On the Reform in Talent Cultivation Mode of Higher Agricultural Education Under the Background of Comprehensively Building a Well-off Society

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ABSTRACT

Comprehensive building of a well-off society raises higher requirements for talents. This paper starts from the new changes in the demands of agricultural and rural reform for agricultural talents, brings forward the basic features of the reform in talent cultivation mode of higher agricultural education under the background of comprehensively building a well-off society, and elaborates the main approach of agricultural talent cultivation so as to meet the demand of agricultural structure adjustment and talent market for professional talents, to carry out the five development concepts of “innovation, coordination, green, openness and sharing”, and to improve the services provided for agriculture, rural areas and farmers.

INTRODUCION

Since the 19th CPC national congress, the goal of comprehensively building a well-off society has become clearer and clearer; the “13th five-year development period” is a vital historical period for realization of this goal, and there is new progress in economic and social development. “Farmers are key point for appraisal of well-off society.” To realize the great goal of comprehensively building a well-off society, we must ensure comprehensive realization of well-off condition of the population in rural areas. The development issues of rural area and agriculture is a key subject for determination of whether this goal is realized. To ensure timely and high-quality realization of comprehensive well-off society in rural areas, sufficient agricultural talent supports and intelligence guarantees are required. Continuous innovation in agricultural talent cultivation mode has become a key link and important measure for comprehensive building of a well-off society.

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THE GOAL OF COMPREHENSEVELY BUILDING A WELL-OFF SOCIETY RAISES NEW REQUIREMENTS FOR AGRICULTURAL TALENT CULTIVATION

It is clearly brought forward in the report of the 19th CPC national congress that the great goal of comprehensively building a well-off society shall be realized by 2020. This goal requires comprehensive realization of well-off level in the five aspects of political, economic, cultural, social and ecological construction, and it is emphasized that comprehensive development of people is the ultimate objective of comprehensively building a well-off society. Agriculture is a fundamental sector of China, rural society is an important component of our society, and farmers are main group of the Chinese people. Development of agriculture, rural areas and farmers is closely related to the comprehensive building of a well-off society, while cultivation of agricultural talents directly influences the development of agriculture, rural areas and farmers, and is a key link in the realization of the great goal of comprehensively building a well-off society. In detail, the new requirements raised by the comprehensive building of a well-off society for agricultural talent cultivation mainly include:

Firstly, new requirements on the structure of agricultural talents. According to the requirements on the new goal of comprehensively building a well-off society provided in the outline of the “13th five-year development plan”, the main goals on the development of rural areas and agriculture in the next five years mainly include: maintaining medium and high speed economic growth, with obvious progress in agriculture modernization; deepening the implementation of the innovation driven development strategy to realize prosperous entrepreneurship and innovation and obvious improvement in productivity of all elements; obviously improving the quality of urbanization, and quickening the increase of population urbanization rate as indicated in household registers; significantly improving quality of citizens and degree of social civilization; eliminating poor counties, minimizing poor population in rural areas, and solving the problem of regional poverty under the current standards; achieving significant progress in national governance ability and modernization of governance system, further improving democracy, basically completing construction of law oriented government, and significantly enhancing institutionalization of Party building. From these goals it can be seem that during the “13th five-year development period” the structure of agricultural talents will become more diversified. In the aspect of type, various types of talents such as scientific and technological talents, economic talents, administrative talents, legal talents and Party affair management talents are needed; in the aspect of form, innovative talents, applied talents and skillful talents are needed; in the aspect of educational level, masters, bachelors, senior vocational school graduates and medium vocational school graduates are needed.

Secondly, new requirements on the quality of agricultural talents. During the “13th five-year development period”, the concept of China dream and the core socialist values will be rooted more deeply among period, the collectivism, patriotism and socialism will be promoted, the positive and good social morality will be further developed, the ideological and moral quality, scientific quality and cultural quality of citizens will be obviously enhanced, and the awareness of rule of law will be continuously strengthened. This requires agricultural talents to greatly enhance their comprehensive
quality including scientific and cultural quality, ideological and moral quality, mental and physical quality, and so on, so that a solid quality foundation can be laid for the comprehensive building of a well-off society.

Thirdly, new requirements on ability of agricultural talents. During the “13th five-year development period”, along with the further improvement in industrialization and informationization, the progress of agricultural modernization will be more obvious; technology and economy will be integrated deeply, the innovation ability will be comprehensively enhanced, great breakthroughs will be achieved in core technologies in key fields and processes, and the country will join the group of innovative countries. This requires agricultural talents to have diversified abilities such as innovation and entrepreneurship ability, business operation ability, and so on.

**BASIC FEATURES OF THE REFORM IN TALENT CULTIVATION MODE OF HIGHER AGRICULTURAL EDUCATION UNDER THE BACKGROUND OF COMPREHENSIVELY BUILDING A WELL-OFF SOCIETY**

To bring into full play the functions of scientific research, talent cultivation, social service and cultural transmission, teaching in higher education should firmly grasp the fundamental mission of talent cultivation, and take talent cultivation as the most important task. Talent cultivation mode of institutions of higher education mainly consists of four parts, respectively talent cultivation objective, talent cultivation approach, talent cultivation mechanism, and talent cultivation assessment. Among them, talent cultivation objective provides qualitative definition of talent cultivation, and solves the problem of what talents to be cultivated; talent cultivation approach solves the problem of manner of talent cultivation, and refers to the process that the teachers and the students reasonably utilize education media and means such as books and experimental equipment, cooperate with each other, and carry out teaching and learning activities in certain manner so as to realize the talent cultivation objective; talent cultivation mechanism solves the problem of the means of talent cultivation, relates to talent cultivation procedures, regulations and implementation systems, and is a basic premise and important guarantee for effective implementation of talent cultivation; talent cultivation assessment solves of the problem of standards for talent cultivation, and covers monitoring and assessment of talent cultivation objectives, systems and processes using appropriate assessment techniques. Based on the simple analysis of the composition of talent cultivation mode, an operating sketch of talent cultivation mode is provided below (see Figure 1):
Effective talent cultivation should take the initiative to meet the national and regional economic and social development and industrial progress, meet the requirement of comprehensive development of people, and meet the rules of higher education development. Under the new background of comprehensively building a well-off society, for higher agricultural education, the talent cultivation mode should follow the development laws of agricultural education, and should be a model in cultivating comprehensive talents for the realization of the goal of comprehensively building a well-off society in rural areas. Therefore, the reform in talent cultivation mode of higher agricultural education under the background of comprehensively building a well-off society should take the need of agricultural development and the economic and social development of rural areas under the background of comprehensively building a well-off society as basic basis, and should cover scientific positioning of talent cultivation objective, comprehensive revision of talent cultivation scheme, and innovation of talent cultivation approach and mechanism. The cultivation concept should be gradually reformed from “traditional” to “modern”; the discipline and speciality setting should transit from industrial function orientation to social function orientation; the cultivation objective should change from specialized talent to comprehensive talent; the cultivation system, mechanism and approach should change from focus on “teaching” of knowledge and skills to initiative and comprehensive self-development of students.

**MAIN ROUTES OF AGRICULTURAL TALENT CULTIVATION MODE UNDER THE BACKGROUND OF COMPREHENSIVELY BUILDING A WELL-OFF SOCIETY**

To meet the requirements of the goal of comprehensively building a well-off society, efforts should be made mainly to the construction in six aspects including one “innovating”, two “optimizing”, two “strengthening”, and one “beautifying”.

**Innovating Talent Cultivation Concepts**

Firstly, the concept of “focus on quality”. Compared with the requirement of comprehensively building a well-off society, the current population quality in China, especially in rural areas, still needs improvement. In order to realize scientific
development and transform the economic development pattern of China, it is necessary to improve the learning quality of students, teaching quality of schools and overall quality of the whole nation and to implement the strategy of “focus on quality”. This requires to persist in human orientation, to improve talent cultivation quality by enhancing individual high-quality and comprehensive development, and to improve education quality by means of high-quality education development.

Secondly, the concept of “excellence and efficiency”. “Excellence” is mainly reflected in excellence in the students recruited and in cultivation objective, process and fruits; “efficiency” is mainly reflected in adjustment of recruitment scale and enhancement of recruitment quality.

**Optimizing Talent Cultivation Platform**

Special attention should be paid to three cultivation platforms, respectively theoretical course building platform, active practice ability developing platform, and scientific overall quality assessment platform.

Firstly, theoretical course building platform. All courses should be built and improved based on network resources using modern information technologies and relying on online teaching platform, and the reform in contents, methods and means of teaching should be facilitated, teaching material development should be driven, and famous teacher development should be promoted through course building.

Secondly, active practice ability developing platform. Active practice refers to the arrangement that students are taken as the subject of practice to the greatest extent, and are encouraged to participate in all processes of the practice. Active practice is relative to “passive practice” in which teachers directly provide guidance for students, and such practice covers determining experiment object, working out experiment method, designing procedures (routes), making analysis and conclusion, and so on. Active practice can effectively build up abilities of students and provide them with opportunities to get innovative results. The concept of active practice should be carried through in all processes of experiment, and different and appropriate organization and guiding manners should be used for different students. The students should be encouraged to take active practice by further opening up laboratories to them, strengthening extracurricular scientific and technological innovation of students, strengthening credit rewarding for innovation, and so on. While consolidating and bringing into full play the function of experiment and practice base, student scientific research and innovation center and quality building base should be constructed to meet the need of students for active practice and to provide platform supports for their active practice.

Thirdly, scientific overall quality assessment platform. In terms of ability and quality assessment of students, the old approach in which greater importance is attached to knowledge, theory and single-aspect assessment than to ability, practice and comprehensive assessment should be changed. While continuously improving management of the credit rewarding system for scientific and technological innovation
and extracurricular activities of students, the “overall moral quality credit system” should be studied and used actively to comprehensively assess the moral, intelligent, physical and artistic quality of students and perform overall assessment covering both ability and personality.

**Optimizing Talent Cultivation System**

Agricultural talent cultivation system under the background of comprehensively building a well-off society should conform to the basic laws of agricultural engineering education and talent cultivation. During the construction of talent cultivation system, the principle of “taking students as center and taking agricultural and social service as purpose” and the education concept of “solid foundation, strong practical ability, high quality and outstanding competence” should be followed, and the talent cultivation system should be optimized to reflect the advantages and characteristics of agricultural engineering disciplines and majors.

Talent cultivation system mainly covers two aspects, namely cultivation system structure and course teaching content. The cultivation system structure has two dimensions, respectively horizontal dimension and vertical dimension. The horizontal structure mainly consists of “theoretical teaching system, practical teaching system, and overall quality development system”, in which the theoretical teaching system consists of “platform (fundamental + specialized) and module (main specialized courses + optional specialized courses)”; the practical teaching system mainly consists of fundamental experiment platform and specialized experiment platform; the overall quality development system includes skill training platform, student discipline contest platform, scientific research and practice innovation platform, scientific and technological innovation association platform, quality development platform, and so on. During course teaching content construction, theoretical teaching should start from fundamental and applied contents, with special attention paid to advanced and comprehensive contents, and updating and integration of courses should be strengthened; the contents of practical teaching should be mainly comprehensive experiments characterized by design, selection and research by students; overall quality development should be performed flexibly by means of student associations, discipline contest, social practice, scientific research practice, and so on, and should embody innovativeness and initiative to effectively improve specialized accomplishment of students.

**Strengthening Talent Cultivation Mechanism**

Agricultural high-tech talent cultivation mechanism refers to the operation and management manners used by schools, governments and employers after determination of the cultivation objectives. In the new age of agricultural construction, the accelerated transform from traditional agriculture to modern agriculture must be driven by scientific and technological progress and innovation to enter a new phase of sustainable development as quickly as possible. Agricultural high-tech talent cultivation mechanism is a fundamental guarantee for the realization of the talent cultivation objective. An agricultural high-tech talent cultivation driving mechanism with good
interaction should be built, and the problem of “affordable education, sufficient qualification, good learning effect, high suitability and satisfactory retaining” should be solved at the mechanism level. Efficient and ordered operation mechanism for agricultural high-tech talent cultivation should be built, and leadership, institution, assessment mechanism, adjustment mechanism and selection mechanism should be strengthened and improved to ensure realization of cultivation objective and quality. Sustainable guarantee mechanism for agricultural high-tech talent cultivation should be built [2], and close attention should be paid to modernized management and building of good education environment to provide effective guarantee for building of long-term mechanism of talent cultivation.

**Strengthening Talent Cultivation Assessment**

Talent cultivation assessment indexes include “soft” indexes such as scientific management and cultivation quality degree, and “hard” indexes such as quantity of talents cultivated, benefits, and so on. Effective assessment mechanism is a standard for judgment of the correctness of talent cultivation mode and evaluation of cultivation efficiency, benefit and maturity. To build effective assessment mechanism, efforts should be made by both governments and colleges. Governments should establish talent cultivation assessment system to promote standardized performance of work; colleges should work out detailed assessment indexes for each major, and integrate such indexes into their overall teaching quality guarantee systems.

**Beautifying Talent Cultivation Environment**

Beautification of talent cultivation environment mainly covers the following three aspects:

Firstly, strengthening construction of material cultural environment [3]. Campus environment at the material level of campus culture mainly covers architectural style, geographical position, teaching facilities, scientific research facilities, and so on. Such environment is a carrier of school culture. A good material cultural environment is a necessary and fundamental condition for colleges. For example, science museum used to foster science and technology awareness of students, art gallery used to improve art accomplishment of students, and gymnasium used to build up physical quality of students. Agricultural colleges should quicken hardware construction according to their traditions and cultivation objectives, expand campus environment and space, enrich the contents of campus culture, heighten the cultural grade of campus, and harmoniously integrate the service function and aesthetic function of material cultural environment.

Secondly, strengthening construction of spiritual cultural environment. Colleges should work out appropriate plans and measures, attach importance to spiritual civilization construction of students, and properly guide the speeches and acts of students. Firstly, they should establish and improve institutional systems to provide rules for cultural activities in campus. Secondly, they should strengthen construction and guidance of student association culture to ensure progress of student centered cultural atmosphere.
toward a correct direction. Thirdly, they should set good examples and models, and invite excellent alumni and role models to give lectures so as to build up their spiritual cultural environment.

Thirdly, strengthening construction of institutional environment. Institutional environment refers to a series of fundamental rules of basic political and social laws used to establish production, exchange and distribution basis. Institutional environment of a college is the most external influencing factor for reforming activities of the college. Many problems of colleges, such as change in management, school running and teaching activities, are often embodiment and representation of the changes in institutional environment. Promotion of institutional environment construction not only needs standardized systems and rules, but also requires the whole society to perform cultural cultivation well, to continuously promote changes in in-depth social values and behavior concepts, and to prepare deep and favorable cultural, democratic and legal soil for relevant reforms of schools.

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REFERENCES