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Study on the Ecological Ethics of Agricultural College Students

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Abstract From the perspective of environmental sociology, a questionnaire survey was conducted on the environmental awareness and behaviors of undergraduates from nearly all fields of majors in Sichuan Agricultural University. According to the investigation results, there are los of problems, for example, the college students generally do not have adequate knowledge about environment and are unclear about the existing national ecological law system; their attitude towards environment is often influenced by their majors; their evaluation of environment is far from the reality; their environmental behaviors are weakly restrained and conserved. According to these problems, related suggestions were proposed.

Key words College students, Environmental awareness, Environmental behaviors, Ecological ethics

With the sharp growth of world population, the accelerated advances of science, and the tremendous increase of material wealth since 1990s, the essential material resources are being consumed and the ecological environment is also exacerbating. The appearance of global environmental crisis makes it impossible for people to stop thinking about its radical causes, which are, the backward and a lack of environmental awareness. As China ecology develops rapidly and the urbanization process is accelerated, environmental issues have become a tough problem facing the sustainable development of China. Bearing the tough task of constructing and supporting the cause of socialism with Chinese characteristics, the college students should also be the main force of environmental

protection. On this basis, it is of great significance to studying the environmental awareness and behaviors of college students as a typical group of environmental protection.

1 Construction of the research method and research model

Related data was collected by the method of questionnaire survey. Five first-class indexes were designed, covering 60 second-class indexes, including the basic personal information of investigated students, ecological knowledge, ecological behaviors, ecological education and effect, as well as ecological values. The details can be found in Table 1.

Table 1 Ecological ethics of college students in agricultural universities and colleges

No.	First-class index	Second-class index
1	Basic information of the investigated students	Age, gender, major
2	Ecological knowledge	Ranking, green food, ecological civilization, ecological quotient, radioactive substances, Kyoto Protocol, low-carbon knowledge, ecological common sense, greenhouse effect and ozone destruction
3	Ecological behaviors	Environmental protection days, reduction of pollution, saving of energy, disposal of wastes on campus, environmental protection practice, reaction to destructive behaviors, consumption pattern, ways to travel, source of drinking water, saving of water and energy, disposal of wastes, reuse of papers, disposal of garbage, reaction to uncivilized behaviors, disposal of waste battery, disposal of gums, bringing your own shopping bags, use of disposable tableware, selection of detergent, preference to green products, protection of flowers, protection of grass, planting
4	Ecological education and its effectiveness	The way to get environmental protection knowledge, forms of environmental education activities, selection of environmental education activities, teachers' awareness of environmental education, ways to creating the learning environment of ecological environment, effectiveness of college environmental education, forms of college environmental education, suggestions on college environmental education
5	Ecological values	Real essence of environmental problems, attitude towards eco-environment, eco-ethic concepts, saving, attitude on restrictions of plastic bags, thrift, classification of domestic garbage, classification of residential garbage, while pollution, smoking, greening expense, fireworks, environmental expenses, environmental activities, participation of enterprises, green lifestyle, care about other substances

Sichuan Agricultural University is a comprehensive university and has a complete major system covering fields such as physical

science, engineering, economics, management, arts, pedagogy and law. All the students questioned are from the first to third grade, among whom there are 222 freshmen (30.5%), 221 are sophomore (30.4%), 284 are junior (39.1%). And 377 are male (51.9%), 350 are female (48.1%).

A total of 800 questionnaires are released and about 727 shares are recovered, the recovery rate is 91%. And all the 727 shares are proven to be valid.

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2 Analysis of the investigation findings

Based on the questionnaires, the ethic values, ecological knowledge, ecological behaviors, as well as the ecological education and effectiveness and their relations of college students are analyzed, and the factors leading to the weak environmental awareness and substandard environmental behaviors were studied.

2.1 Weak environmental awareness As a type of social consciousness, environmental awareness belongs to the superstructure at ideology level. On the one hand, it is subjective to the economic structure; on the other hand, it is closely related to and restricted by the superstructure at legal and political level^[1]. The environmental awareness of college students is generally embodied in their knowledge about ecological ethics and ecological behaviors.

According to the investigation results, the college students generally lack the eco-ethnic knowledge. In terms of the question "Please put the followings in a temporal order: World Earth Day, Environment Day, Water Day, No Tobacco Day, and Land Day, 705 students gave their responses, 40.0% of whom, about 282 students gave the right answer. When asked about whether they have heard about the term of "ecological quotient", 42.0% of the students investigated had never heard about the term; 48.8% expressed that they heard but didn't have clear knowledge about the concept; while only 9.2% of the students had a better knowledge about it. When questioned about what they know about Kyoto Protocol, 23.7% answered "nothing", 36.8% answered "little"; while 39.6% had a general knowledge but showed interest in it. When asked what they think about "low-carbon economy" and "low-carbon life", 718 students gave their answers, but only 4.9% knew them well, 44.4% had little knowledge, while 32.0% had little knowledge.

2.2 Unscientific eco-ethic values Eco-ethic values refer to people's basic ideas about the value of ecology^[2]. The traditional concept of eco-ethic values, a one-sided man-oriented ecological value, searches for the pure pursuit of value and destroys the ecological environment. While scientific eco-ethic value is a scientific view of development which respects the nature, protects the ecological environment and maintains the harmony between human and nature. Due to a lack of basic eco-ethic knowledge and influenced by traditional concept of eco-ethic values, lots of college students hold a false concept of eco-ethic values, such as fuzzy attitude towards eco-environment, unclear knowledge about the environmental policies and system, as well as a lack of environmental protection awareness, *etc.*

As is indicated by the investigation findings, there are lots of problems in the eco-ethic value of most college students. When asked about their attitude towards eco-environment, 727 students gave their answers, 29.7% attached great importance to eco-environment, 49.2% attached general importance to it, while 21.0% cared little or nothing about eco-environment. When asked about their attitude towards the national restriction of plastic bags, as many as 80.9% spoke highly of this policy, 9.2% were indifferent, while 4.3% were against this policy. When questioned about

how to evaluate the enterprise participation in environmental protection industry, 49.9% deemed it a part of enterprise responsibilities, 38.5% thought that those enterprises were just pretending to do environmental protection, 7.2% thought it unnecessary, while 4.4% preferred that the environmental protection should be financially supported by the enterprises but practically implemented by the government. As is seen from the above data, under the existing dual structure of state and society, the college students tend to categorize the environmental protection into part of governmental responsibilities, and they have got used to waiting for the government to solve various environmental issues through large-scale activities.

2.3 Insufficient environmental education The present college education focuses too much on the knowledge related to their majors, and that is why their awareness of environment is greatly influenced by their majors.

It is found out that the education about environment in higher universities and colleges is quite insufficient. When asked whether the teachers include some environmental knowledge in their teaching, 48.6% answered "no"; 32.2% chose "yes", while 18.2% chose "others". When questioned about whether the teachers use multimedia to support their teaching of ecological knowledge, about 704 students gave their responses, but only 1.3% said "yes", and the rest chose "others". When asked whether the college education helps improve and enhance their environmental awareness, 65.2% denied, while 34.8% chose the option of "with little help". All above exposes that the colleges neglect the setting of public environmental courses, which, as a result, leads to the fact that some students from non-environmental majors have few knowledge about the environment. The lack of such education results in the weak environmental awareness of college students. Environmental awareness determines environmental behaviors, and weak environmental awareness will necessarily result in irrational environmental behaviors.

2.4 Weak environment ethic restraints Ethics are an important component part of social system with the functions of mobilizing, integrating and controlling social resources. But ethics are different from laws and not mandatory, thus they are weaker in restricting the social behaviors. Ethics cannot effectively restrict and prevent some environmental destruction behaviors.

When facing some destructive behaviors, the college students are less likely to say "no". When asked about their attitude towards the waste of water and electricity on campus, 8.7% just ignored, 60.4% occasionally stopped such behaviors, while 30.9% would definitely prevent such wasting of resources from happening. When investigated about whether they pay attention to the saving of water, electricity, papers and plastics, *etc.*, 79.4% answered "yes", 18.2% chose "no". When questioned about their attitude towards the smoking behaviors of their family members, 56.8% had noticed the harmful impact of smoking and would try to persuade their family members to quit smoking, 13.1% didn't think smoking was quite harmful and just neglected the smoking

behavior, while 20.0% thought that smoking was none of their business, and 9.6% thought that smoking causes harms to humans instead of to the environment. When asked whether they would report to related department about some destructive behaviors to environment, 715 students answered, and about 53.3% chose "yes", while 45.6% chose "no". When asked whether they would turn off the light or computers when nobody was in the dormitory, 716 students answered, about 42.8% answered "definitely yes", 30.0% answered "usually", 20.8% chose "occasionally", while 7.6% chose "rarely".

Ethics are an essential factor to restrict the environmental behaviors of college students, therefore, we should enhance the ethic function to establish a complete ethic restriction system.

2.5 A lack of ecological social practice The college education greatly improves the students' professional theoretical knowledge, but fails to give enough attention on improving their practical skills, especially the practical skills of environmental protection.

When asked whether they wanted to participate in some environmental protection activities, 79.3% chose "yes, but it depends", 15.0% chose "definitely", and 5.6% chose "no". When investigated whether they often promote some environmental protection knowledge or take part in some practical activities, 717 students responded, and 43.8% answered "yes", while the rest chose "no". As is seen from above, the some students are indifferent about the practice of environmental protection.

3 Conclusion and suggestions

According to the studies on the environmental awareness and environmental behaviors of college students, the environmental awareness of college students is generally weak, and their ideas about environmental protection are largely influenced by their majors; they are over-optimistic about their environmental behaviors; they care little about environmental protection and are not enthusiastic about some environmental protection activities. Environmental awareness is closely related to the environmental behaviors. Given the above analysis, some suggestions are proposed:

(1) To transform their traditional mind and raise their attention on environment. Firstly, the college students should absorb the real essence of the scientific concept of development and the ideas of harmonious society, and deal with the relations between humans and nature by the Marxist philosophy; nextly, the students should transform their traditional concept of ecological values and let the scientific ecological values guide our life, study and practice; thirdly, the students should enhance their ecological ethic study and enrich their professional knowledge about ecology and environment; finally, they should also take part in various ecological activities and care about some environmental issues.

(2) To construct an effective ecological ethic education system for college students. Ecological ethic education is a brand new concept of education rooting in ecological ethics, and its core is expressed in the following aspects: firstly, to review the fundamental relations between human and nature with a sustainable ethic concept; secondly, to review the equal interpersonal, intergenerational and interspecies relations with a brand new ecological perspective; thirdly, to reconstruct a lifestyle giving equal attention on ecology and development, simple and complex in a new and rational way^[3].

To construct an effective ecological ethic education system in college education, the penetration model and single discipline model should be organically combined, which means that, the ecological ethics, as a part of ethic education, are involved and penetrated into the education of each discipline, preventing the students from thinking the ecological problems separately. By penetrating the ecological ethics into every subject, their relations should be understood, and their difference should be noticed, so as to cultivate the college students' awareness of protecting environment and form scientific and complete concept of ecological ethics.

(3) To create good environment for ecological ethic education on campus. Firstly, the college leaders and teachers should set an good example to cultivate the students' ecological ethics; secondly, to create a good environment of ecological ethics, the students should respect the natural environment and denounce some destructive behaviors, and promote the responsibility of ecological conservation. Every student should fully recognize that to adhere to ecological laws and regulations as well as stick to the ecological ethic values are the moral obligations of everyone; thirdly, the colleges should increase their investment on education of environmental protection, and provide more chances of environmental protection practices, so as to attract more students into it, and deepen their knowledge about environmental protection.

References

- [1] ZHU DG. Discussion on current situation and improvement of law and system of ecological compensation[J]. Inner Mongolia Environmental Sciences, 2009(3): 5-8. (in Chinese).
- [2] REN JQ, LIU X. A probe into the ecological values[J]. Journal of Inner Mongolia University (Humanities and Social Sciences), 2004(6): 62-67. (in Chinese).
- [3] YE H. How to understand the ecological ethics and education[N]. China Environment Daily, 2009-01-09. (in Chinese).
- [4] LIU ZY, PANG YJ. Durrent situation and countermeasures of Chinese farmers' eco-ethical quality[J]. Journal of Anhui Agricultural Sciences, 2012, 40(22): 11463-11464. (in Chinese).
- [5] WANG XJ YE CY. Establishing cultivation mechanism of university students' eco-moral consciousness[J]. Journal of Southeast University(Philosophy and Social Science), 2009(6): 43-46, 127. (in Chinese).