

論文の内容の要旨

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論文題目 A study on local residents' consciousness and participation regarding nature
reserve of China – Case study of Beijing area –

(中国自然保護区に対する地域住民の意識と参加に関する研究 — 北京に関する事例—)

In recent decades, China has seen a rapid increase in the number of nature reserves. Most of nature reserves are distributed in rural areas, which are characterized by poor economic conditions, and thus local residents heavily rely on natural resources. Almost any access to nature reserves, or utilization of these natural resources, is regarded illegal in China by the regulating act. That has led to many conflicts between nature reserve managerial boards and local residents. In other developing countries, the importance of enhancing understanding, perceptions and attitudes of local residents has been of a great importance. However, the top-down management in China still does not pay sufficient attention to the significant role of the participation of local residents. In this paper, I demonstrate the need to win support and encourage participation of local residents in order to effectively manage nature reserves in China. The purpose of this thesis is to grasp the driven factors toward local residents' consciousness and participation in nature reserves and to propose some corresponding measures to improve the nature reserve management. In this thesis, "consciousness" includes "perception" and "attitude". Furthermore, "attitude" means approval or disapproval to something. Many studies about nature reserves are concentrating on the opinion of managing authorities. Studies regarding the local resident's consciousness and participation are very scarce in China.

In Chapter 1 of the thesis, I outlined the background and goals of the research. This chapter elaborated an importance of nature reserves in China and discussed a definition, categories and developing condition of nature reserves. Moreover, problem and difficulties faced by nature reserves were summarized and, what I care about and wish to solve, are indicated as a goal of this study.

Some theoretical background was introduced in Chapter 2. Solution for the problems in nature reserves of China can be inspired from some foreign experience. An overview of the park-people conflicts in some national parks in developing as well as in developed countries is given. A solution for such kind of conflicts has been seen in a local residents' participation and that has obtained a consistent approval among researchers. However, it is found that the management of nature reserves in China still does not pay a significant attention to the needs of local residents. Therefore, the concept of local residents' participation is proposed to be introduced to China and it is appealed to pay more attention to the voice of local residents. Furthermore, I introduced the Social Exchange Theory into this study and regarding it, three hypotheses followed by 14 sub-hypotheses were set in order to investigate driving factors which influencing consciousness and willingness of local residents to participate and thus to improve the managing process of nature reserves in China. The hypotheses are stated below:

Hypothesis 1. Local residents' attitude and participation toward nature reserves management is impacted by their perceptions.

Hypothesis 2. Local residents with different individual characters are likely to show different consciousness and participation toward nature reserves.

Hypothesis 3. Different social conditions are likely to impact the consciousness and participation of local residents.

Followed sub-hypotheses indicated more details, such as attitude and participation of local residents are impacted positively by their positive perceptions toward nature reserves, local residents' consciousness and participation toward nature reserves are impacted by their educational level and the consciousness, participation intents of local residents will be different toward different nature reserves and so on.

In Chapter 3 of the thesis, I explained the methodology and some basic conditions of three investigated nature reserves of Beijing (the oldest one named Baihuashan, the newest one named Puwa and the representative of transition time in nature reserve development process of Beijing named Wulingshan). First, I applied a questionnaire survey in order to grasp main factors which influence local residents' consciousness and participation toward nature reserves. In addition, face to face interviews were conducted with the authorities of nature reserves. As supplement, a literature survey regarding official statistics data, which including local economic conditions and records of illegal actions committed by local residents in nature reserves was conducted.

The Chapter4 of the thesis presents the results of the survey. In total, 444 questionnaires were accomplished. Further on, factor analyses were carried at first and four common factors were obtained. Using such findings, three structural equation models (SEM) were established. Conducting Covariance Structural Analysis has revealed statistically significant path coefficient and indicated the causal relation between perceptions, attitude and participation of local residents toward nature reserves. It is learned that positive perceptions of local residents influence their

attitude and participation strongly. Especially the positive economic perception has been revealed as the most important factor. On the other hand, negative perceptions were not correlated with attitude and their influence to participation was weak. In addition, comparing with perceptions, local residents' attitude toward nature reserves impacted the participation decisively.

Moreover, according to findings followed by analyzing free-answer questions regarding the knowledge, advices and comments toward nature reserves of local residents, 40% of respondents were not much familiar with nature reserves. What they desired the most are increased economic benefits: such as increase of income and compensation for crop damage by wild animals. Also, some residents were unsatisfied with current nature reserve managing body. It is urgent need to strengthen social education and propagandas regarding nature reserves.

As continue, in Chapter 5, I tried to appraise the influence of local residents' individual characters on their consciousness and participation toward nature reserves. Analysis of Variance and Multiple Comparison were conducted applying sex, age, education level, family annual income, residence period and employment relation with nature reserve as independent variables. I found that when compared with middle aged, young and old residents showed a weak willingness to participate in nature reserves. Then, high educational level of local residents is likely to be an indicator of strong positive economic perception toward nature reserves. In addition, wealthy residents are likely to be positive participants in nature reserves, and residents who possess employment opportunity in nature reserve are likely to feel stronger economic merits and indicate more supportive attitude toward nature reserves. Moreover, crosstab analysis of responses on free-answer questions also indicated that different education level, income and employment relation with nature reserve influence local residents' responses toward nature reserves.

In Chapter 6 of the thesis, a comparison analysis of local residents' consciousness and participation among three investigated nature reserves was conducted to test the influence of social condition differences. It is found that some commonness can be summarized as: (1) Positive economic perception is the most driven factor to the attitude of local residents toward three nature reserves; (2) Attitude is the driving factor to the participation; (3) Local residents participation improve their acceptance of nature reserves; (4) Individual economic situation influence local residents' participation. Also some differences were found among three nature reserves: such as the driving factor of perceptions toward participation is positive economic perception in Wulingshan, positive living environment perception in Baihuashan or negative living environment perception in Puwa. Correspondingly, a crosstab analysis showed that composition of age, educational level, family annual income and employment relation in three nature reserves indicated significant difference. I selected the education level, family annual income and employment relation as representatives of social condition. Multiple

comparing analyses were conducted to evaluate the correlation between the social condition and local residents' consciousness and participation toward three nature reserves. Results indicate that a little increase in family income will bring significant positive change of participation intents in Wulingshan and Puwa, but only great change happened in Baihuashan can show influence on the participation of local residents. Moreover, the effort to improve education is likely to be the best approach to gain a more support from local residents in Puwa but, increasing income and employment opportunities seem to be useful only in Wulingshan.

In addition, correlation analyses of governmental statistical data about local economic conditions and a data regarding a frequency of illegal actions committed by local residents in the nature reserve were conducted. In all of the three nature reserves, it was likely that an increase in average family annual income would reduce a number of illegal actions being committed by local residents. That confirms that economic development is the essential key in alleviating the resident- reserve conflicts.

Results of an interview with nature reserve authorities are included in Chapter 7. Common problems of all three interviewed nature reserves were the lack of funds and the lack of mutual understanding from local government bodies. As far as local residents, they indicated that the discontent of local residents mainly come from lack of monetary compensation. They believe that the best "local residents' participation" is providing more employment chances and improving their income of local residents. However, low educational level and capacity is a barrier for local residents accessing high quality position.

Finally in Chapter 8, I have summarized the results and listed the conclusions. (1) Economic benefit seems to be the most important driving factor for local residents' participation to the nature reserves in Beijing area of China. (2) Providing more employment chance can increase local residents' satisfaction toward nature reserves. (3) Social education and training is very important. (4) Establishing ecological compensation mechanism is imminent. (5) More efforts should be emphasized to strengthen local infrastructure development.

In addition, some prospects were outlined toward the future management of nature reserves. (1) Ecotourism should be improved since it is a direct provider of income and employment opportunities for local residents. Nature reserve managing body should integrate local culture and natural landscape and act as an improver and propagandist of the ecotourism. (2) Developing multiple managements and featured economies, nature reserves can provide starting fund and technical support to develop featured products in a larger scale. (3) Build social educational mechanism toward common local residents and add some basic knowledge about biodiversity conservation into the school curriculum. (4) Establish public compensation policies and solve the conflicts between nature reserves and local residents by conducting economic incentives.