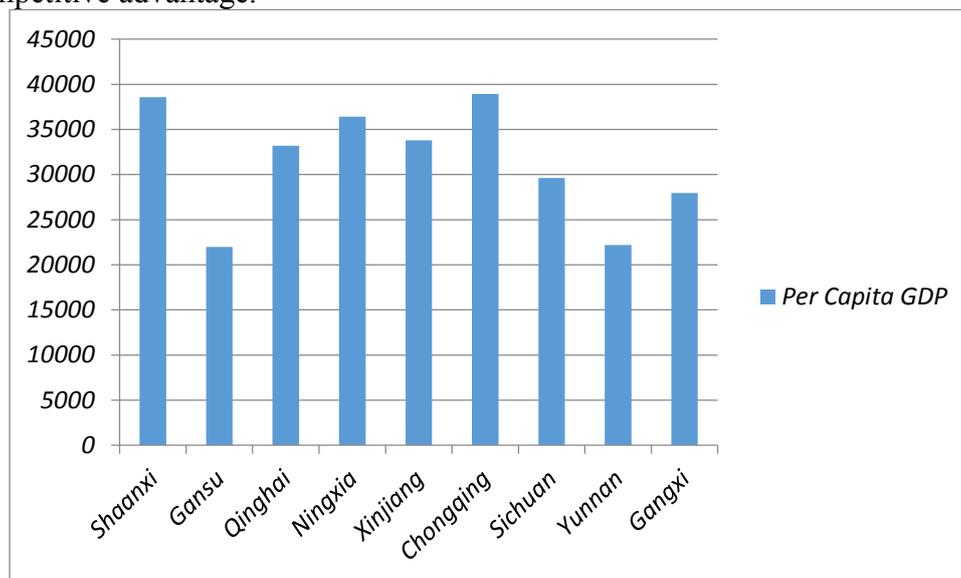


Fig.1 Per Capita GDP of each region

(2) the capability of independent innovation needs improving

Independent innovation ability already became the critical factor of area core competition ability and enhancing capacity for independent innovation needs innovational talents. The ratio of GDP to R&D funding and the per capita number of patent applications in 2012 is significantly lower than the national level.

(3) A serious brain drain and lack of high skilled talents

Brain drain is serious in spite of the rapid development of economy. According to the survey, human resources outflow is higher than inflow as a result that the talents tend to technology developed metropolis, which result in the scarcity of high-level innovative and highly skilled personnel in Shaanxi province.

4. Recommendations for promoting talent training of Shaanxi Province

(1) Deepen education reform and promote the development of education evenly and high-quality.

It is education that the basic approach for developing human resource and improving the quality of labor force. The development situation of education is closely related to the quality of talent training. Remove the universal exam-oriented education and perfect the cultivation and appraisal mechanism of student cultivation. Explore multiple teaching methods and cultivating mode to meet diversity demand for students. Improve vocational education model, strengthen the close ties with the enterprise and boost the model of running school of vocational education group. Reform the model of vocational education and continuing education, increase the proportion of vocational education and raise the enthusiasm of students to apply vocational education, in order to cultivate more utility-type talents.

(2) Reform the model of talent cultivation according to the requirement of society

In terms of talent cultivation in colleges, it should optimize the subject setting to form a subject-specialist cluster system with rational distribution, distinct characteristics and significant advantages. At the same time, it should enhance the practice teaching link to improve students' ability of practice, perfect the incentive mechanism and bring up students' innovative consciousness and ability. Strengthen cooperation with other colleges, enterprises, R&D institutions and financial institutions, form a talent cultivation mode which is open and agility. Strengthen international exchanges and cooperation and cultivate a group of international talents.

The innovation ability of technology talents is the core of enterprise resources. An enterprise should not only concern about the pre-occupation of staffs, but also strength the skills training and theoretical education to ensure the vitality of enterprises.

(3) Speed up the economic development

To improve urban comprehensive strength, the development of economy is the guarantee. At the same time, it should pay attention to developing tertiary industry that stresses commerce and tourism, to developing new technological industries that regard electronic industry as the guide. Give advantage for courting foreign investment by developing financial, foreign trade and communication industries.

(4) Exert the function of government in macroscopically regulating to promote the development of human resources.

Government plays a main role in the process of developing talent. By guiding the establishment of talent development scheme and by perfecting talent training policy, the sustainable development of talents can be guarantee. In the aspect of talent gathering, Shaanxi can learn from Shenzhen and Hangzhou.

The Silk Road involves many countries and regions and the construction needs lots of international and high-end inter-disciplinary talents. Shaanxi government needs to invest more in this area and guarantee the interests of migrants by legal.

5. Conclusion

In the knowledge economy times, human resources have been an important factor for the development of regional economy. Shaanxi should take advantage of the human resource, reform the education models, and raise the conversion rate of human resources and innovative ability. With the effect of government guidance, Shaanxi can train many technical talents of high-quality for the construction of the Silk Road.

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