

TOWARD HERITAGE 100 YEARS FROM NOW

An Experience of Forest Management Based on the Partnership Between Government, Local Community and Tourists

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ABSTRACT

The ecosystem in the upper reaches of the Yangzi river basin in Yunnan Province, China (Lijiang area) is suffering a striking decline. With this case as an example, this paper will examine how the partnership between the government, local community and tourists can be developed toward the goal of sustainable forest management, and furthermore, the establishment of a local based global community. These findings are based on the spot inspection carried out by an NGO organized by the authors.

INTRODUCTION

In recent years, there has been a great deal of afforestation activities in China. The primary background to these activities has been the formal launch of "Forest Ecology Programs" such as the "Mountain Afforestation Program" among others, which have been treated as state projects. At present, international cooperation between private NGO groups, tourists from foreign countries, local administrative organizations and inhabitants has been making progress in various areas across China to achieve the goal. However, cooperative enterprises undertaken by such domestic and foreign participants have been largely limited to instances of transient events. The formation of long term collaborations and equal partnerships by a wide range of participants aimed at achieving sustainable forest management is as yet inadequate.

This paper, taking account of the background described above, presents the afforestation activities of "IEGC (Organization for International Exchange of Green-Culture, University of Tokyo, Japan)," an NGO that was established mainly by young researchers and students. This paper attempts to understand the benefits and problems of afforestation endeavors, including tourism, and look into the potential of the formation of a "forest community" through a tripartite collaboration comprising the local administration, local inhabitants, and tourists (offshore residents).

THE ESTABLISHMENT OF IEGC AND ITS PHILOSOPHY

Issues of Forest Management in China and the Establishment of IEGC

Forests play important roles in ecological, economic, and social aspects (Davis et al., 2001). In the past years, assessments of the value of forests have been mostly one-sided-emphasizing their economic value. This results in the overcutting of forests, and therefore resulted in floods and other disasters. This has further led to the frequent occurrence of a wide range of related cultural problems, including great difficulties in the restoration of wooden cultural assets in the cultural heritage areas. Consequently, the nation has come to focus on the public interest functions of forests. In other words, expectations are rising regarding the environmental, social and cultural benefits of forests. The focus on forests is shifting from regarding them as a source of logs to regarding them as a resource stock or even as common social capital (Uzawa, 2000). They are recognized as the foundations for water/soil maintenance and environmental amelioration systems, the foundations to carry on the legacy of wooden cultural assets in a sustainable manner, as recreational resources and tourist targets.



Figure 1. Area Subject to NGO Activities. (Source: map courtesy of Takayoshi Yamamura)

In contrast, very little consideration has been given to the concrete roles of the local inhabitants and tourists concerning forest management. This is so in China partly due to the fact that most policies are carried out in a top-down manner. In order to carry out the appropriate management of natural resources and restore the deteriorating ecological environment in certain areas, there is a need for proper administrative guidance. At the same time local inhabitants and tourists must have a deep understanding of forest management as well as actively and voluntarily participate in it. In the case of areas that do not have such a partnership, there are high expectations for the role of NGOs as "third sector organizations" (Korten, 1990), which lead toward the development of a framework of sustainable forest



Figure 2. Traditional wooden buildings have restoration difficulties due to the lack of wood. (Photo: Takayoshi Yamamura)

management based on collaborative management between local administration, local inhabitants, and tourists.

The IEGC, which was established on March 12, 1999, was founded by graduate students of the Graduate School of Tokyo University (including visiting students from China and Japanese students, all in their thirties or younger) who shared a common recognition of such issues. The objectives of IEGC are the “regional development through afforestation activity” and “international interchange between different cultures.” The initial members of IEGC decided to focus its main activities on a farm village on the outskirts of Lijiang in Yunnan Province. As of April 2004, the IEGC was only a small student circle with a membership of no more than thirty; however, having received subsidies from Japanese foundations since 1999, the IEGC goes onsite every year in a group of 10-20 people, including foreign tourists in addition to group members, in order to carry out afforestation activities called “Green Hope Project And Environmental Education Undertaking.” In addition, the young researchers and graduate students who are the regular IEGC members have made the IEGC a place of interdisciplinary research activities, because they come from a wide range of fields, including agriculture and the humanities, urban engineering, ecology, environmental education, and cultural anthropology. Furthermore, since the beginning of such activities, there has been frequent contact and adequate discussion with local administrative authorities and the local community. Excellent collaboration and partnership has been formed gradually by entrusting them in part with the preparation of afforestation locations, preparations for seeding, and some afforestation activities and the management tasks. In addition to tree-planting activities, there has been an ongoing accumulation of data and interviews, depending on the specialties of each member, information has been accumulated and personal networks built that contribute to the activities.

Approach to the “Participation” of Tourists

As Kant (1803) said, “human beings are the only creatures that cannot exist without education.” In addition, “human beings can

become human only through education.” It is certainly true that the recognition of values is thought to deepen gradually only after passing through the process of education and learning.

In the Belgrade Charter (1975), the targets of environmental education are listed as Awareness, Knowledge, Attitude, Skills, Evaluation Ability, and Participation. In other words, this process, which is considered crucial, begins with interest and concern, followed by understanding and recognition skills, and the ability to make evaluations, and culminating in participation. The key words for the long-term outlook in Japan’s environmental master plan also include “participation,” in addition to “circulation,” “symbiosis,” and “international measures” (The International Environmental Education Program (IEEP, 1975).

In fact, it is thought that, before long, one will reach the stage of voluntary, energetic participation if one’s recognition of the importance of values deepens, accompanied by actions to resolve environmental problems. In other words, the key targets of environmental education are to instill the proper recognition of the relationship between human beings and the environment and responsibility for one’s own actions. Having achieved this, it is possible to create human resources that can participate proactively in the creation of a sustainable society.

The general idea of this “participation” is crucially important in connection with the two following points. The first is that the voluntary participation of the local inhabitants, is the driving force behind the management and development of the region. The second is the participation of others besides the local inhabitants (non-residents), which might include NGO members and tourists. The establishment of a cooperative framework of their participation is a crucial element in realizing the sustainable management of regional resources, and this is a point that has been underlined in recent years by UNESCO and other international organizations (ICCRUM Mayors & Decision-Makers’ Forum, 2003).

Outline of the Regions Targeted for Activities

In China, afforestation projects have been carried out with the objective of conserving the water and soil of the *Chang Jiang* (Yangzi River) catchment basin. A project to protect the forests of the middle and upper reaches of the *Chang Jiang* has been carried out since 1989, with the main objective of alleviating flooding and preventing the sedimentation of the *Sanxia* dam. However, a great flood with serious damage occurred in 1998. It has been pointed out that one of the causes of this flood was the reduction of the forests in the upper reaches of the *Chang Jiang*. In response to this flood, the Chinese government launched a number of projects in earnest, including a program to protect natural forests and the “Mountain Afforestation Program” (the conversion of existing farmlands on steep slopes into forests) (State Forestry Administration, P.R. China, 2001a:

107). Lijiang, which is the district in which IEGC's activities are carried out, belongs to the upper reaches of the *Chang Jiang*. In 1997, the Old Town of Lijiang was registered as a world cultural heritage with UNESCO in recognition of the cultural value of its clusters of traditional wooden buildings. Nonetheless, due to the lack of forested area, it has become impossible to restore and procure wood (Yunnan Pine: *Pinus yunnanensis*) for replacement works in the region. The present situation is that the majority of wood is imported from the neighboring country of Myanmar (Yamamura, 2002).

DESCRIPTION OF THE ACTIVITIES OF IEGC AND COOPERATIVE FRAMEWORK WITH THE REGION

The Setting of Activity Content and Description of Activities

In the Lijiang region, IEGC's activities are known under the title "Green Hope Project" (project to create forests through environmental education). IEGC is carrying out an afforestation project with the cooperation of the local administration, local inhabitants, and elementary and junior high schools. IEGC selected as its site the lands where cultivation has been abandoned, and the riverbeds of four townships (*Longpan, Daju, Shigu, Shitou*) along the *Chang Jiang* under the jurisdiction of the *Yulong Naxi* Autonomous County, Lijiang City of Yunnan Province. The objective of this project is to restore areas that have been devastated, recover the natural ecosystem, and to elevate the environmental awareness of the people by assigning this forest a role in environmental education.

Nonetheless, from the very beginning of the project it has been difficult for participants to gain an understanding regarding the various related targets. In order to eliminate difficulties in theoretical understanding, the initial activity targets were simply defined as "presenting the enjoyment of forest management to children and inhabitants." For this reason, edible fruit trees



Figure 3. Tourists (Japanese University Students) and local residents (Naxi Primary School Children) planting pear trees in agricultural wasteland. (Photo: T. Yamamura)

were chosen for the tree-plantings in the first period so that people would be able to see the concrete benefits of planting commercial trees within a short time. More specifically, chestnuts, pear trees, and walnut trees were chosen. These are regional fruit trees that the local inhabitants were familiar with. These trees produced concrete benefits leading to the short-term goal of bearing fruit within 3 to 4 years, which could be seen by children and participating tourists.

In the process, the tourists paying their own expenses, took part in annual ten-day afforestation tours sponsored by IEGC, in which they contributed their own labor. Besides IEGC members, since 1999, groups of around 20 tourists comprised largely of students and retirees have taken part annually in the tours, and the repeat rate is remarkably high. The repeat rate of university students is particularly high, and some of them are shifting from simply being transient tourists to becoming highly motivated members participating regularly in IEGC's activities.

Sources of Revenue

IEGC is a volunteer organization that basically does not have any activity fees or capital. The funds that are necessary for the afforestation activities are donated by annual grants (around 500,000-1,000,000 yen) from relevant foundations in Japan. Nonetheless, these grants just barely cover expenses for seedlings, expenses for on-site management of afforestation, and land preparation costs. The format used by both domestic and foreign participants (members of IEGC and tourists) who take part in the on-site work is completely voluntary (participants pay their own expenses). This kind of participation, at one's personal expense, has the advantages of instilling a deep understanding of the project in the participants and generating the desire to participate. On the other hand, the amount of funding that can be obtained annually is unstable, and there is the disadvantage that long-term plans of operation may not be set up because of a lack of a stable source of funding.

Benefits of Activities

From 1999 to the end of 2003, the total surface area of land planted with trees amounted to about 30 ha (300,000 sq. meters) in total. All of this land is owned by farmers or villages and was provided voluntarily by parties that approved of the activities of IEGC. After trees have been planted, the farmers, if the land is owned by farmers, or if the land is owned by villages, the village forestry stations, the young people's associations, and elementary and junior high-school students take care of the trees, including watering and fertilizing.

As can be seen from the above description, this project has resulted in the establishment of a cooperative framework consisting of the local administration, local inhabitants and tourists. Its characteristics can be summarized as below:



Figure 4. Local youth member and NGO member carry out a survey for an afforestation project. (Photo: T. Yamamura)

- IEGC, namely, interdisciplinary young researchers, plan their activities from the standpoint of their respective technical specialties while respecting the basic structure of the community, and tourists who approve of this participate in the program at their own expense.
- By securing the support and cooperation of the local administrative bodies, the local inhabitants have become aware that the activities of IEGC are “interdisciplinary, international NGO activities.” Consequently, it has become possible for them to be accepted as tourists and members of an NGO by the local community.

Figure 5. Local and Japanese students celebrate after the afforestation activities. (Photo: T. Yamamura)



- Working in collaboration with the local inhabitants, the tourists carry out exactly the same tasks as the inhabitants. Besides such tasks, IEGC frequently arranges meetings with the local inhabitants for exchanging views. Such meetings encourage proper understanding of the local community and forest-related issues. In addition, interchange meetings are also arranged between students. The building of friendly, forward-looking relationships is paving the way for a high percentage of repeaters.
- The project itself has been gaining the support of local administration. The appearance of IEGC on the scene has enabled a format in which work is carried out on the initiative of the local inhabitants as much as possible. In doing so, IEGC listens to the opinions of the inhabitants as much as possible. Things are moving forward in reflection of this, while understanding between local administration

and the inhabitants is developing. Given this situation, a “from-the-bottom-up-type project” is taking root, in which the driving force behind the work may be said to be the local inhabitants.

DISCUSSION

An interview survey was carried out on villagers (all adults) in the vicinity of the districts in which the project was conducted in order to understand the “receptivity of the region,” which demonstrates an important indicator of the social aspects. The results are as follows: with respect to the “Green Hope Project and Environmental Education Undertaking,” the evaluation of 44.6% of the respondents was “very good,” 47.3% replied “good,” and 1.4% replied “slightly good.” In contrast, 6.7% replied, “I thought it was not good” or said they “cannot understand” (study executed in March 2003). In view of these results, it may be said that the local inhabitants have accepted the project and given it a high evaluation. In addition, most of the respondents expressed the following expectations to the role of the project: “land greenification,” “resolution of conflict with neighborhood villages,” and “environmental education.” By seeing and understanding what IEGC and the tourists are doing in the locality, the inhabitants reflect on the formerly destructive development and begin to take interest in tree-planting activities in the familiar forests and rivers and to resuscitate nature. Moreover, this frame of mind having been generated, it may be said that there has been a notable relaxation of disputes between villages and the feelings of dislike formerly associated with forestland are declining.

When overseas participants (tourists) were asked for their impressions, most stated that, by participating in the project and coming into contact with the local history and culture and the lives of the local people, they had come to think about the optimal ways of safeguarding the environment of the earth in the 21st century, the future of international cooperation, and the education of the next generation (study executed in March 2003).

However, certain problems still remain. Here we will raise three topics. The first are the needs in terms of education. The people still cannot be said to have a symbiotic relationship with, nor friendly feelings toward the forest, and their awareness of the

Figure 6. Commemoration monument established by local authorities: NGO staff explain to local children. (Photo: T. Yamamura)



public interest function of the forest and the value of having biodiversity is still inadequate. Secondly, there is vagueness regarding the arrangement of land management. The arrangement of land ownership and usage is vague, especially with respect to land owned by villages. Tree managers are often not present after planting, and in some cases the trees just wither and die. Thirdly, community leadership is lacking. In the future, management of this afforestation project must be transferred from third person organizations like the IEGC to the local community, which is a vehicle for managing original regional resources. Certainly, it is desirable with respect to international cooperation and environmental education for third-person organizations like the IEGC and tourists to take interest regularly in the local community, which would need to manage afforestation over the long term. However, it should be made clear that the inhabitants are the ultimate vehicle for management and the capacity to value this should be instilled into the local inhabitants. It is desirable to build a framework that should be called “the forest community” in the interest of preserving and passing on sustainable regional resources, while the various actors play their respective roles in this way.

The major issue confronted by the activities of IEGC in the future will be to improve the three points covered above. Finding the beginnings of scientific and practicable resolutions to these issues may be suggested as the role to be carried out by the researchers who are the main members of IEGC.

CONCLUSION

This case study has suggested that one of the more effective techniques in permanently maintaining the stock in an area and the forest environment as a flow, is for local administration to take the leadership, with the local inhabitants and tourists participating in a collaborative manner. A variety of problems remain, including confrontations between opposing value systems and difficulties in forming agreements (Kuriyama, 1997). However, from the experiences of IEGC activities, it appears that there is adequate potential for the formation of a “forest community.”

It is considered that the following three points are the key to success in the activities of this NGO, and with these characteristics, a partnership continues to be developed between the local government, stakeholders and the local community who form the basis of the forest’s administration.

1) Interdisciplinary Research: This NGO was established based on the research know-how contributed by young researchers participating from a variety of fields. All the members are in their thirties or below, and not adhering simply to already existing study fields, makes it possible for them to progress into an interdisciplinary discussion. This factor contributes largely to (2) education.

2) Education: The aim of these afforestation activities is based on the development of an “environment education forest” for children, allowing primary and junior high school pupils in the area to actually take part in the planting work. In this way, the organization succeeds in gathering the attentions of a broad range of people beginning with the parents of the children, teachers and scholars, a comparatively high level of educated society, and domestic and international tourists. Thus, this is linked to the dissemination and enlightenment regarding the importance of forest management.

3) Strategy: Having received the offer from the local government of an abandoned cultivation area within the village, that area became the target of afforestation. In this way, the inhabitants can actually see the effects of plantation. Furthermore, the species of trees planted in the beginning are fruit trees, which have traditionally been used by the local inhabitants for food. This fact links to the creation of a concrete sense of purpose in which some years later, the trees can be harvested for food, thus, in the minds of the tourists and inhabitants, triggering a positive consciousness for the revisit to the forest and the management of it.

In any case, there is a need for environmental planning based on universal theory and scientific foundations, in order to ensure better development of the regional whole. It is the duty of universities, the higher education system, and researchers to spotlight this need. Similarly, it is the role of NGOs, as third person organizations, to be intermediaries between local inhabitants and local administration, providing coordination for theories and plans. The role of tourists who have become repeaters is to make regular visits to the locality while living elsewhere and to provide labor, new information, and other support. The role carried out by the tourists also deserves attention as regards making the inhabitants discover new value systems.

This case study is still in progress. It has experienced a series of trials, errors and failures. However, over time, it is building a relationship of mutual trust with the community (in particular, the youth segment). It will be wonderful if the progress of future studies and research can contribute to the creation of better localities.

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