Report of Research Activities for Mie University International Student Internship April 15th ~ June 30th, 2013 Julia M. Schumann

Use of Non-Timber Forest Plants by Forestry Volunteer Groups in Mie Prefecture

Introduction

Background

Although Japan has the second largest percentage of deliberately planted forest area in the world (FAO 2006a), much of the nation's planted forests have been abandoned since the domestic timber industry cannot compete with the price of imported wood. The Japanese government has recently targeted the lack of management of forestlands as a major environmental and economic concern (Yamaura et al 2011); abandoned timber stands pose threats from tree diseases and pests, landslides, and runoff issues, as well as through limiting species diversity. National and local governments and nonprofits have also expressed a desire for Japan to become more self-sufficient in domestic timber use; some academics have noted that Japan's reliance on foreign wood continues to have a devastating effect on old growth forests in southeastern Asian nations (Yamaura et al 2011). In response, numerous forestry volunteer groups have recently formed in rural areas of Japan to try and address this problem by managing local forestlands. Despite the lack of profitability of forest work in the current economic climate, many volunteers enthusiastically participate in physically demanding forestry-related volunteer work several times per week. However, these activities do not simply mimic the work of commercial timbering companies: in addition to cutting, trimming, and processing timber trees, many groups plant native trees, conduct education classes, and make use of leftover wood or other non-timber forest products.

Research Purpose

The purpose of this study was to understand if and how forestry volunteers in rural areas of Mie Prefecture use non-timber forest plants in the course of their volunteering activities and what benefits they might derive from these plants. Understanding the motivations behind participating in such groups was also a secondary goal of the study. It was hypothesized that individual volunteers would receive benefits from the use of non-timber forestry plants in the forms of social, cultural, natural, and economic capital and that these benefits would have an impact on volunteers' participation in volunteering activities.

Fieldwork Overview

Over the course of approximately ten weeks, participant observation and semi-structured interviews were conducted with one key volunteer group, Mori no Kaze ("Wind of the Forest") operating out of Yokkaichi, northern Mie. In addition, a limited number of interviews and activities were conducted with individual members from seven other forestry volunteer groups in the area. Written surveys were delivered to members of Mori no Kaze and members of other forestry group.

Prospective Pathways to Impact

As national and local governments, as well as non-profit groups, seek to find ways to promote volunteer and professional forestry management activities, this work seeks to show how the role of non-timber forest plants will continue to be relevant. It is hoped that the results of this study may help demonstrate the continuing and evolving cultural importance of non-timber forest plants for forestry volunteers in Mie Prefecture.

Research Questions

The guiding research question was: "Does the use of NTFPs (non-timber forest products) provide forestry volunteer members with some intangible benefits in the forms of natural social, and cultural capital?" Following from this research question were the following secondary research questions: Do forest volunteers make use of non-timber forest plants? If so, in what ways are non-timber forest plants utilized and exchanged? Which species are utilized? What benefits do volunteers derive from the use of non-timber forest plants? Is knowledge about these plants exchanged during the volunteer activities? Are plants themselves exchanged or transferred from communal areas to private ownership? What are the stated motivations for volunteering? How do social circumstances influence membership/volunteering? Does age impact use of non-timber forest plants? And do volunteers utilize and/or receive non-timber forest plants outside of volunteer activities?

Hypotheses

Current literature on historical, customary rights to plants and contemporary land tenure suggests the following hypotheses: participants make use of non-timber forest products through their volunteer activities; participants will identify a number of species that are utilized; participants will utilize nontimber forest plants in a variety of ways; participants will receive nontangible benefits from using non-timber forest plants through volunteer activities; participants will exchange knowledge about these plants (such as what species they are, where they grow, how to use them, how to identify them) through both formal and informal means; and age will be a factor in use of non-timber forest plants (older people will make more use of the plants)

Research Aims

Research aims included the following: to increase understanding of how forestry volunteer groups make use of non-timber forest plants, to establish a list of commonly utilized plant species, to understand whether the use of these plants provided intangible benefits to volunteers, and to determine whether these benefits have an influence on participation in forest management activities

Methods and Fieldwork Activities

Study Site

The fieldwork for this research took place within Mie Prefecture in Western Japan during the period between late April 2013 and early July 2013. The official period of research during which I was hosted by Mie University was from April 15th through June 30th, however a few research activities were conducted after that period. The participants in this study included members of several forestry groups with mainly non-profit or volunteer activities that undertook their work within the boundaries of the prefecture. However, this is not a representative sample of all the forestry groups or activities within the prefecture. One group, Mori no Kaze ('Forest Wind') served as a case study. All of the forestry groups conducted their activities in rural areas of the prefecture. Because of the difficulty of reaching these rural areas and language limitations, it was not always feasible to meet with volunteers in person. Therefore, I obtained some information, including written survey results, through electronic means.

Research Participant Population

The target population of this study consisted of adults who identified themselves as members of forestry volunteer or non-profit groups within the borders of Mie Prefecture. These groups had to involve actual, physical interaction with forested lands (at the *genba* (現場) or 'on-site'), not just planning and education. I unintentionally received some survey results from forestry group members whose activities were primarily motivated by economic reasons and I chose to remove these responses from the final data analysis because I felt they were not part of the target population for the study.

Research Population Demographics

The majority of the participants in my study were older adults, ranging from late twenties to mid-seventies, with an average age of slightly over 52 years old (for those who participated in the written survey). Men outnumbered women by around 5:1. Many of the participants did not originate from Mie Prefecture but I did not collect information on participants' family origins. I did not come across any members of forestry groups who identified themselves as other than ethnically Japanese, so I consider the ethnicity of all the participants as Japanese.

Fieldwork

I spent the first several weeks of my fieldwork period commuting to Mie University, studying relevant vocabulary and concepts, making contacts, and learning about the context and domains of sansai, plant collecting, and rights to plants (my original research topic). I had originally planned to study customary rights to wild foraged plants in public and private areas but I found it very difficult to get people to open up about the issues of rights to plants in my initial conservations (although some of these issues would later surface during my subsequent fieldwork). However, during the first few weeks, I was able to make invaluable contacts and begin to understand the vocabulary and context of forest plants and land use in Mie Prefecture.

During these first few weeks, my advising professor, Professor Ehara at Mie University introduced me to Tamaki Shimizu, a graduate student and pivotal member of the forestry non-profit (NPO) Mori no Kaze, who would become my key research informant. Professor Ehara had suggested that I work with her because I had expressed an interest in the concept of *satoyama*, or socio-ecological landscapes that include the fields and mountains. After meeting Shimizu-san, I decided to focus on the cooperative and individual use of plant products by forestry groups by observing how the groups used plants, how they interacted within themselves, and whether working with plants provided an incentive to participate in the groups.

Through Shimizu-san, I used snowball sampling to identify other participants (Bernard 2011). Shimizu-san introduced me to members of her forestry group and to forestry officers in the prefecture. Through these forestry officers, I was able to gain references and introductions to other forestry volunteer groups.

I decided to make a case study of Mori no Kaze since they were willing to let me participate in their activities. So, I began participating in their forestry volunteer activities. I attended six regular activities and events with Mori no Kaze members during May and June, as well as two meetings between Mori no Kaze members and local forestry officials. For the first few weeks, I was mostly a quiet participant and found it very difficult to speak one-on-one with most of the participants. We did not have much in common and my language skills were very rusty. However, as time went on, the participants began to open up and speak more freely around me.

While participating in these forestry volunteer activities, I devised a structured survey in the form of a questionnaire (Bernard 2011) to deliver to individual volunteers from Mori no Kaze. After delivering the survey to Mori no Kaze, I discussed the issue of potentially comparing the survey results to other forestry groups in the prefecture with Shimizu. She assisted me in helping to identify potential groups to contact, along with the forestry officers to whom she had already introduced me. I delivered the questionnaires in late May and June and I received responses to these surveys from early June to early July. I sent follow-up emails to seven of the members who took the survey to ask for details in regards to the names of plant species that they had mentioned. Towards the end of my research period, I was invited to sit in on a meeting between forestry officials and a newly devised forestry volunteer group, as well as the first official meeting of the group.

Lastly, from mid-June through early July, I undertook five semi-structured interviews with individual forestry group members ranging from 35 minutes to over 4.5 hours in length but averaging over two hours in length (Bernard 2011). The interviewees included three members of Mori no Kaze (one 40 year-old female, one 47 year-old male, one male in his mid-60s) as well as two members of the forestry groups Morizumu (a male in his 50s) and Ponpoko Yama (a 70 year-old male), respectively.

Post-research

I transcribed selected portions of the interview recordings with the assistance of a Japanese graduate student. I analyzed survey data using Microsoft EXCEL. I used a simple coding schema of my own design to thematically organize my interview and participant observation notes. The complete results of my research are still pending, however, and will be examined fully in my thesis.

Ethical Considerations

Prior informed consent

First, upon meeting my research participants, I tried to be open and clear about the nature and purpose of my study. There were no times when I felt it necessary to conceal my goals or motivations. However, I was genuinely interested in participating in the forest volunteer efforts and freely expressed my enjoyment of the activities. Before taking photographs, I received verbal permission. With the help of some Japanese graduate students, I drafted a prior informed consent statement as well as an explanation of my research activities to include in the written survey (see the Appendix for a copy of the survey materials in English and the original Japanese). Prior to each interview, I also asked for verbal consent and outlined the purpose, particulars, and potential implications of my research. In several cases, I did not make audio records because I felt that it would have made the participants uncomfortable.

Language issues

The most serious ethical consideration and limitation in regards to this thesis, in my opinion, was that I conducted the above research mainly without the use of a translator. I have studied Japanese for over seven years and am fluent enough to participate in relatively high-level conservations in Japanese. However, my level is still far from the level of a professional translator or near-native speaker. Japanese graduate students assisted me in formulating my survey questions, drafting my informed consent statement, and transcribing selected portions of interviews. However, I undertook large portions of the translating myself. So, I am aware that there is a considerable risk that I may have misunderstood or mistranslated some of my data. With the exception of one interview in which I was only able to take notes in English, I have preserved all the raw data in the original Japanese. So, it is possible to review and confirm my translations. However, the results and discussion in this thesis that relate to my original data collection are heavily dependent on these translations. With respect to this risk, I have made my best efforts to confirm my interpretations and translations within the constraints of time, funds, and not wishing to impose overly much on my Japanese colleagues. Yet, because my participants were all aware of my language limitations, this may also have impacted the information that they were willing to share and the manner in which they shared it with me.

Respecting local and cultural values

I did face some challenges in regards to respecting the values of my participants. Trying to find a way to interview older male forestry members, as a young female outsider, was somewhat complicated. In Japan, there is not a strong tradition of adult members of the opposite sex meeting as friends or acquaintances outside of work or social clubs. However, for reasons of privacy, I felt it was important to conduct some individual interviews. So, I tried to organize the interviews in the least objectionable way possible – by meeting in public places and trying to maintain an atmosphere of appropriate formality.

In addition, I came across several other challenges. One challenge was to devise culturally appropriate interview questions. In the original makeup of my survey, I had included questions about land ownership. After delivering the survey to a few participants, they responded to my key informant that they did not understand the purpose of the survey. Upon hearing this news, I felt devastated. So I consulted with another Japanese friend who was not a member of the group. They suggested that the land ownership questions might be considered too personal. After removing the related questions and re-wording the second half of the survey, I re-delivered the survey to the members of Mori no Kaze and asked those who had not yet filled it out to fill out the new survey. Five members had filled out the original survey and one offered to fill out the new version of the survey, as well. Because I had to alter the survey, though, I was forced to throw out a portion of some of the original responses.

Delivering the Results

At the conclusion of the six-week research period, I delivered a 15-minute presentation in Japanese on my research at Mie University. I will also write a 1-page summary of my research and findings along with a list of frequently used non-timber forest plants in Japanese. Where feasible, I plan to deliver paper copies of this summary to the groups that participated in my research. To the other groups, I will deliver an electronic copy. I also plan to offer a physical copy of my dissertation to Mori no Kaze and offer an electronic copy to all the groups that took part in the survey. Lastly, I plan to give a copy of my dissertation and a copy of the Japanese summary of my results to Mie University

Selected References

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