2016 年度
国内実地研修報告書

まちとむらをつなぐ

―愛知県豊田市農山村地域の取組みから―

Domestic Fieldwork Report 2016

Bridging the Urban with the Rural:

Efforts Made by Rural Areas of Toyota City,
Aichi Prefecture

2017 年 3 月
March 2017

名古屋大学大学院国際開発研究科

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はじめに

名古屋大学大学院国際開発研究科の特色ある実践教育の 1 つが、国際開発国内実地研修実習（Domestic Fieldwork、以下 DFW）です。この DFW は、次の 4 つを目的としています。

1. 「開発現場」を知ることの重要性を実感する。

2. フィールド調査の基本的方法や姿勢、調査論理などを習得する。

3. 日本の町村レベルにおける地域開発への取り組みについて見聞を広める。

4. 異なる背景を持つ学生が、グループ活動を通して国際的な共同作業の経験を積む。

平成 28 年度の DFW は、おいでん・さんそんセンターのご協力をいただき、豊田市の農村部で実施しました。豊田市は、トヨタ本社を中心に産業が発達したので「くるまのまち」と呼ばれる一方で、全体の面積の約 7 割を農山村では若者の流出が続き、深刻な人口減少、過疎・高齢化が進行してきました。豊田市における経済的に豊かな都市と農山村の格差は、日本の縮図ともいえます。そうしたなか、豊田市では 2000 年に東海集中豪雨によって矢作川流域で水害が発生し、都市部が水没する危機に晒されました。その背景には、農村部で林業の衰退に伴う森林の荒廃が進んだ結果、矢作川の上流で豪雨による土砂崩れが多発したことがあります。

こうした都市と農山村が共有する課題を解決すべく、豊田市はおいでん・さんそんセンターを設立し、都市と農山村がそれぞれの良さを生かして互いに支え合う持続可能な地域づくりに取り組んできました。おんでん・さんそんセンターは、地域の住民、市民団体、企業、行政、専門家、大学などがつながり合うプラットフォームとして機能し、都市と農山村の様々な課題の解決と、持続性かつ活力がある地域社会作りに力を入れています。たとえば、農山村の空き家を都市からの移住希望者に紹介する空き家バンクの運営、農山村での生活を支えるスモール・ビジネスについて研究実践、都市部から来る森林ボランティアのトレーニングといった活動を展開しています。これらは、経済成長のみを豊かさと見なす従来の開発に疑問を呈すと同時に、農山村の魅力を再発見し、わくわくしながら暮らすことのできる環境を創造しようとする画期的な試みだと理解しました。本年度の DFW では、こうした地域の取り組みを理解すべく、三つのグループが、(1)「スモール・ビジネスによる地域社会への貢献」、(2)「農山村地域における学習環境と住民の教育ニーズ」、(3)「森林管理におけるボランティアの役割」という研究課題に取り組みました。

この事業は、多くの方々からの暖かいご支援がなければ実施することができませんでした。鈴木辰吉センター長をはじめとするおいでん・さんそんセンター職員の皆様は、事前研修、予備調査、本調査、現地報告会まで、多大な時間を割いてご協力くださりました。旭町住民の皆様は、

本調査を快く受けいれてくださり、現地報告会では多くの知見を学生たちと交換してくださりました。ここに、名古屋大学大学院国際開発研究科を代表して、関係者各位に厚くお礼申し上げます。

名古屋大学大学院国際開発研究科
平成 28 年度国内実地研修実施委員会
日下渉・劉靖

目次

Table of Contents

2016年度国内実地研修の概要

名古屋大学大学院国際開発研究科の国内実地研修は、座学の国内実地研修特論と、開発現場での実地研修から構成される。前者では事前研修と調査準備を、後者では予備調査（平成 28 年 7 月）、現地調査（平成 28 年 10 月）、そして現地結果報告会（平成 28 年 12 月）を行った。

1. 国内実地研修特論の内容

講義内容は、次の通りである。

＜基礎的理解＞

4 月および 5 月：豊田市農山村地域の概要、日本の地方行政と地方自治、日本の環境モデル都市、日本の教育、日本の農村開発

＜調査地の開発問題・研究計画の作成指導＞

6 月：愛知県豊田市おいでん・さんそんセンター長の鈴木辰吉氏によるご指導。

調査地の実情を理解するとともに、研究計画の作成に向けて問題意識を深める。

＜調査の基礎：知識と技術＞

5 月および 6 月：「調査倫理」、「多様な調査方法」、「聞取り調査入門（インタビュー方法）の開講

＜豊田市における農山村振興を学ぶ＞

7 月：「Why have young people started to return to rural area in Japan?」

（講師：名古屋大学大学院環境学研究科　教授　高野雅夫）

＜調査準備＞

6 月と 7 月：各班が研究計画の作成に取り組む。2 回の研究計画の報告会を通じて研究計画の内容の改善に努める。

7 月：現地で予備調査を行い、研究計画を説明したうえで、関係機関との打ち合わせ等を行う。

8 月と 9 月：調査内容の決定

2. 国内実地研修実習の実施

研究計画の妥当性を確認し、関係機関等との打ち合わせや情報収集を行うため、平成 28 年 7 月に予備調査を実施した。そのうえで、研究計画と調査票等を確定させた。本年度は、「豊田市農山村地域におけるまちといなかをつなぐ実践」という共通テーマのもと、参加学生（16 名）の興味と関心に応じて、第 1 班が「スモール・ビジネスによる地域社会への貢献」、第 2 班が「農山村地域における学習環境と住民の教育ニーズ」、第 3 班が「森林管理におけるボランティアの役割」

というテーマに取り組んだ。各班は調査準備を進め、平成 28 年 10 月 12 日～14 日の日程で現地調査を実施した。各班の課題と主な調査活動先等は、次の通りである。

第 1 班 （Working Group 1: WG1）

課題：スモール・ビジネスによる地域社会への貢献

豊田市農山村地域におけるスモール・ビジネスは、都市部の伝統的なビジネスモデルと異なり、金銭的利益の獲得を最大の目的とするのではなく、コミュニティへの貢献を重視する。豊田市旭地区におけるコミュニティ指向型スモール・ビジネスの形成プロセスを明らかにし、それがいかなる経済的・社会的な影響を地域に与えているのかを理解する。

調査方法

＜聞き取り調査＞

対象者：スモール・ビジネスの管理チームのメンバー

＜参与観察＞

対象者：スモール・ビジネスに関わるメンバー、スタッフ、従業員

第 2 班（Working Group 2: WG2）

課題：農山村地域における学習環境と住民の教育ニーズ

豊田市農山村地域では様々な住民向けの教育と学習プログラム・活動が存在する。しかし、これまで学習環境に関する研究調査は行われておらず、また移住者と地元住民による学習・教育に対するニーズに関する情報もなかった。本調査は旭地区の移住者と地元住民を対象に、豊田市農山村地域の教育環境の現状を把握し、移住者と地元住民の学習・教育に対するニーズを明らかにする。

調査方法

＜聞き取り調査＞

対象者：豊田市旭地域への移住者、地元住民

第 3 班（Working Group 3: WG3）

課題：森林管理におけるボランティアの役割

豊田市における森林ボランティア・グループ、森林所有者、森林組合への聞き取りを通じて、これらのアクターが森林管理において、どのような協働やつながりを持つのかを明らかにする。それぞれのアクターの特長と森林管理への貢献を明らかにした上で、三者協働の新たなモデルを提案する。

調査方法

＜聞き取り調査＞

対象者：森林組合、森林所有者、森林ボランティア

Working Group 1
Local Small Business

The Development Process of Local Small Businesses and their Effects on the Local Community: A case from Toyota City

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Table of Contents

List of Terms and Abbreviations

CSOs	Civil Society Organisations
DFW	Domestic Field Work
GSID	Graduate School of International Development
LSB(s)	Local Small Business(es)
OECD	Organisation for Economic Co-operation and Development
NGO	Non-governmental Organisation
NPO	Non-profit Organisation
SLSBF	Sustainable Local Small Business Framework
WG1	Working Group 1

Working Terminologies

Throughout this report, there are several terms that we apply under the specific framework of this study. To facilitate reading, we will explain the terms here before going into the main body of the paper.

Social capital

Putnam (1995) defined social capital as "features of social life-networks, norms, and trust-that enable participants to act together more effectively to pursue shared objectives" (Putnam, 1995). In this study, we use the term to indicate the networks among the local people in the studied area as well as the connections between them and people in other areas (outsiders) who work together and contribute to the establishment and operation of the local small businesses (LSBs). The cooperation in these networks can take the form of sharing ideas, contributing human, physical, or financial resources, and many other possible forms.

Local small business

Regarding which establishments are called businesses, we adopt the definition used in the course Introduction to Business and Management at the University of London, which is "a commercial enterprise or establishment that trades in goods or services" (Timms, 2011, p. 17). Since all of the establishments that we investigated provide either goods or services and generate income from these, they satisfy the definition.

The World Bank uses three criteria to define small enterprises, including the number of employees, total assets, and total annual sales. The European Union uses different criteria for the financial aspect, which are annual turnover and annual balance sheet total. Due to the inconsistencies in assessing the monetary values of businesses, the scale of employment has been commonly applied to categorise a business. Both of the mentioned organizations agree that small businesses are those having from 10 to 50 employees. Those with less than 10 are considered micro enterprises (Berisha & Pula, 2015). The local entities that we surveyed belong to both groups. However, because the differentiation between small and micro does not play a critical role in this report, we group all of them as small businesses.

Civil society organizations

In a report by the United Nations Research Institute for Social Development, Civil Society Organisations (CSOs) are non-state organizations operating not for profit. Forms of CSOs vary from professional associations and groups based on religion, culture or activity to informal organizations (Clayton, Oakley, & Taylor, 2000). We adopt this definition to indicate the non-state organizations mentioned in this report.

Local community

The determination of a local community can be based on geographical borders, administration, or living environment, among other criteria. In the paper, we simply refer to the community constituted by the resident in the research area, namely Asahi, Toyota City.

I-turners

The term I-turners is used to specify the people who have left the cities to settle in the rural area. The phrase I-turn highlights that there is no backtracking to hometowns as in the case of U-turners. Rather, I-turn is the single-directional push out of urban areas. The cases in this report whether referred to as I-turners all fall under this category.

1. Introduction & Background

In Japan, rural areas are confronted with depopulation challenges which are said to be the after-effect of rural-urban migration. This hollowing out of the population in rural areas is considered as one of the major issues for both the central and regional governments due to modernization and industrialization since the 1868 Meiji Restoration. Several studies state that one of the reasons behind this challenge is that the locals, mostly young adults, relocate to large cities, particularly the Tokyo metropolitan area. Having left their villages and small towns behind, over time, they decided to remain in urban areas permanently. As a result, rural and remote areas in Japan have consistently experienced declining populations and presently have high proportions of elderly people.

The decline in population in rural areas has resulted in numerous vacant buildings and unused land and infrastructure. According to the most recent land survey conducted in 2013 (Brasor and Tsubuku, 2015), there are about 8.2 million vacant residences in Japan, 39 percent of which are designated as abandoned but not for sale or rent. Likewise, due to the issue of the ageing population, unmanaged forests and abandoned farmlands are expected to continue increasing in the coming years.

In response to this phenomenon, government and civil society devised several programmes intended to use local small businesses as key drivers of economic and social revitalization in rural areas of Japan. By providing employment and generating additional income to the owners and workers, local small businesses contribute to the wellbeing and the livelihood network of their community by leveraging local resources. With local small businesses reopening and providing spaces for social bonding, they also contribute significantly to the social wellbeing of rural communities, and can also influence urban-to-rural migration, which is a strategy being used by rural communities to attract new investment and human capital.

In Japan, the role of local small business has been particularly helpful in reviving disaster-hit areas, and have been shown to aid recovery efforts in affected local communities. Nagai (2012) cites the Kahoku Shimpo, which refers to a program called “disaster tourism”; designed to provide educational tours to visitors about disaster-affected areas. Some of the small businesses established under this program were reconstruction markets, temporary shopping malls, storytelling guided tours, and restaurants for the volunteers.

Likewise, another local small business project launched by the government of Japan to support local economies and the revitalization of communities is the “One Village, One Product Movement” which aimed to promote independence and creativity among locals (Reigner, 2006).

The Michi-no-eki (Road Station) network of stores is another avenue through which the Japanese government has been providing livelihood support for local communities. This system was designed to promote local tourism and trade through the selling of local products as well as other regional goods and services.

The aforementioned examples show how Japanese small businesses support their local economies by creating employment opportunities and boosting income generation through the utilization of local resources.

Drawing from these examples, this study will take a more in-depth look at local small businesses in a rural area of Toyota City, focusing on their development processes and how they support their local economy. The study will also look at the social impacts these businesses have on the local community.

1.1. Research Area

Asahi is a small, rural town incorporated into Toyota City with about 4000 residents. The town was merged into Toyota City in 2005 as a part of a series of mergers across Japan which was a critical part of the government's response to rural decline. The fundamental premise is that by linking urban and rural areas, each can draw strength from the other, thereby creating perfect equilibrium. There are approximately 35 small businesses in Asahi, mostly involved in the retail and tourism industries. However, as local and external demand faded, the few remaining businesses were on the brink of closure. However, the community-oriented business model that has found roots in the town is helping to revive the community's vitality whilst providing a means of support for both the social and economic livelihoods of local residents. This model reinterprets the traditional definition of local small business (LSB) to include community-building, self-help and problem-solving, which traditional profit-oriented business tend to overlook. This model is a type of social business with a unique element, in that it includes community participation and social cohesion as a part of the mainstream business operation. In addition, these businesses are created in direct response to community problems, and unlike traditional businesses, the happiness or relative comfort of staff is strongly emphasized. In this model, staff are partners, not only by their association through the business but also by being members of the community. Therefore, business partners are highly motivated and satisfied, knowing that their contributions not only serve their individual interests but also those of the wider community.

This community-oriented business model emerged from the participation of townspeople in a LSB group called Local Small Business Laboratory, which utilizes the social space created by Toyota's Oiden Sanson Center to find innovative solutions to community challenges. The Oiden Sanson Center was established in 2013 to promote communication between residents of the urban and rural areas and as well as to create a cooperative community among locals. The center serves as a bridge between individuals, organizations, and businesses, helping to identify commonalities and strengths which can be used to address the issues faced by the community. As a result, several businesses and projects have emerged from this unique community-oriented partnership.

This study will explore the aforementioned concept and three businesses to identify the conditions that allowed for their emergence, as well as the social and economic effects they are having on the community of Asahi. The research will also highlight the important role(s) of the Local Small Business Laboratory in resuscitating rural communities, particularly Asahi.

1.2. Research Objectives

The concept of LSBs highlighted in this study is different from traditional business models in urban areas in that its purpose is to contribute to the community rather than earning monetary profits. The notion

comes from Satoyama Capitalism, which introduces a non-profit initiative undertaking commercial activities with the aim of local community development and revitalization. In the research area, the local small businesses are more people-centered than profit oriented. In detail, they prioritize people's connection and communication within the community to contribute to improving their well-being. In this context, we investigated the model of the community-oriented businesses in this area (how they are established and run under the vision of contributing to community development) and their economic and social effects on the community. The two objectives of our research were:

(1) To identify the process of development for community-oriented LSBs;

(2) To identify the economic and social effects of LSBs on the local communities.

1.3. Research Questions

In order to achieve the objectives, this study will answer two research questions:

(1) What is the development process of the LSBs in Asahi?

(2) What are the economic and social effects of LSBs on the local community in Asahi?

1.4. Significance of the Study

The community-oriented business model being implemented in the rural areas of Toyota City is intended to solve local problems with the ultimate goal of enhancing local people's lives. Through this study, we will be able to increase awareness and understanding of this model, thereby contributing to the discourse about rural development in Japan. Besides, this research can support efforts at encouraging urban-rural migration.

2. Literature Review

This section presents previous researches regarding community-oriented social enterprise and the role of multiple stakeholders or outsiders. It starts by presenting brief definitions of the selected research determinants, then proceeds to findings from various authors.

2.1 Community-oriented Social Enterprise

The term "community business" was introduced to Japan in 1997 through the publication of the paper "NPO textbook" (Hiyashitaigi Fudousha in Japanese). Miyasaka, Yakura & Nishimura (2007) note that community business involves a business model where citizens take initiative to solve the challenges they face. These businesses are created with the main purpose of serving the community, which contrasts to that of profit-oriented corporations. Fujita (2005) confirms this assertion, adding that these businesses use local resources and return benefits to the community. Gibson (2008) states that community-oriented social enterprises provide a people-centered approach to local economic development. Social enterprise emerged as a Western concept, but similar models have been seen in Asia as well.

According to the Centre for Sustainable Community Development (2016), sustainable communities continuously evolve in order to meet the social and economic needs of their residents. This evolution must, however, maintain the local environment's capacity to continue meeting local people's needs. In Toyota City, the community-oriented business model is wrapped around a similar concept of using local resources for the benefit of local people. Toyota's resource use can also be considered sustainable as significant effort is being made to increase awareness of the need for conservation, as well as the need for a community-oriented approach to local resource management, which also helps in promoting community development.

Fujita (2005) explains that at present most studies about community business only focus on urban areas, and as such, there is limited research on rural areas. Therefore, a study on local small businesses in Toyota City can make up for this insufficiency, and provide reference data for future studies in rural areas.

A good example of a problem-solving community-oriented business model called Kaze Makura can be found in Okayama Prefecture. The programme works to link local medical facilities, elderly care institutions and other related agencies, with the aim of alleviating the issues related to ageing. Not only did this unique community-oriented business help reduce the burden placed on the community brought on by ageing, but it also promoted local economic development (Fujita, 2005).

2.2 The Role of Outsiders and Multi-Stakeholder Cooperation

The participation of outsiders has become a mainstream concept in the sustainable development arena. However, there are various understandings of what outsiders means. In the context of sustainable development, outsiders are defined as people who do not belong to a certain group and usually possess traits that separate them from the society they engage in (Chen, 2015). Fuhrmann (2011) cited Chambers (1983) view that outsiders are concerned people who come from a wide variety of field and expertise. Studies reveal that their thoughts and ideas are different, making their beliefs distinct from the local community or insiders. They are considered an important element in the community as they act as the "thinkers". Consequently, outsiders play the role of facilitators, not direct implementers (Bergdall, 2003). Hence, the insiders drive their own development; outsiders facilitate the process. Berghall (2003) also views outsiders as an effective catalyst in encouraging the local community to take action directly on their own based on the given interventions that they have provided. Outsiders can also extract the hidden potentials of the community (Yoshimoto, 2007).

Burns (2015) also states that the merging of outsider and insider knowledge paves the way to support local innovation by helping the local community to be knowledgeable of their environment.

To have a successful community-oriented social enterprise, interaction with a large array of support groups is essential, as they provide a wide range of services and support functions, including providing or raising start-up funds, technical training, networking and institution building (Berkes and Seixas, 2010). These support partners were identified as the government, NGOs, training institutes, universities, and research centers. In establishing community-oriented enterprise, one key role of outsiders is the provision of double dimension – the financial and non-financial services needed to achieve environmental, social, economic and institutional

sustainability (IFAD, 2004). Experiences with successful community development initiatives such as in community-oriented social enterprise reveal that the role of outsiders and stakeholders is crucial in generating an atmosphere of trust and catalysing cooperation (Dhamotaran, 2009).

3. Research Methodology

3.1. Research design

The study adopted an exploratory design using qualitative methods. Specifically, we conducted observations and interviews in order to seek answers for both of the research questions. The purposes of doing this were to find the structural factors shared by LSBs throughout their entire course of development and to understand the effects that they are exerting on the local community. In order to achieve the objectives, we designed the interview guide to incorporate both the development factors and the effects. Regarding the former, we developed questions to encourage informants to share their stories of how and when the LSBs were established, the human and financial contributions of such establishments, as well as the organization and daily operation of the entities. To discover the latter, we asked the interviewees to describe the situation in the community before and after the emergence of their businesses. Also, we sought to investigate the unintended effects brought about by these LSBs. The full interview guide is provided in Appendix 1 of this report.

3.2. Data collection

3.2.1 Interviews

In-depth interviews were conducted with the managers of eight LSBs in Asahi. Each interview lasted two hours on average. The interviews took place at the operating locations of the LSBs, giving us the opportunity to conduct observations in the meantime. The interviews were semi-structured with open-ended questions to guide the informants towards the intended research direction while allowing space for unplanned questions. Given the diversity of LSBs in the research area, the interviewers modified the order and phrasing of the interview questions to fit the situation of each establishment.

As explained above, the survey was redesigned to be qualitative research. Accordingly, the informants were not restricted only to business managers. The scope was widened to also include participants and persons who interact with the businesses, when applicable. The list of participants is given in Appendix 3.

3.2.2 Observation

Observations were conducted during the interviews at all of the LSBs in this study to collect information on their day-to-day operations and the contribution/participation of their members, staff and associates. Data collected included descriptive information as well as quantitative data such as number of workers.

From the data collected through observations, we have gained further insight into the operation of the LSBs. This has been incorporated into the analysis of this study.

3.3. Sampling and respondents

According to the proposed data collection and in light of the time constraints of the fieldwork, purposeful sampling was used to select respondents. The informants are located in Asahi and Asuke, Toyota, which facilitated transportation during the fieldwork.

3.4. Ethical consideration

The research proposal was sent to Oiden Sanson Center as the receiving unit of the fieldwork in Toyota City for their approval and support in respondent selection. The consent of all informants was procured prior to the survey in October. The survey was conducted on the basis of their willingness to participate. All information was used for the purpose of this research only. During interviews, group members took pictures and performed audio recordings only after receiving the explicit consent of informants. The use of participants' actual names in this report was done only after receiving their explicit consent.

4. Findings and Analysis

4.1. LSBs profiles

General information about the surveyed LSBs is as follows:

Kinoeki Project

Year Founded: 2010
Members: 15
Purpose: To manage the abundant forest resources in Asahi
Main activities:
- Planting of trees
- Cutting of trees

Agricultural Cooperative

Year Founded: 2011
Employees: 2 core members, 8 employees, 27 households
Purpose: To take over the farm work for the member households
Main activities: Cultivating and harvesting the farmlands on behalf of the owners

Sugin Koubou

Year Founded: 2015
Employees: 13
Purpose: To utilize local natural resources and act as an avenue to promote community participation, especially among women I-turners.
Main activities: Making and selling sweets

Ikoma House

Year Founded: 1998
Employees: 3 employees
Purpose: To support and provide care to disabled people; to help them lead an active and enjoyable life despite their condition.
Main activities:
- Collecting walnuts
- Cleaning the surroundings
- Movie watching
- Concerts for city people.

M-easy

Year Founded: 2013
Employees:
- 5 core members
- About 30 seasonal workers
Purpose: To “make earth a life synergy” by linking urban and rural people through revitalizing agricultural activities.
Main activities: Supporting social activities in Asahi.

Wood chopping business

Year Founded: 2013
Employees: 10 employees
Purpose: to support the Kinoeki Project in achieving sustainability by increasing the value of wood.
Main activities: Chopping wood produced by the Kinoeki Project.

Maki-stove business

Year Founded: 2015
Employees: 3 core members.
Purpose: To expand awareness about the benefits of utilizing local resources such as the abundant trees in Asahi.
Main activities: Installation of maki-stoves (wood stoves).

Keiryuso

Year Founded: 1974
Employees: 2 staff
Purpose: To produce meals made from local ingredients such as mushrooms.
Main activities: Food service

4.2. The development of LSBs in Toyota City

4.2.1. Development factors

The investigation of eight LSBs in Asahi revealed several common structural factors which appear to play a significant role in building the foundation for the LSBs to emerge and operate. We will elaborate on these factors and highlight the three that we consider as the pillars of these LSBs, which are: (1) social capital (2) community-oriented motivations, and (3) support from the local government and/or civil society organizations.

(1) Social capital

The first and foremost factor mentioned by the informants when asked about how their LSBs came about is a connection between them and other local residents or people in other areas. These connections are detailed in the table below. These connections show how interactions in the community take place and how these interactions lead to community development initiatives. These connections can be referred to as social capital. This means social capital is at the core of LSB development in Asahi as the majority of the businesses we investigated were formed through collaboration and resource-sharing among community members.

The significance of community participation in the development of these LSBs is summarized as follows:

(1) It can integrate a wide variety of opinions and abilities of residents.
(2) Residents can be involved in the administration.
(3) To provide a better understanding of each subject, consensus can be promoted.
(4) In the participation process, there is potential to create new values and codes of conduct among the people belonging to the community.

Table 1: Social Capital of the LSBs

	Foundation members	Type of relationship	Forms of contributions
Agricultural cooperative	Households in the village	Neighbour	Ideas Financial resources
Kinoeki Project	Forest group	Community	Human resources (Kouchi-ken forest group) Financial resources
M-easy	Residents and turners	Community	Human resources (Projects and NPOs)
Sugin Koubou	Residents	Community	Ideas Financial resources
Keiryuso restaurant	Residents	Family	Ideas Human resources Financial resources
Ikoma House	I-turners	NPO	Ideas
Maki-stove Business	Residents and I-turners	Family Friends	Human resources Financial resources
Maki-chopping Business	Residents	Community	Ideas Human resources

For residents of municipalities located in mountainous regions of Japan, financial resources are limited when compared to urban areas. As such, they tend to rely on national and prefectural subsidies when starting enterprises. For this reason, residents themselves have developed a kind of dependency on this kind of government-sponsored assistance, making it difficult for them to develop alternate support mechanisms.

The ability to make good use of social capital helps to establish their own problem-solving process that is well-suited to local characteristics and temperament of residents. In addition, establishment of such problem-solving processes is significant for creating new values and codes of behaviours of residents.

Local small businesses in Toyota City and Asahi typically develop from within the community, as new activities are mostly started through local connections. In Toyota City, social capital represents the base of these connections. Therefore, for LSBs in Toyota, it is important to use social capital well. Community development is considered as a scientific approach that makes good use of social capital.

CASE BOX: The use of social capital by the Agricultural Cooperative and M-Easy

This kind of agricultural cooperative has expanded all over Japan. Asahi is one of the districts that is managing an agricultural cooperative now. Previously in Asahi, The business was run privately by a community member. However, due to his illness, he became no longer able to do this job. Therefore, the Agricultural Cooperative was established to take over the operation Nowadays, large areas of farmland are being managed using machines. However, in this way the function of the community will gradually disappear. Protecting the farmland while at the same time keeping the function of the community is one of the goals of this cooperative. The Agricultural Cooperative is protecting the farmland through a system of cooperation among residents, whereby the importance of the community system can be seen.

M-easy provides a place for people to communicate. Therefore, when they plan to do something there is no problem in collecting social capital because they have already accumulated it through their usual communication. Therefore, they can make good use of social capital. Residents are playing a role in supporting the formation of their own problem-solving process that complies with their local culture and value system.

(2) Community-oriented motivation

The second pillar that supports these LSBs is motivation. Six out of the eight LSBs that we examined were set up wholly or partly based on the need to solve community problems. These issues and their corresponding solutions are explained in the following table.

Table 2: Community-oriented motivation of LSBs

LSBs	Community problems/issues	Solutions
Agricultural Cooperative	The elderly people are becoming unable to undertake agricultural work, while most of the young residents refuse to do it. Hence, the number of people working on the fields is declining, leading to the diminishing of farmland and agricultural activities in this area	The cooperative was established to take over the farm work for the households in this area using machines and hired operators. In this way the farm land is protected and the agricultural activities are sustained.
Kinoeki Project	The density of the timber trees in the local forests is too high. The trees block the sunlight, hindering the growth of the ecosystem on the ground. This might result in a reduced capacity of the forests to prevent floods and landslides.	The project was formulated as a measure of forest maintenance by thinning the timber trees. The aims are to sustain the local forests and enhance their functioning as disaster prevention tools.
M-easy	Due to the issue of depopulation, the agricultural activities in the local area were unsustainable.	M-easy was founded to revitalize the agricultural activities and link the rural area with urban areas through sales activities.
Sugin Koubou	There have been consistent increases in the number of women who migrate to Asahi. In order to facilitate their inclusion in and acclimatization to the	Sugin Koubou came about to offer joint activities and a common place for the I-turn women to communicate and interact with each other and with local residents.

	local society, it is necessary to have a place or activity for them to participate in. This helps them to communicate and socialize.	
Ikoma House	There were no facilities to take care of the disabled people in the area. The families of these people were also unable to give adequate care to them.	The Ikoma House was established to receive the disabled people in the area and offer them full-time care.
Maki-stove business	There are a large amount of trees brought down by the Kinoeki Project that are not being used. This is considered as a waste of local resources.	The Maki-stove business was introduced in the local area to make use of the wood in people's daily life.
Maki-chopping business	The trees brought down by the Kinoeki Project have to be transformed into small pieces of wood (maki) for use in the maki stoves.	The activity was initiated to turn the wood into usable form while creating a space where local people can work together and interact with each other.
Keiryuso restaurant	The owner of the restaurant at first wanted a job based on the conditions of the local area while pursuing his cooking hobby.	The restaurant was set up as a place where people can have meals made from local ingredients while enjoying the natural scenery.

It was discovered that these LSBs were initially set up to deal with one or more problems or issues prevailing in the local community. The Keiryuso restaurant appears to be an exception since it did not originate from the need to solve a specific community problem. However, the owner decided to utilize mostly local resources, so his motivation can be considered community-oriented.

Also, as indicated in the above table, the eight LSBs are categorized into two groups. The former include those established based on shared goals, while the latter refers to businesses established based on private interests. This is to highlight that a community-oriented business can be developed out of either individual or collective ideas.

(3) Support from the local government and the civil society organizations

Another common answer given by informants is that they either received incentives from the local government, support from civil society organizations, or both, during business establishment and operation (in the framework of this study, we use the term civil society to refer to all of the associations or community groups in the area which are non-governmental or non-private). Based on this criteria, the LSBs are grouped as follows (details are provided in Appendix 2):

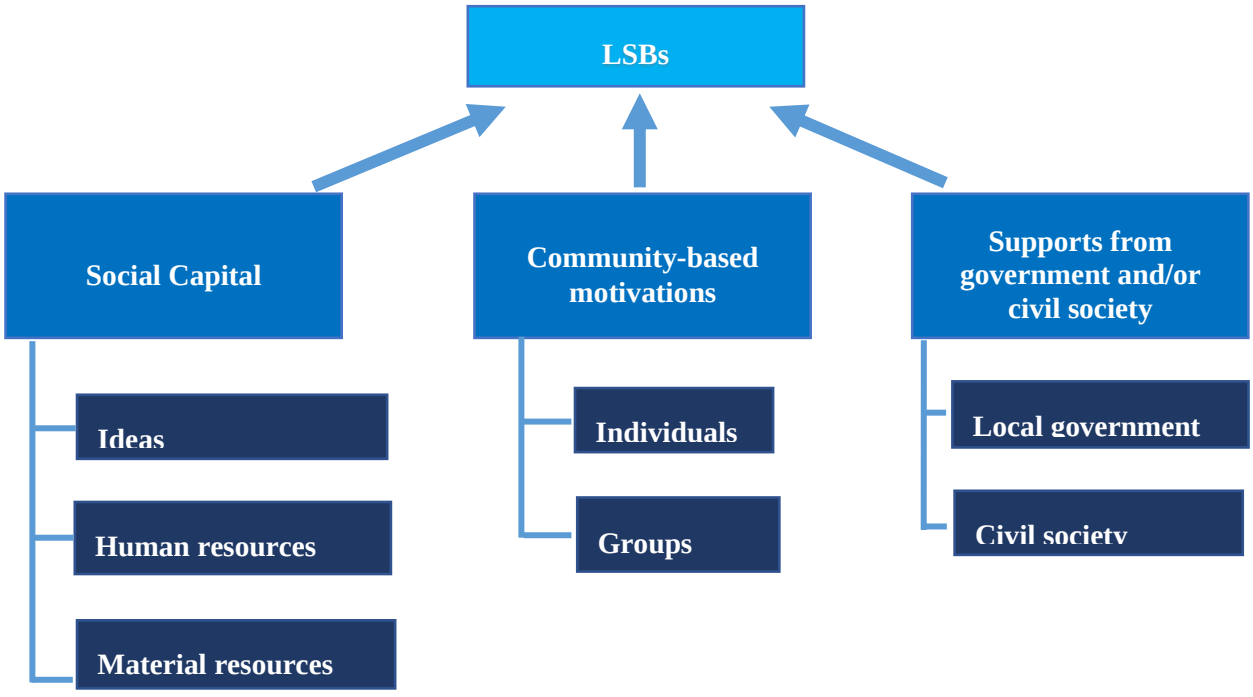
Table 3: Supports from the local government and/or the civil society

LSBs	Government's supports		Civil society's supports
	Financial supports	Others	
Agricultural Cooperative	Establishment subsidy		
Kinoeki Project	Operational subsidy		
Sugin Koubou	Establishment subsidy (Wakuwaku)		
M-easy		Japan Re-start	Angel Investment
Maki-stove	Future-challenge project		
Maki chopping business	Establishment grant		
Keiryuso restaurant			
Ikoma House			

It is noted that the Keiryuso restaurant and Ikoma House were not granted direct tangible support from either government or civil society groups. However, given that six out of eight LSBs were supported both financially and technically, we may claim that these external supports build another pillar for the LSBs to emerge and maintain their operations.

The following figure illustrates the three core factors of the this local small business model.

Figure 1: Fundamental Factors of LSBs in Asahi



4.2.2. Unique Features of LSBs in Asahi

We found several characteristics (as outlined below) commonly shared by the majority of the surveyed LSBs which distinguish them from profit-oriented businesses. However, it is necessary to note that these features do not apply to all of the cases. We will specify the exceptions in the analyses.

(1) Ownership

Most of the LSBs are collectively owned. There is no clear relationship of owner and employees. Decisions are made based on discussions by the participants or in some cases by the people directly involved in the job. It needs to be stressed that the sense of shared ownership is promoted among all of the participants, most typically in the case of Kinoeki Project, M-easy, and Sugin Koubou.

(2) Organisation

Similar to the ownership structure, the surveyed LSBs do not have a clearly identified organizational structure. The founding members as well as the participants jointly engage in the work as it arises. It was mentioned by most of the entities that there are no superior-subordinate relationships in their organization, although the tasks may slightly differ from the managers to the employees, as in the case of Ikoma House. Nonetheless, because of the relatively small number of people engaging in these businesses, it is sensible that a specific role assignment structure is not necessary or applicable.

(3) Use of profits/revenues

In six out of eight LSBs, the revenues generated from the activities are reinvested in their operation as a revolving fund. Almost all of the participants do not get personal income out of their participation. Kinoeki gives vouchers to tree cutters, but the value is relatively small so they do not consider that as a type of salary. “Members don’t get profit from this project. They do this just to do something for their hometown”, said the representative of Kinoeki Project.

Exceptions to this feature are Keiryuso restaurant, Ikoma House, and the Maki stove business, as their staff receive payment on a regular basis for their labor. In Ikoma House, the turnover rate of the staff is quite high, which is why payments for the staff is essential to keep them in the jobs.

(4) Employment/staffing

The scale of staffing in these LSBs is relatively small, ranging from two to less than 10 employees. The Kinoeki Project is a special case. It has 14 members on the management board and around 30 participants performing the tree-thinning tasks.

It is necessary to mention that the members of Sugin Koubou are required to contribute annual membership fees to join the group. An extra fee is charged if they wish to use the facilities for personal purposes. The members are allowed to sell their own products in Sugin Koubou together with those made by the group.

(5) Business scale

Another noticeable finding of the research is that many of these businesses wish to neither expand the scale of their operation or sales nor industrialize their production. As shared by the manager of the Maki chopping business, they plan to reduce the use of machines in the future and recruit more human resources instead. The reason behind this intention is that they are concentrating more on having people working together rather than increasing productivity, which is why their work is not sales oriented.

In this sense, we again exclude Keiryuso restaurant because it is profit oriented. Although expansion was not mentioned by the owner when he shared his future plan, we base this statement on his intention to create a new menu to attract more customers.

(6) External intervention

One noticeable feature seen in many of the businesses is the participation, direct or indirect, of external actors. In most of the cases, the founders of the entities are either migrants from urban areas or local residents with education or working experience in urban areas. Out of the eight units visited, only Keiryuso and the Agricultural Cooperative were developed purely by local people. The founder of M-easy and the Maki-chopping business graduated from Nagoya University, where the owner of the Maki-stove business is currently working as a consultant. This company and the Kinoeki Project imported their business ideas from other localities (Fukuoka Prefecture and Kochi Prefecture respectively). In the case of Sugin Koubou and Ikoma House, the founders migrated into the Asahi area and became insiders before promoting activities in the locality. As such, their activities can to a certain extent be considered as insiders' intervention and contribution to the local community.

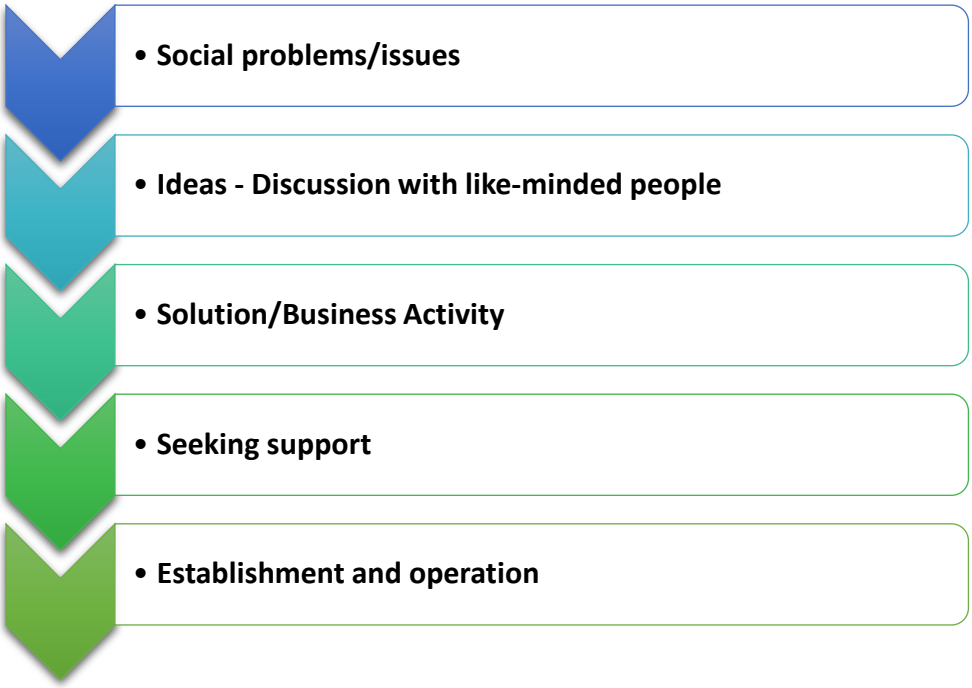
The small scale of the research does not allow us to make any statistical statement on the correlation between such external interventions and the establishment and development of the studied LSBs. Nonetheless, this fact gives us a basis to assert that most of the LSBs display a clear engagement with external actors in their establishment and operation. Also, this factor may contribute to making this business model more sustainable than interventions by the government or NGOs because the initiatives originate from the combination of both external knowledge and experience and the understanding of local characteristics.

Above are brief descriptions of the characteristics that we think contribute to defining the LSBs as social enterprises or community-oriented businesses rather than commercial businesses.

4.2.3. Development process

On the basis of the above analyses, we then developed the following diagram to aggregate the significant factors for establishing and operating LSBs in Asahi. Among other characteristics, we consider these as the foundational components which define these LSBs.

Figure 2: Development process of LSBs in Asahi



CASE BOX: Sugin Koubou's process of development

Sugin Koubou is run by a group of mostly migrant women who all had a desire to address the settling and acclimatization of newcomers to the community. They were able to identify others who shared similar views based on discussions during the monthly local business working group meeting hosted at the offices of Oiden Sanson Center. Once the like-minded women joined forces, they began sharing ideas with each other, and before long they came up with the idea of making sweets together as a way to enhance the skills of migrant women, give them an opportunity to socialize and communicate with others, and in doing so support the development of the community. In order to do this, they sought assistance and were successful in obtaining a grant from the government which helped them secure their current facility, purchase equipment, and procure the necessary licenses and permits. They now have a solid system in place which not only achieves the original goal of supporting migrant women, but contributes to the local economy through the use of local materials to make their products. In fact, Ikoma House (disabled residents) is one of Sugin Koubou's suppliers. By supplying Sugin Koubou with local walnuts, they are able to boost their income slightly, provide residents with productive means of engagement, and promote the use of local resources.

4.3. Effects of LSBs on community development

4.3.1. Economic effects

Based on the community-development oriented nature of the business in our study, economic benefits are limited. However, the Kinoeki Project has been observed to contribute to the local economy of Asahi. Kinoeki Project is contributing to the local economic development by using the local currency moriken and

the project also distributes the moriken to volunteers who are involved to encourage them to use it in local area. The amount of this local currency is increasing year by year.

As shown in the table on the left, the Kinoeki Project has an increasing economic contribution to the region every year. It has made a significant economic contribution, from the 400,000 yen in the first year to the present two million. Because the moriken can only be used in local area, the economic effect is surely within the region. Currently the moriken can be used in 34 local shops, or nearly all shops in the area. Of course, those shops also benefit greatly from the moriken.

Table 4: Moriken value of Kinoeki Project

Year/month	Money circulation (sheets)	Convert to Japanese Yen
2011/2	400	400,000
2011/11	460	460,000
2012/2	725	725,000
2012/11	1,913	1,913,000
2013/11	1,861	1,861,000
2014/11	2,155	2,155,000

Source: Kinoeki Secretariat 2016

Maki stove is another activity that contributes to the local economy of Asahi. It is a small business that was developed from the Kinoeki Project. Currently it is engaged in activities to support the Kinoeki Project, and it will be developed as a regional business and evaluated as an activity making an economic contribution to the local iron making factory.

The wood chopping business is also an activity that has developed from the Kinoeki Project, and like the Maki stove business, it supports the Kinoeki Project. In the future, they are planning to use more maki to contribute more to the local economy.

The economic contribution of the remaining businesses in terms of monetary value is not considered to be significant, but they are making plans to expand their operations so they can contribute more to the local economy. As for the Agricultural Cooperative, it is starting to sell rice, thereby controlling more of the economic gains it makes. The members also intend to start assuming greater ownership of their farmlands in the future. Sugin Koubou is also hoping to increase its profitability going forward. The members hope to do so through better marketing and by pulling on the financial capacity of residents in the urban areas of the city. By creating more demand for locally produced items, they will no doubt be positively impacting the economy of Asahi.

In addition to economic benefits, this social business model being used in Toyota City has several positive effects on the local community. In overall terms it is facilitating the community's revitalization and helping the community respond to the challenges brought on by the declining population, ageing and reduced social capacity. The effects of this unique business model are manifest throughout the community in a variety of ways; however, we have grouped them into four main categories as outlined below.

4.3.2. Effective local resources management

Asahi has vast forest resources. In fact, about 70% of the land of the town is forest. Due to the declining population and reduced manpower in the community, the people of the town have been unable to manage the forests efficiently. Effective forest management is important to the safety of the town and urban areas of Toyota, as flooding caused by landslides is a serious threat. Through the Kinoeki Project and the efforts of forestry NGOs in rural Toyota, forest management is now a reality in Asahi. Mountain owners are motivated to take care of their forests and they are given the tools and assistance needed to do so successfully. While private businesses could be approached to manage the forest commercially, local residents prefer to use the unique opportunity to collaborate and enhance the social dynamics of the community. This shows the strong sense of community pride and duty shared by the community members, which is one conditions needed for the successful implementation of this business model. The moriken local currency system, which is a part of the logging activities, is also helping to enhance the community social cohesion as outlined below. The Kinoeki system has grown considerably over the past five years since its inception. There are now more than 100 participants (mountain owners and local stores) involved in the scheme, accounting for 500 tons of wood per year and over four million yen of moriken (Kinoeki Secretariat, 2016). This Kinoeki system helps with the improved maintenance of local forests, reducing the risk of disaster for the town itself as well as nearby urban areas. In addition to the reduced disaster risk, the proper maintenance of the forests allows for the cultivation of mushrooms which is used by the local people and business such as Keiryuso restaurant.

Another way the community is managing its resources is by using local produce to create value-added products, thereby enhancing personal and community revenue and providing positive engagement for community members. The Keiryuso restaurant, for instance, uses only local produce for its meals, while Sugin Koubou uses primarily local ingredients (walnuts, eggs) for its products. Deformed walnuts which are not of retail quality are collected by locals (including disabled residents of Ikoma House) and then used to make confectionary products which are sold within the community as well as to urban areas of Toyota and elsewhere in Aichi Prefecture. This kind of activity does not produce significant economic benefit for the operators, but their commitment to doing this to enhance the community is why this business model is so intriguing.

4.3.3. Increased community participation and social capacity

In any community, regardless of its size and its proximity to major cities, local people's participation is crucial in attaining sustainable development. According to a Victorian philosophy, the best solution to a community's problem lies in the hands of its locals, the most important stakeholders of a community-oriented

enterprise. Community participation has an intrinsic value as it provides an effective tool to solve sustainable management issues (Martin and Thompson, 2010). In Asahi, where the chronic problems are depopulation and aging, community participation is an essential strategy to strengthen the ties between the residents in order for them to create a harmonious living and working environment where each individual feels a sense of belonging.

One community-oriented social enterprise which produced significant results for community participation is the Sugin Koubou business, a small local project which aims to attract the active voluntary participation of the residents in sweet-making by utilizing local resources. Under this concept, no skill checking is needed to be a member, thereby everyone can partake in the program and share their ideas about the present condition and the future vision of the venture through administering meetings and workshops. The gathering date for the members is every Thursday, on which each member can have free access to the facilities in the Sugin Koubou center. Additionally, the steering committee of this social enterprise occasionally conducts training or short classes which help members grasp new ideas for starting up other small businesses of their own. Although it was revealed during the fieldwork that most members are women, specifically housewives, the steering committee also encourages the participation of local males.

The Kinoeki Project also embodies the concept of a community-oriented enterprise by which people, consisting of both locals and outsiders, work closely together by cutting and chopping wood and trees. The fieldwork revealed that most of the participants in this community-oriented activity are men whose ages range from 60 to 70 years old. Instead of spending their spare time at home, the participants engage in community building initiatives such as the Kinoeki Project as it makes them more productive and active in their communities. Some evidence states that elderly people who engage in this kind of activity feel that they are still being recognized and valued by the community despite their age. Additionally, engaging in voluntary work or even in pastime community activities in later life enhances life satisfaction and physical and mental health among older people (Kamiya, Maty, and Timonen, 2011). Another example of a social enterprise in Asahi which features community participation is the M-easy business which was established in 2013. This kind of social enterprise caters mostly to the local community in Asahi. It undertakes a wide range of social activities such as rice planting (cooperative), sweet-making, choir and the Kinoeki Project, to name a few. The founder of the M-easy business employs people who help him organize and carry out the activities. His goal is to engage people in various activities, introduce them to each other, and later on, create and expand their social networks. The fieldwork revealed that M-easy promotes human capital enhancement.

Overall, community participation in Asahi reflects a grassroots or bottom-up approach in getting people involved. As such, communication among locals is enhanced, which results in social and personal empowerment. As the usual community engagement progresses, locals who participate in the activities get to meet old and new people and get to know each other better. They also learn something new from each other through brainstorming, and in the short run, feel a sense of belonging. Apart from this, the concept of local small businesses in Asahi is not only promoting community participation but also encouraging socially constructive activities from the members who are determined to create solutions to the most pressing societal

needs that they are facing. Clearly, the concept of social business, by valuing the voice of the community, is one of the prominent mechanisms in attaining community revitalization.

Photo 1:WG1 and some of the members of Sugin Koubou business in Asahi. Also shown in the photo are the sweet products they made for selling.

4.3.4. Improved community service

Community service is an important function in any locality and plays an integral role in ensuring that members of the area, particularly those in need, are cared for. While this function is usually carried out by the state, the private sector and civil society organizations are increasingly getting involved. In Asahi, Ikoma House and Sasato House are performing this community service function by taking care of the disabled residents of the community. Ikoma House provides skills training and livelihood support for disabled residents and Sasato House provides accommodation, food and support for their daily needs. This helps the residents develop basic survival skills and increases their capacity to contribute despite their physical and mental limitations. Also, it provides a space where their unique needs can be met, providing greater flexibility for their families to work and live relatively normal lives. In some places, community service becomes relevant because of the lack of financial resources among families to care for those in need, such as the disabled or critically ill. However, even if money is not an issue for families in Asahi, convenience is. Considering how far Asahi is from the urban area (where these services can be procured more easily), having to take loved ones to locations outside of the community for care is time consuming, expensive and strenuous, both physically and mentally. Also, due to the relatively small number of residents in need of this special kind of care in Asahi, conventional business might not find it lucrative enough. This is why Toyota's special model of business is appropriate for these kinds of communities. The recognition of the need to care for these residents, and the commitment to doing it despite the lack of profit, makes it extraordinary. Thanks to this business model and

the community-oriented spirit of the business proprietors, such as the operators of Ikoma House, the needs of the disabled in the community are being addressed without placing excessive pressure on the time, finances and mental health of their families. Also, as outlined above, these disabled residents have been given the tools to contribute to community development in their own ways, by collecting walnuts which are used by other establishments in the community to create new value.

4.3.5. Enhanced livelihoods

Another distinguishing feature for building the concept of community-oriented social enterprises in Asahi is the ability to enhance livelihood activities for local residents. The community-oriented social enterprises in Asahi are equipped with skills and resources which improve the livelihoods of the residents through providing secondary work to the people. With the establishment of the Kinoeki Project, the members can actively engage in the cutting and chopping of wood and trees which is an avenue to economic benefit in the form of moriken, which boosts the local economy. The chopped wood, on the other hand, helps sustain other small entities such as the Maki-stove business. The maker of the maki-stoves, who is an I-turner from Itoshima in Fukuoka Prefecture, said that Kinoeki helps him sustain his Maki-stove business through the availability of chopped wood. On the other hand, the Maki-stove business creates work for the local steel plant and provides jobs to migrants.

As previously mentioned, Sugin Koubou, besides being a community-oriented social enterprise that develops strategies to solve social problems and challenges, also introduced livelihood interventions for its members, as it allows them to put their products on display in the center for free. The Ikoma House gathers walnuts and sells them to Sugin Koubou. The money collected is used to pay the staff of Ikoma House, which is also facing a difficult time accumulating money for the facility's sustainability, as it does not receive any financial support from the government.

Similarly, the Agricultural Cooperative serves as a secondary source of income for its operators and employees. Besides, the enterprise also cultivates and harvests farmlands using rented high-end machines and equipment from different households. The households in return receive payment and shares of harvested rice or vegetables.

Photo 2: Walnuts collected by the people of Ikoma House.

Photo 3: A facade view of Ikoma House which was originally built as a kindergarten in 1998. The facility moved in 5 years ago.

Photo 4: The founder of Maki-stove Business explaining the concept of Maki-stove business. At the center is the Maki-stove itself.

Photo 5: The sweets and other products made and being sold in Sugin Koubou.

Photo 6: Pile of chopped wood from the Kinoeki Project which being sold to the locals.

The combined power of these effects is transforming this rural community, enhancing the quality of life and wellbeing of its residents, and can serve as a model for similar communities in the Tokai region and possibly other rural areas of Japan.

5. Conclusions and recommendations

Local small businesses in Asahi are having a transformative effect on the development of the community. They are helping to address serious social concerns, such as livelihood support and care for the community's vulnerable residents, but they also help to address the critical environmental issues relating to forestry preservation and disaster prevention. In this section, we present our analysis of the future of this business model in terms of growth in the local domain as well as its replicability in other areas of Japan which may be in need of these community-oriented business initiatives. The main part of this analysis will look at the issues related to the sustainability of the businesses in the area, based on our research data and best practices obtained from academic literature on the issue.

5.1. Possibility of future expansion of this model in Japan

Currently the Japanese government provides rural municipalities with various subsidies dedicated to regional development. The model in Asahi highlights good use of subsidies and the power of the local small business sector in boosting rural communities. A model like this can be used a kind of guidebook for other areas, and as an example of bottom-up regional development.

With regard to the Kinoeki Project, Asahi is the third district in Japan to have developed this project. The current Kinoeki Project has already expanded nationwide and is currently deployed in 40 places. Asahi is trying to make the maki stove and firewood businesses achieve similar success so they can also be usable business ideas across the country. The goal is to promote development nationwide. This way of thinking is also important in doing regional promotion, but by not taking the successful case as unique, it can be shared with people in the whole country and grown together.

Nationwide deployment of agricultural cooperatives

Although the agricultural cooperative is not an original activity of Asahi district, but rather a participant in a national project sponsored by the Ministry of Agriculture, Forestry and Fisheries, Asahi district participation presents an excellent learning opportunity. Through this experience, it will be able to identify strengths, weakness and opportunities which may become useful to communities who wish to implement similar projects in the future.

5.2. Sustainability of the LSBs

The community-driven bottom-up social business approach to business in Asahi district has proven to be of significant value to the growth and revitalization of the rural community. As analysed, this approach is predominantly based on three factors: social capital, community-oriented motivations, and government/civil society support. While these factors form the base of business development, they may not be enough to ensure sustainability. For social business owners, personal gratification and contribution to community are often sufficient reasons to conduct business activity, making issues such as financial sustainability and growth potential less important. However, in a business environment where evolution is rapid, very slight changes can

lead to large shocks to a business' sustainability. For example, what would happen to businesses in Asahi if there was a major natural disaster such as a landslide, or if some commercial logger was successful in convincing several mountain owners to allow them to log commercially? If the government ceased the support them, would they go on as usual? This raises the issue of sustainability. The LSBs in Asahi all have good motives and bases for establishment, and given the current environment, they are achieving relative success. However, making themselves more resilient to unforeseen shocks in the future by incorporating more success factors into their business model may ensure better longevity of their efforts.

As far as the sustainability of this model is concerned, we sought to analyze the sustainability of these LSBs by using an adaptation of the Sustainable Livelihood Framework concept (DFID, 1999), which notes that the existence of and harmony between five essential factors (resources) is necessary to ensure resilience to future shocks (risks). The five factors that the Livelihood Framework focuses on are Natural, Human, Physical, Social and Financial resources. For businesses in Asahi we thought that these resources are also important to sustainability. While this concept is used to analyze poor people's livelihoods, the guiding principles of the framework makes it appropriate for adaptation in Asahi. One principle is the need to be people-centered. LSBs in Asahi are essentially about people-centeredness and interaction among community members. Other principles are holistic (involving several actors and several dimensions), dynamic (recognizing the evolutionary nature of challenges), building on strengths (capitalizing on potential/strengths/opportunities rather than focusing on weaknesses/needs), broad linkages and partnerships (promoting greater collaboration among stakeholders/actors). All of these principles are applicable in the Asahi context, which makes this adaption of the Livelihood Framework for analysis of LSBs in Asahi appropriate.

Considering the situation of the LSBs in Asahi, we found that they have already two of five factors in the Sustainable Livelihood Framework. The first is social capital which is the network among locals and with people in other areas. The second is the human capital, in this case are the founders and operators of the enterprises who have the community-driven motivations. Thus, we refer to this factor as community-oriented human capital. Hence, there are six factors in totals which we consider necessary for the sustainable development of the LSBs in Asahi. Based on these six factors we believe that the businesses will be able to evolve, adapt and meet the challenges associated with their rural business environment. It is important to note that many of the businesses in Asahi are not interested in a profit-oriented model, as they believe this will distort the community-driven goals of their business. However, financial stability is essential to future sustainability, and so we sought to emphasize the need to pay more attention to financial resources and profit generation.

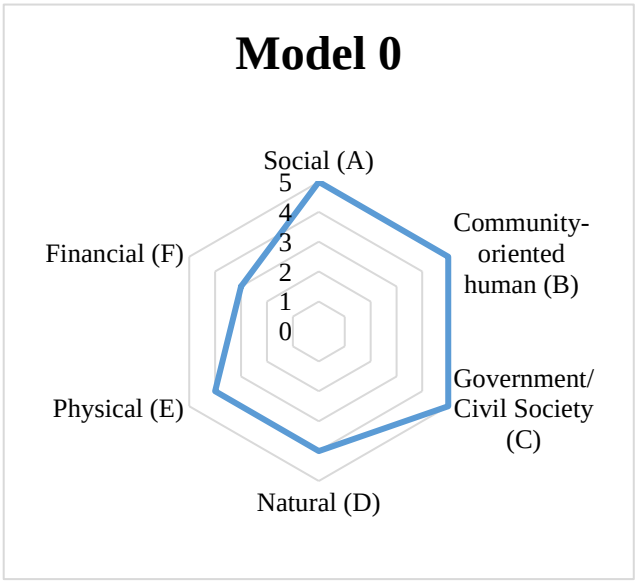
We therefore developed a new model called the Sustainable Local Small Business Framework (SLSBF) to address more aspects of business management which should give businesses greater resiliency to shocks if considered seriously. It is important to note, however, that the three-factor model is not explicit and is perhaps a mere observation based on our research data. LSB owners may not be explicitly aware of these factors, and

so care must be taken in explaining the SLSBF model as a more comprehensive business management approach.

The SLSBF suggests that each and every of the six factors plays a role in the sustainability of the LSBs. However, their scale of significance varies depending on the nature of activity, business focus, and the context. Not all of them need to have level 5 on all points, yet none should be underestimated in the long term. Below we provide a case study to demonstrate how the SLSBF works in Asahi.

Currently, from the data gathered, the case LSB seems to be basing its business on the three main factors, namely social capital, community-oriented motivations, and outside supports. It also has stable facility conditions for operation, and relatively large usage of local resources. The financial asset appears to be in less demand. The contemporary business model is graphed in Figure 3 (Model 0).

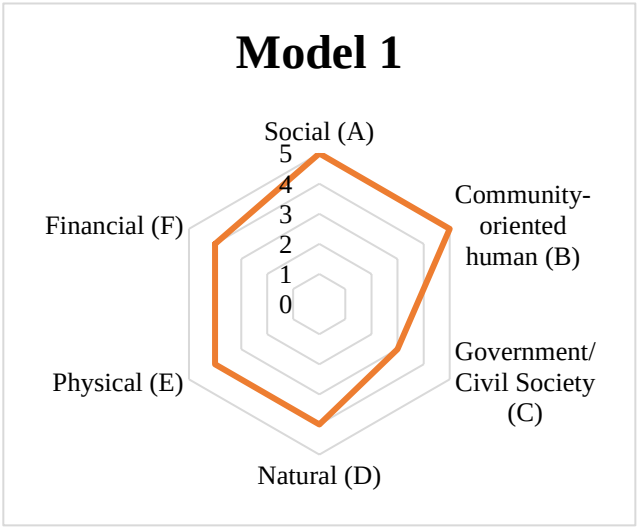
Figure 3: SLSBF Model 0



This model proves to work relatively well in the current natural, economic and social conditions. In particular, the residents have stable income, enabling them to participate in social activities; the local government/civil society provides constant subsidies; and there are no major natural disasters which curtail the substantial resources of the LSBs.

However, when the matter of sustainability is considered, they should predict the potential shocks that may affect the availability of these assets and consider alternatives. We provide here two hypothetical cases, one which assumes a reduction in the assistance of the local government or the civil society, and in the other there is a natural disaster. We will elaborate each case below.

Figure 4: SLSBF Model 1

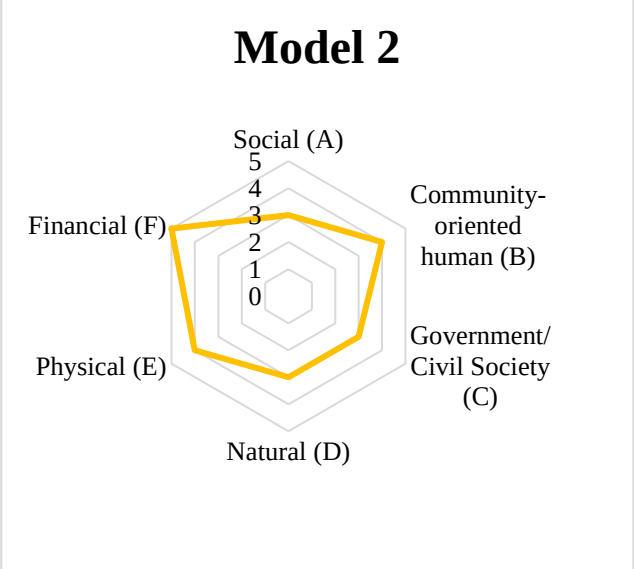


Scenario 1 assumes that the subsidies and supports to this LSB decline. Although the social participation, community motivations and the stock of natural resources remain, it may become difficult to sustain business activities. Given this situation, the enterprise may need to mobilise financial assets from either its own savings or loans to compensate the cutback in subsidies. Anticipating the situation, it may be better to

improve financial preparedness. If a business has the confidence to take out a loan, it may not need extensive attention to generate profits in the current state. Otherwise, it is suggested that the enterprise makes a thorough estimation of present profits for necessary savings and contingency allowance. As demonstrated in Figure 4 (Model 1), the weight shifts from factor C to factor F, reshaping the business model of this LSB.

In scenario 2, when a disaster strikes, such as a landslide or flooding, the stock of natural resources like wood, mushrooms or walnuts may decrease, which has enormous effects on production. At the same time, human and government assets will be used from these LSBs to repair the damage to the community. Under such changes, the enterprise can no longer rely on the human factor and outside supports. As such, it should mobilise more financial strength, as in the above case, to import the materials from outside or update the production methods to fit the new conditions. Also, it is suggested that it modify its vision because this one incident can have a long-term effect on activity. A revised business plan or strategy is now needed to adapt the business in changing conditions. The model then increases the financial and vision factors (F and G) while the social network, outside supports, and natural assets (A, C and D) are lowered due to the disaster.

Figure 5: SLSBF Model 2



Above are the examples of situations when the LSBs should consider modifying the extent to which they mobilise and utilise resources for sustainable development. They suggest that the framework should not be fixed for all times, but rather be flexible depending on the circumstances. In order to allow for such adaptation of the framework, the projections of future conditions and availability of each of the assets are indispensable. It is also recommended that the enterprises build their human, physical and financial capacities to relatively high levels to help them weather unexpected risks. Besides, we would like to stress again that the balance of all six factors are not necessary in all circumstances. Rather, if the business leaders can adjust the strategic use of these types of resources appropriately, their resilience and survivability may be heightened.

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It has been a year since we started this study which we considered as the first step towards our research journey in the Graduate School of International Development. Given the skills and knowledge we have, we did our very best to produce a great research paper, but without the support of the people around us, this paper would not have been possible.

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Appendices

Appendix 1: Interview Guide

Category	#	Question Content	日本語
Planning & Establishment 起業計画と 設立	1	Who set up this business and when?	誰が事業を始めたのですか？いつ頃ですか？
	1b	Are they locals or urban migrants?	(事業を始めた方は)地元の方ですがそれとも都市から移住してきた方ですか？
	1c	If migrants -> What was the motivation for moving to Toyota City?	もし移住してきた方である場合-> 豊田市へ移住した動機はなんですか？
	2	What was the motivation for setting up the business (goals)?	この事業を始めた動機はなんですか？そしてどのようなことをこの事業のゴールに据えていますか？
	3	How long did it take from idea to establishment?	この事業案ができてから実際に起業するまでの期間はどれくらいでしたか？
	4	Who participated in the planning process?	起業計画には誰が参加しましたか？
	5	Was this business idea copied from any other business?	この事業案はなにか別の事業案を参考にして考えられたこのですか？
	6	Who owns the business (shares)?	この企業のオーナーシップ構造について教えてください。
	7	Who funded this business (capital (Own money), subsidy, incentives (奨励金), loans, etc)?	事業を始めるにあたり、どのような方から資金を得ましたか？
Management 運営	8	Who makes decisions? / How are decisions made? (incl. local government)	日々の運営の中で、どなたが主な決定権を持っているのですか？
	9	We would like to know the organization of your business. Do you have an organizational chart already made? Otherwise, would you prefer explaining it to us or drawing the chart?	事業関係者の構造をお教えください。現在の組織の構造が分かるような何か図とかお持ちですか？もしなければ組織図を図示していただきたいです。

	10	What type of social networks do this business make use of (family, friends, etc)?	この事業ではどのような社会的な繋がり(家族や友人など)が活用されていますか？
	11	How are profits used?	どのように利益余剰金を使っていますか？
	12	How many people are employed by this business?	従業員数は何人ですか？
	13a	How many of these employees' household income depend on their earnings from this business?	従業員の方の中で、この企業での収入が家計の主要収入源となっている方はどれくらいいますか？
	15	How has employment (# of employees, types of jobs) changed over the life of this company (start & now)?	創業時から従業員数はどのように変動してきましたか？
	16	How were employees recruited?	どのような方法で従業員の方を採用しましたか？
	17	What are your main products?	企業の主要製品はなんですか？
	18	How do you promote these products? (SK: Tasting event -> How did participation [# of potential customers] change over the years?)	どのような方法でそれらの製品のプロモーションをしていますか？（潜在顧客の方の参加具合やその反応はどのように変化してきましたか？）
	20a	Who are your targeted and actual customers?	企業がターゲットとしているお客さんはどのような方たちですか？そして実際にどのような方が顧客となっていますか？
	20b	Where are they from (local/cities/other)?	顧客の方々はどこからいらした方々ですか？
	21a	How has your product sales changed every year from the start (figures)? →If decreasing, why?	製品の売り上げは(創業時から)どのように変化してきましたか？
	21b	How has income (range) changed over the years?	総売上はここ数年でどのように変化してきましたか？
Marketing & Sales	22	How has profit (range) changed over the years?	また利益はここ数年ように変化してきましたか？

マーケティングと販売	23	How does the business impact the local community (revitalization)?	この事業はどのようなインパクトを地元に与えていると思いますか？
	24	What is the nature of the problem this business attempts to fix?	この事業を通して解決しようとしている問題の特徴はどのようなものですか？
	25	How did this problem affect the community?	この問題はどのような影響を地元のコミュニティに与えていましたか？
	26a	Before the business was established, how did the local community deal with this issue?	この事業が始まる前には、地元のコミュニティはどのようにその問題を対処していましたか？
	26b	To what extent do you use local resources?	どの程度地場の資源を活用していますか？
	26c	How is this advantageous? Are there any disadvantages (ex. savings)?	地場の資源を活用することはどのような利益/問題点がありますか？
	27a	What challenges do this business face?	この事業が直面している問題・課題はありますか？
	27b	What have you done to overcome them?	その問題・課題を解決するためにどのようなことを行ってきましたか？
	28a	Are you interested in the city (urban) market?	都市部の市場に進出しようという試みや関心がありますか？
	28b	How does this business interact with other businesses in Asahi?	この事業はどのようにその他の旭市のビジネスと関わりを持っていますか？
	29	How did the merger between rural and urban areas affect this business and this business model?	農村部と都市部の交流はどのようにこの事業モデルに影響をあたえましたか？
	30	Whom do you seek advice from for your business? (NPO or government maybe)	事業に関してのアドバイスはどこから得ていますか？

Appendix 2: Supports for LSBs in Asahi, Toyota

(1) Wakuwaku project (ワクワク事業) is a new local activity support institution designed to utilize the local resources (people, history, culture, etc.), solve local community problems, and support the organizations which work on revitalizing local development.

(2) Japan Re-start (日本再発進！若者よ田舎をめざそうプロジェクト) is a project aiming to attract young people to live in rural areas. It produces rice, soya bean, vegetables and so on, do local work, and introduces the charm of the rural (Asahi) area.

(3) Future-challenge Project (チャレンジ事業) Toyota City Future-challenge City Partner Project is a combination of citizens, companies, universities and city government which aims to realize sustainable development of local areas and provide a decent standard of living to local people by making use of new ideas and technologies

和文要約

国内実地研修 2016
ワーキング　グループ 1: ローカル　スモール　ビジネス

ローカルスモールビジネスの開発プロセスと地域コミュニティへの影響：豊田市農村地域のケース

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** グループリーダー

* サブリーダー

目次

略語のリスト

CSOs	Civil Society Organisations （市民社会組織）
DFW	Domestic Field Work （国内実地研修）
GSID	Graduate School of International Development （国際開発研究科）
LSB(s)	Local Small Business(es) （ローカルスモールビジネス）
OECD	Organisation for Economic Co-operation and Development（経済協力開発機構）
NGO	Non-governmental Organisation（非政府組織）
NPO	Non-profit Organisation（非営利団体）
SLSBF	Sustainable Local Small Business Framework（持続可能なローカルスモールビジネスの開発フレームワーク）
WG1	Working Group 1 （ワーキンググループ１）

専門用語

本レポートで用いられる専門用語を説明します。

ソーシャルキャピタル

地域住民（外部移住者も含む）そして他地域の間の社会ネットワークや、協働によって築かれる関係性。

ローカルスモールビジネス

地域に根差して商業を営む小規模企業あるいはサービスの向上を目指す組織 (Timms, 2011)。

市民団体

市民の任意参加に基づく組織で利益を追求しない。

ローカルコミュニティ

本レポートでは、豊田市旭地区に住む住民たち。

移住者

他地域の住民あるいは元住民で都市で働いた後、移住した人たち。

1. 紹介と背景

日本の農村地域では、都市化の進展により、過疎化問題に直面している。人口減少に伴い空き家、空き地が増加している。加えて、高齢化問題の影響もあり、管理されていない森林と放置される農地が、今後数年の間に増加すると予想されている。

この現象に対応して、政府と市民団体は、ローカルスモールビジネス（LSBs）を経済開発において中心的役割を果たしていると考え、いくつかの支援政策を実施している。日本では、LSBs が被災地の復興に役立っており、被災地の地域社会の復興を支えていると言われている。“被災地観光”と呼ばれている活動もこれに含まれる。これらプログラムの下で再建されたスモールビジネスは、復興市場と呼ばれ、一時的なショッピングモール、ストーリーテリングガイドツアー、ボランティアのためのレストランなどがある（Nagai, 2012）。

日本政府が地域経済発展と地域活性化を支援するために推進したもう一つの LSBs のプロジェクトは、地元民の自立と創造性を促進することを目的とした「一村一品運動」である（Reigner, 2006）。「道の駅」も一つのネットワーク店舗形態として、日本政府が地域社会に生計支援を提供している手段のひとつである。このシステムでは、地元の商品や他の地域の商品やサービスの販売を通じて、地元の観光と商業を促進することが期待されている。

これらの例を参考に、本調査では、豊田市のいくつかの LSBs を事例として、開発プロセスと地域経済の支援方法を中心に調査を行った。調査では、これらの企業が地域社会に及ぼす社会的影響についても調べた。

1.1 調査地域

旭地区は豊田市にある小さなまちで約四千人が住んでいる。旭地区には約 35 の小規模企業があり、主に小売業や観光業を営んでいる。しかし、需要が減退するにつれて、残りの少数の事業は閉鎖の危機に瀕していた。そのため、コミュニティに根ざしたコミュニティ指向型のビジネスモデルは、コミュニティの活力を復活させ、地域住民の生計の社会的側面と経済的側面の両方を守る手段を提供している。 このコミュニティ指向型のビジネスモデルはコミュニティの繋がりを増加させて、豊田市のおいでんさんそんセンターが創出した社会空間を利用して、コミュニティの課題に対する革新的な解決策を見つけ出している。それがスモールビジネス研究会というものである。スモールビジネス研究会は個人、組織、ビジネスの橋渡しをして、コミュニティが直面する問題に対処するために使用できる共通点と強みを識別する役割を果たしている。

1.2 調査目的

この調査で取り上げられた LSB の中核的な概念は、都市部の伝統的なビジネスモデルとは異なり、その目的は金銭的利益を得ることではなくコミュニティに貢献したいという点である。 ここでは、この分野におけるコミュニティ指向型のビジネスモデルを調査した。 私たちの研究の目的は 2 つある:

(1) コミュニティ指向型の LSBs の形成プロセスを理解する
(2) LSBs の経済的影響と社会的影響を明らかにする

1.3 研究課題

上記の目的を達成するために、本研究は以下の 2 つの研究課題に答えるように努めた。

(1) 豊田市旭地区においてスモールビジネスの形成プロセスはどうなっているか?

(2) LSBs の経済的影響と社会的影響はどのぐらいあるか?

1.4 研究意義

豊田市の農村地域で実施されているコミュニティ指向型のビジネスモデルは、地元住民の生活を向上させるという目的で、地元の問題を解決している。本調査を通じて、このモデルの認識と理解を高めることにより、日本の農村開発に関する諸問題の解決に向けて貢献することが期待される。さらに、本研究は都市農村間の移住を促進するための努力を支持することに資する。

2. 先行研究

2.1 コミュニティ指向型社会的な企業

「コミュニティビジネス」という言葉は、1997 年に「NPO 教科書」（檜下史夫）の出版を通じて日本に紹介された。宮坂、矢倉＆西村（2007）は、コミュニティビジネスには、市民が直面している課題を主導的に解決するためのビジネスモデルが含まれていることに注目した。これらのビジネスは、利益を重視する企業とは対照的に、コミュニティに役立つことを主目的としている。藤田（2005）は、これらの企業が地域の資源を利用し、地域社会に利益をもたらすと論じ、コミュニティ・ビジネスの意義を支持している。 ギブソン（2008）は、コミュニティ指向のソーシャル・ビジネスは、人間を中心とするアプローチを用いた地域経済発展をめざす活動であると述べている。ソーシャル・エンタープライズは欧米の概念として生まれたが、同様のモデルはアジアでも見られる。

岡山県では、問題解決型のコミュニティ指向型のビジネスモデルの良い例として、「風まくら」と呼ばれるプログラムが存在する。このプログラムは、高齢化に関連する問題を緩和する目的で、地元の医療施設、高齢者ケア機関および関連機関を結びつけることを目的としている。このユニ

ークなコミュニティ指向型ビジネスは、高齢化に伴うコミュニティの負担を軽減するだけでなく、地域経済の発展も促進している。

持続可能なコミュニティ開発センター（2016）は 持続可能なコミュニティが、住民の社会的および経済的ニーズを満たすために継続的に進化している、と述べている。豊田市では、地域に根ざしたビジネスモデルが、地元の人々の利益のために地元の資源を使用するというコンセプトを内包している。 Fujita (2005)によると、 現時点では、コミュニティビジネスに関するほとんどの研究は都市部のみに焦点を当てているため、農村部に関する研究は限られている。したがって、豊田市の LSBs に関する本研究は、この不足を補うことができ、農村地域に関する将来の研究に資する参考データを提供することができる。

2.2 外部者の役割と多数のステークホルダーの協力

持続可能な発展の文脈から読み取ると、外部者は、特定の住民グループに属しておらず、通常地域住民が生活する地域社会の属性と区別される特性を持っている人々と定義されている（Chen, 2015）。Chambers（1983）の考え方を参考にしたFurnham（2011）は、外部者が幅広い分野と専門知識を有する人々と関わっていると考える。その結果、外部者はリーダー的な役割を果たし、直接的に活動を行う人ではないと説明している（Bergdall, 2003）。Burns（2015）は、外部者と内部者（地域住民）の知識を融合させることで、地域社会が地域の環境をよりよく理解でき、地域のイノベーションを促進する道が開くとも述べている。

コミュニティ指向型ビジネスを成功させるには、起業支援のための資金提供や人材育成、技能訓練、ネットワーキング、組織づくりなど、幅広いサービスとサポート機能を提供するための多数のサポートグループとの交流が不可欠である（Berkes and Seixas, 2010）。コミュニティ指向型ビジネスなどのコミュニティ開発の主体的に進めるには、外部の関係者やステークホルダーの役割についての信頼の醸成と協力の促進が不可欠である（Dhamotaran, 2009）。

3. 研究方法

3.1 リサーチデザイン

この研究では、質的調査方法を用いて被調査地域を調査するという方法を採用した。私たちはこの２つの研究課題の答えを見つけるために、参与観察とインタビュー調査を行った。本調査チームは、情報提供者に各事業の背景とプロフィールに関する話を共有してもらえるように質問事項を考えた。更に、彼らの企業が起業する前後のコミュニティの状況について、詳細説明を得ることを心掛けた。

3.2 データ収集

3.2.1 インタビュー

本研究では、8 つの LSB の管理チームのメンバーにインタビューを行った。各インタビューは約 2 時間行われ、インタビューの最後の質問は自由記述式とし、半構造化されている。

3.2.2 観察

本調査では、すべての LSB とのインタビューにおいて、毎日の作業、メンバー、スタッフ、従業員の貢献/参加率に関する情報を収集するため、観察が行われた。収集されたデータには、記述的な情報と労働者の数などの量的データも含まれている。データ収集にあたっては、フィールドワークの時間的制約に合わせて、回答者を選定した。すべての情報提供者は、豊田市旭地区と足助地区に居住している。

3.3 倫理的配慮

研究プロポーザルは、回答者選定と受諾に協力し、支援をしてくれた豊田市の「おいでんさんそんセンター」に送付された。インタビュー中、グループメンバーは、情報提供者から明示的な同意を得た場合のみ、写真を撮り、音声録音を行った。

4. 調査結果と分析

4.1 豊田市のスモールビジネスの発展

4.1.1 発展要因－三つの柱（図 1 を参照）

本研究のフィールド調査を通して、この 8 つのスモールビジネスの形成と運営の基盤を構築する上で重要な役割を果たしていると思われる 3 つの重要な構造要因を以下のように明らかにした。

(1) ソーシャルキャピタル

調査した多くのビジネスは、コミュニティメンバーの間の共同作業（他地域からの人々も含まれている）やリソース共有によって形成された。これは、旭地区の地域開発イニシアティブにおける中心的な基盤の 1 つである。ソーシャルキャピタルを上手く活用することは地域の特性や住民の気質に適合した独自の問題解決プロセスを確立することに役立つ。また、そうした問題解決のプロセスの確立が, 住民の新たな価値観や行動様式を生み出すという意義を持っている。

(2) コミュニティ指向の動機付け

これらの LSBs を支える第 2 の柱は動機づけである。調査した 8 つの LSBs のうち 6 つは、全面的に、もしくは部分的に、地域の問題を解決する必要性から、設立された。例えば、農地・農業

活動の減少と農業生産性の低下、地域の不適切な森林管理、移民の地域への統合に関する問題、地域の障害者たちの自立と生活の質の向上への支援、地元の資源の限られた利用などである。

(3) 地方自治体と市民団体の支援

8 つの LSBs のうち 6 つは、地方政府からのインセンティブ、市民団体からの支援、またはその両方を、事業の設立と運営の過程で受けていた。これらは、本研究において、旭地区の LSBs の発展に不可欠であると判明し、スモールビジネスの成功要因として第 3 の柱を形成する。

4.1.2 旭地区の LSBs のユニークな特徴

調査した LSBs の大半は、利益指向のビジネスと区別されるいくつかの共通な特徴（以下に概説）が見られたが、すべての事例に該当するわけではない。

(1) オーナーシップ

これらの LSBs は参加者達が共同して所有し、参加者の議論に基づいて決定が行われる。共同所有権（シェアードオーナーシップ）の意識は全参加者の間で共有されており、特に、木の駅、M-easy と杉ん工房では明示的に行われている。

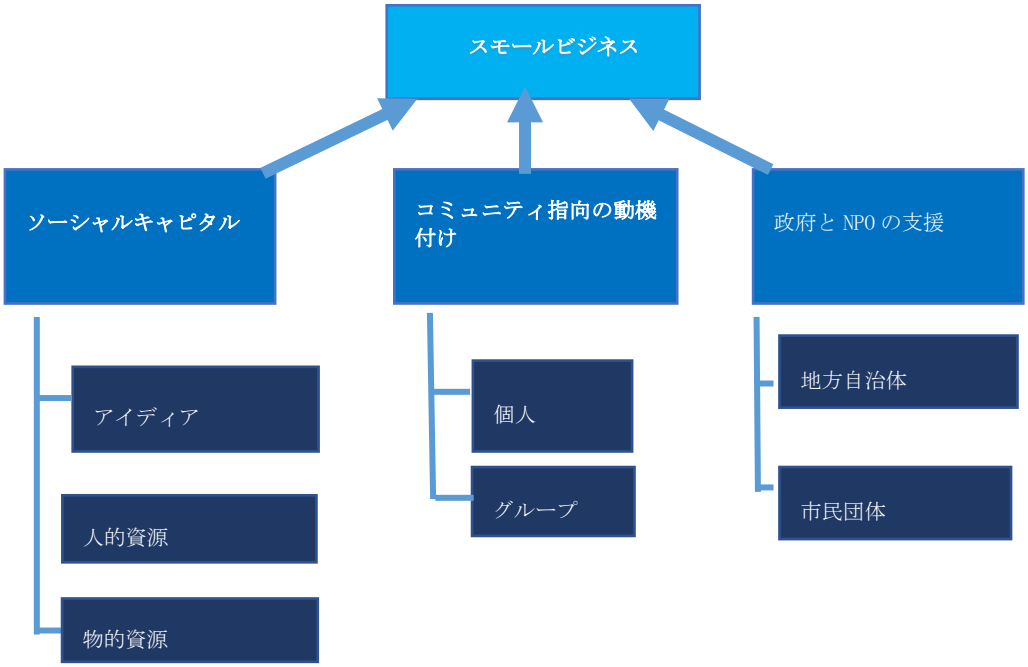
(2) 組織

調査した LSBs は、組織構造が明確に特定されていない。全てのメンバーが共同的に仕事に従事しており、一般には、これらの組織内部において上下関係はない。

(3) 利益/収益の使用

8 つの LSBs のうち 6 つは、事業活動から生み出された収益が、回転資金として事業に再投資されている。ほとんど全ての参加者は LSBs の事業活動の参加、コミュニティ参加から個人収益を得ることはない。

図 1: 旭地区におけるスモールビジネスの基本要因



出所：筆者が作成。

(4) 雇用

これらのLSBsの雇用規模は比較的小さく、従業員は二人から10人までである。この中で、「木の駅」プロジェクトは管理職や樹木の伐採などを含めて約 44 名のメンバーを持っている特別なケースである。

(5) ビジネス規模

8 つの事業のうち 6 つは、生産性の向上よりもメンバー達が協力し共同作業を行うことに集中しているため、事業の拡大または生産過程の機械化・大規模化を望んでいない。

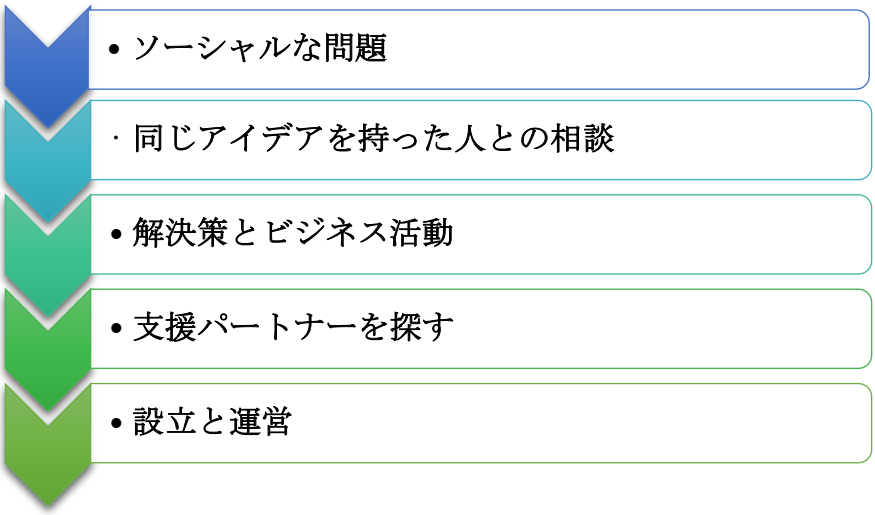
(6) 外部支援

これらの事業の多くは、人的資本（企業の創設者は、都市部からの移住者または都市部で教育を受けたまたは雇用された地元住民）または他の地域から導入されたビジネスアイデアなどの外部要因の存在を伴っている。

4.1.3 開発プロセス

上記の分析に基づいて、我々は以下の図 2 を作成し、旭地区における LSBs の設立と運営に来よる重要な要素をまとめた。

図 6: 旭地区のスモールビジネスの開発プロセス



出所：筆者が作成。

4.2 LSBs のコミュニティ開発への効果

私たちの研究によると、本調査で取り上げた 6 つの LSBs は、コミュニティ指向型のビジネスの性質ゆえに、経済的な利益は限られている。しかし、「木の駅」プロジェクト、「薪ストーブと薪づくり研究会」（木工事業）などのビジネスは、現地通貨（モリ券）の利用拡大、付加価値のある製品開発（伐採された木とストーブ）を通じて地方経済発展に貢献している。

残りのビジネス事例については、金銭的価値という観点での経済的貢献は重要ではないと考えられている。しかし、営農組合が米を自ら販売し始めていることから、と、彼らが生産した米の経済的利益の多くをコントロールすることが可能になり、経済効果の潜在的な増加に寄与することが期待される。「杉ん工房」も今後、収益性を高めることを望んでいる。豊田市では、経済的利益に加えて、ソーシャルビジネスモデルが地域社会にいくつかのプラスの効果をもたらしている。全体として言えば、このソーシャルビジネスモデルがコミュニティの活性化を促進し、人口の減少、高齢化、社会的能力の低下によってもたらされる課題にコミュニティが対応できるよう支援している。このユニークなビジネスモデルの効果は、コミュニティ全体でさまざまな形で現れている。本研究ではこれらの効果を下記のように 4 つのカテゴリーに分類した。

(1) 効果的な地元資源マネジメント

これは、旭地区におけるコミュニティ指向型スモールビジネスモデルの最も重要な社会的環境効果の1つである。土砂崩れによる洪水が豊田市にとって深刻な脅威であるため、これらのスモールビジネスの社会環境的な効果としての森林マネジメントは豊田市の市街地や都市部の安全にとって重要である。「木の駅」プロジェクトと豊田市農村地域の森林組合などの NGO の取り組みを通じ、山主は、必要な手段と援助を得て、彼らの森林を管理するよう動機付けられた。地元資源マネジメントのもう一つの方法として、地元の農産物を使って付加価値のある商品を作ることで、個人および地域の収入を増やし、コミュニティメンバーに積極的な関与の機会を提供する。例えば、渓流荘レストランは地元産物のみを使用し、「杉ん工房」も主に地元の食材（クルミ、卵）を商品に使用している。

(2) コミュニティ参加と社会的能力の向上

それぞれの人が帰属意識を感じられ、調和のとれた生活環境と作業環境を作り出して、住民同士の結びつきを強化するためには、 人口の過疎化や高齢化という課題を抱える旭地区では、コミュニティ参加が不可欠である。

「木の駅」プロジェクトは、地元住民と外部者の両方から構成される人々が密接に協力するコミュニティ指向のソーシャルエンタープライズのコンセプトを具現化している。コミュニティ再構築の参加者として、主に 60 歳から 70 歳の男性が従事しており、これらの活動は彼らの退職後の生産性と活力を高めている。2013 年に、戸田氏が設立した「M−easy」 もコミュニティ参加を活動の中心にしている。稲作、お菓子づくり、合唱、「木の駅」プロジェクトなど幅広いソーシャル活動を行って、組織化と活動内容の実施において人々が協力して動くように動員するものがいくつか挙げられる。「M-easy」の目標は、ソーシャルネットワークの創造と拡大を可能にするような様々な活動に従事する人材の育成による人的資本の増強である。全体として、旭地区におけるコミュニティ参加は、人々の関わりを深めるボトムアップのアプローチが用いられており、地域のコミュニケーションや社会的、個人的なエンパワーメントを強化している。

(3) コミュニティサービスの改善

コミュニティサービスは、コミュニティのすべてのメンバー（特に支援を得る必要のある人）が支援を得られていることを確実にするコミュニティの一つの重要な機能である。この機能は、通常、国によって行われているが、旭地区では、「いこまハウス」と「ささとハウス」が地域社会の障害者を援助してこのコミュニティサービス機能を実行している。これは、障害を持った住民が基本的な生活スキルを発達させ、身体的および精神的な制約にもかかわらず、自立能力の向上に役立つ。また、彼らのユニークなニーズが満たされ、家族が仕事をし、比較的普通の生活を営むことができるように、より大きな柔軟性を有する空間が提供されている。

(4) 改善された暮らし

旭地区におけるコミュニティ指向のソーシャルビジネスのコンセプトのもう一つの顕著な特徴は、人々に副業の機会を創出することによって、地元住民の生計活動の改善に貢献することができている。「木の駅」プロジェクトの設立に伴い、メンバー達が、「モリ券」を通して経済的利益を得る手段として樹木の伐採や木材の切断の事業に積極的に参加することができた。 一方、細断された木は、薪ストーブ事業のような他のスモールビジネスの維持・発展に役立っている。薪ストーブ事業は、地元の鉄鋼所の作業需要を創出し、移民に雇用を提供することで、地域の生計サイクルの維持に貢献している。

これらの効果が総合的に、この農村地域のコミュニティを変革させ、住民の生活の質と福利（ウェルビーイング）を向上させており、このモデルは、東海地方の類似なコミュニティや、おそらく過疎化に直面している日本の他の農村地域の再生モデルとしても役立つと期待される。

5. 結論と提案

旭地区のローカルスモールビジネスは、地域コミュニティの開発に変革をもたらしている。本章では、地域の成長に、コミュニティ指向型のビジネスイニシアチブが必要である、ローカルスモールビジネスのモデルが他地域においても普及する可能性がある、という視点から、旭地区のローカルスモールビジネスの今後の発展について考察する。

5.1 このモデルの全国展開の可能性

旭地区のビジネスモデルは補助金の有効活用と農村コミュニティを活性化させる力を強調するモデルである。このモデルは、他地域の地域開発においても、適用可能なモデルの一つとして、使用することができる。

「木の駅」プロジェクトに関しては、現在の「木の駅」プロジェクトはすでに全国に拡大しており、全国 40 カ所に展開している。旭地区では、現在の薪ストーブや薪作り研究会は全国的に展開されている「木の駅」プロジェクトの中でも先進的なモデルであり、成功すれば全国展開が可能である。

営農組合は旭地区で開発された活動でないが、旭地区は農林水産省が主催する国家プロジェクトに参加しており、旭地区の経験は、他の地域に優れた学習機会を提供している。この経験の共有は、将来的に同じプロジェクトを実施することを希望する地区に役立つかもしれない。

5.2 持続可能な発展

旭地区のボトムアップアプローチによるソーシャルビジネスの展開は、農村地域の成長・活性化にとって重要な価値があることが判明した。本稿で分析したように、このアプローチは主に、

社会資本、コミュニティ指向の動機、および政府/市民社会のサポートの三つの要素に基づいている。これらの要因は、ビジネス開発の基盤となるが、持続可能性を担保するには十分ではないかもしれない。

ソーシャルビジネスのオーナーにとって、個人的な満足感やコミュニティへの貢献はビジネス活動を行う十分な理由となるため、財政的な持続可能性や成長性の重要性を重視していない。しかし、進化が非常に速いビジネス環境では、ごくわずかな変化がビジネスの持続可能性に大きなショックをもたらす恐れがある。旭地区すべてのローカルスモールビジネスは設立の際に良い動機と拠点を持ち、現在の環境を前提にして相対的な成功を収めている。しかし、今後の予期できない外的ショックに対応しつつ、ビジネスが持続的に発展するためには、多くの成功要因を取り入れることよりも自信を持つことが重要である。

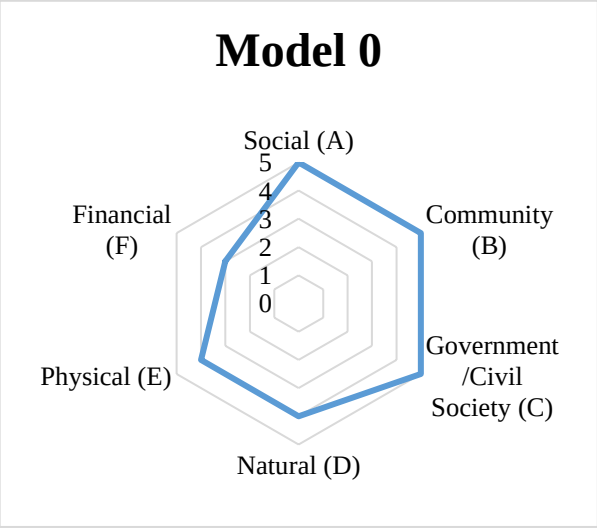
このモデルの持続可能性については、将来の回復力を確保するために五つの重要な要素（資源）の存在と調和が必要であると指摘している「持続可能な生計枠組み」のコンセプトを用い、これらのローカルスモールビジネスの発展の持続可能性を分析する。生活基盤に焦点を当てている五つの要素は、自然、人的資源、物的資源、社会、財源である。これらの五つの資源は旭地区のスモールビジネスの持続可能性にとって重要である。この持続可能な生計枠組みという概念は、従来、貧困層の生活を分析するために使用されてきたが、枠組みの原則は、今回、貧困層の評価に用いられていないにもかかわらず、旭地区での事例の分析に適している。

その原則には次のものが含まれる。（i）人を中心にする必要性――基本的にコミュニティ中心としての人間関係と相互作用に関するものである。（ii）全体的な視点――いくつかの要素と規模を含む。（iii）ダイナミック――挑戦の先進性を認識する。（iv）強みを構築すること――弱点/ニーズに集中するのではなく、潜在力/強み/機会を活用する。（v）幅広い連携とパートナーシップ――ステークホルダー/アクター間の協力を促進する。これらの原則はすべて、旭地区の現状において、旭地区のローカルスモールビジネスを分析するための「持続可能な生計枠組み」に適用されている。

この枠組みを用いて分析すると、旭地区のローカルスモールビジネスの性質から、三つの要因を取り入れることが必要であることがわかった。社会資本は生活資本に含まれているため、政府/市民団体の支援が一つだけ追加されることが必要である。これらの六つの要因が備われば、ローカルスモールビジネスは、農村部のビジネス環境に関連する現状を好転させ、適用されると考えている。

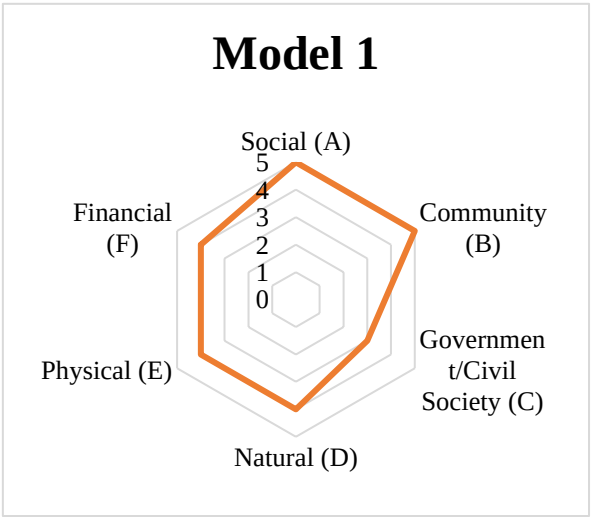
したがって、ビジネス上の外的ショックに対する健全な対策を提供するため、より多くの分野に対応できる、持続可能なローカルスモールビジネス枠組み（SLSBF)という新しいモデルを開発した。

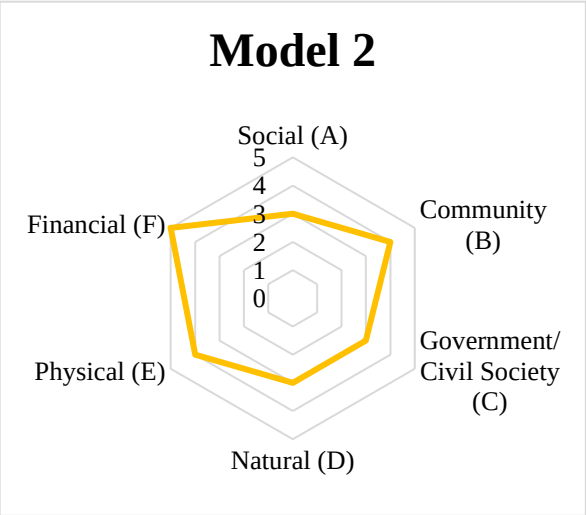
SLSBF は、六つの要素それぞれがローカルスモールビジネスの持続可能性において果たす役割を示している。しかし、それぞれの要素の重要性は活動の性質、ビジネスの対象分野と内容によって異なる。すべての要素は完全な5点を取る必要はないが、過小評価されたり、完全に無視されたりするべきではない。 SLSBF が旭地区の LSB についてどのように利用できるかを示すために、以下のシナリオをいくつか示す。



モデル 0 は、収集されたデータを基にした現在の状況を示す。ソーシャルキャピタル、コミュニティ指向の動機とおよび外部支援の三つの主な要素で構成される。また、安定運営できる設備を持ち、地元資源も使用される。金融資産は比較的少ない。このモデルでは、現在の自然環境、経済環境および社会の状況においてローカルスモールビジネスは順調的に発展していることを示している。具体的な現状としては、住民は安定的な収入を得ている、社会活動に参加することができる、地方自治体は一定の補助金を提供する、また地元資源を減少させる大きな自然災害がない、ことなどが挙げられる。しかし、持続可能な発展の視点から見ると、これらの要素が持続可能な発展に影響を与える可能性が考えられ、解決策を検討すべきである。そのため、二つの仮定から、このモデルを詳しく説明する。

シナリオ 1 では、この LSB への補助金と支援が減少すると、A、B、D のレベルは変わらないが、ビジネス活動を維持するのが困難になる。企業は、補助金の削減を補うために、自らの貯蓄または融資から金融資産を考える必要があるかもしれない。この状況を予測すれば、信頼できる融資能力か、必要な貯蓄と偶発余力のいずれかによって財政的準備を改善することが望ましい。モデル 1 に示すように、重みは因子 C から因子 F にシフトし、この LSB のビジネスモデルを再構成する必要がある。





シナリオ 2 では、災害（地すべりや洪水など）が発生した場合、森林、キノコ、クルミなどの天然資源が減少し、生産に大きな影響を与える恐れがある。それとともに、人的資源と政府支援が LSBs から失われ、回復に向けてリダイレクトされる可能性がある。このような状況では、企業は人的要因および外部支援に頼ることができない恐れがある。したがって、上記のように、旭地区のローカルスモールビジネスは財務力を強化する必要がある。例えば、外部から材料を輸入し、新しい条件に合わせて生産方法を更新する。変化した状況にビジネスを適応させるためには、事業計画や戦略を見直すことが必要になる。このモデルでは、社会的ネットワーク、外部支援、自然資産（A、C、D）が災害により低下している間に、財政とビジョンの要因（F と G）をスケールアップすることが求められる。

上記は、ローカルスモールビジネスが持続可能な開発のために資源を柔軟に利用し、状況によって考え方も変わる例である。持続可能なローカルスモールビジネス枠組みが常に固定されるべきではなく、状況に応じて柔軟性があるべきことが示唆される。このような枠組みを適応させるためには、将来状況の予測と各資産の利用可能性の分析が不可欠である。また、ローカルビジネスでは、予想外のリスクに耐えられるように、人的、物理的および財務的な能力を比較的強く構築することが必要である。さらに、私たちは、すべての状況において、七つの要因すべてのバランスを良くする必要はないということを再度強調したい。むしろ、ビジネスリーダーがこれらのリソースを適切に調整できれば、その回復力と持続可能な発展が高まる可能性がある。

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Working Group 2
I-Turn, U-Turn / Education

Understanding the Learning Environment and the Educational Needs of Rural Toyota

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Table of Contents

1. Introduction

1.1 Background of the Study

When the turner phenomena began penetrating Japan in the early 1990s, the number of movers was still very small compared to the number of people moving to cities. However, due to the improvement of rural institutions and facilities, an increasing preference of owning a business, and greater local government assistance, the turner trend became mainstream. This internal exodus nicknamed the U-Turn gensho eventually expanded into categories such as I-Turn, O-Turn, and J-Turn. The trend, as quiet as it may be, is being encouraged by the Japanese national government, which aims to decrease the concentration of political, economic, and educational activities in the overcrowded cities of Tokyo, Osaka, and Kyoto (Goozner, 1992, n.p.). In an attempt to redistribute population and hopefully solve the low rural birthrate, these turners have since become a welcome injection of fresh faces and new skills to the countryside. However, despite this trend, most of the turners are still composed of retirees or retiring people, and the factors that discourage youth and young adults from moving to the countryside are the same as ever: jobs, social relationships, and education.

Community development through education provides an excellent and holistic opportunity in which people can develop themselves and their societies to their full potential. However, despite its great importance and influence, the potential of education for overall development and well-being is, if not ignored, seriously underrated. Education is usually limited to the confines of the four corners of a classroom and taught by a licensed teacher, but according to the United Nations Education, Scientific, and Cultural Office (UNESCO), education is not just classroom education, it is a basic human right that ensures that "people, whatever their age, have an opportunity, individually and collectively, to realize their [full] potential" through lifelong learning. Education should encompass all the facets of learning and acquiring of basic knowledge, life skills, and functional skills of children, youth, and adults (UNESCO, 2007, n.p.).

The 2001 Forum on Basic Education Action Plan in New Zealand further defines education as the "fundamental building block for society [that] should engender the broader life skills that lead to social cohesion and provide the foundations for vocational callings, higher education and lifelong learning. [All these] when combined with enhanced employment opportunities create a higher level of personal and societal security and development" (pp.1-2). Education, therefore, is an "ongoing learning process, formal or otherwise, whereby [everyone can]...develop their abilities, enrich their knowledge, and improve their technical or professional qualifications or turn them in a new direction to meet their own needs and those of their society" (The Hamburg Declaration on Adult Learning, 1997, para.3). Furthermore, the new demands of the 21st century call for not only a continuous upgrade of knowledge and skills to increase competitive advantage, but also a more holistic learning that involves school-based and community-based education, thus requiring more participation of the family, peers, and the community in creating effective learning environments for everyone.

While there is a shared desire and intent for a standard and equal education, the learning needs and coping mechanisms of every community, rural or urban, are different from one another. Likewise, each resident has his or her own learning and educational needs. During the 1990 World Conference on Education for All in

Jomtien, Thailand, the World Declaration on Education for All further emphasized that "the scope of basic learning needs and how they should be met varies...and inevitably, changes with the passage of time" (UNESCO, 1990, p.3).

The ideal should be that the residents of every local community should be able to maximize the fullest potential and benefits from the educational and learning programs and activities that their community provides. However, every community and resident has his or her own educational and learning needs, as well as his or her own ways of and reasons for learning. With this, it is necessary that both the needs and the learning environment are taken into careful consideration and study, to fully maximize the potential of education and learning for personal and community development, especially across the depopulated rural areas of Japan, where resources are relatively limited and traditional knowledge and lifestyle are perpetuated.

1.2 Statement of the Problem and Research Questions

While rural areas of Toyota have readily-available education and learning programs and activities for residents, there has been no study or survey to date in relation to the learning environment, as well as identifying the learning and educational needs of turners and local residents (see Appendix 8.1. for the definition used for turner and local resident).

The main purpose of this study is to understand the learning environment and the educational and learning needs of rural Toyota. Specifically, it aims to answer the following questions:

a. What is the learning environment of rural Toyota?

   a.1. How is rural Toyota providing for the education and learning of its residents?

   a.2. What are the available programs and activities provided in rural Toyota?

b. What are the learning and educational needs of the turners and local residents?

1.3 Significance of the Study

This study is most significant to Oiden Sanson Center and to the study groups that are concerned with migration, settlement, development, and child rearing. It is hoped that the results of the report provide a benchmark study on the learning environment of rural Toyota and the difference in the actual learning and educational needs of its turners and local residents. By understanding such factors, Oiden Sanson Center can have a greater advantage in attracting more turners and fostering ideal environments for building families. Furthermore, this study also hopes to give Oiden Sanson Center and its study groups an overview of the knowledge of its residents regarding the local educational programs and activities.

Proponents of the education and development field could benefit from this study as well to create future educational plans for rural development and migrant settlement. Finally, this research hopes to get the message across to policy makers and citizens about the importance and influence of education and learning in facilitating communication, development, and fruitful relationships within the community.

1.4 Limitations of the Study

The study is a relatively new field of research in rural Toyota that does not have any benchmark studies to be based upon; thus, most of the supporting data in the literature review will come from secondary sources from other countries and areas. Language is another limiting factor to the researchers. Most of the interviews and needed data are in Japanese, but only two members can speak, read, and write in Japanese, and all group members are non-native English speakers, thus making communication and translation of ideas more challenging. Time was also limited only to an hour of preliminary survey in July and three days of fieldwork in October; it did not allow for an extensive investigation of this topic, thus narrowing the focus of the study.

The locale of the study also limited this research from specializing in one specific mountainous area of Toyota (e.g. only Asahi or only Asuke); rather, it calls for a generalized opinion applicable to all of Toyota's rural areas. Key respondents were likewise limited by their availability and understanding of the important issues of rural Toyota. The scope of this study only involves three main aspects of the learning environment, as well as a generalized enumeration of the educational and learning needs of the turners and local residents of rural Toyota. Turners in this study were identified as a whole unit rather than distinguishing them according to their types. Moreover, this study only includes available respondents from representatives of study groups and organizations related to educational development. Students and teachers were not included as respondents.

2. Literature Review

Resident retention and attraction can be attributed to an education that is fostered within an effective and powerful learning environment for students and learners, whether young or old. Normally, education's primary goal is to train and teach students the subjects that contain knowledge and skills specific to the profession they will pursue. However, the continuous evolution of society demands a constant upgrade of human learning and competencies. Vermunt (2003) emphasized that as societies become more complex and diverse, it is therefore necessary to ensure that all members of the community acquire the set of skills and knowledge that will enable them to keep on learning, think independently, work together, and regulate one's own cognitive development. An environment of learning that contributes to this is therefore important in contributing not only to quality education but also a long-term development of a community.

This literature review will include research on the importance of having an effective learning environment on quality learning, as well as the main aspects of a learning environment. It will also provide an overview of the education provided in Toyota City and the current turner population in rural Toyota.

2.1 Types of Turners

The term U-Turn was re-introduced into the Japanese lexicon in a book published by Okada in 1976 as a reverse migration, wherein the movement of people from the provinces to the metropolitan regions of Japan decreased and the number of people settling in non-metropolitan regions increased (Wiltshire, 1979, p.2). U-Turn was also defined as a return migration "mainly because [an] increasing number of out-migrants from

metropolitan regions…are going [back] to their own local places of origin" (Kuroda 1969, p.2916, cited in Wiltshire, 1979, p.64). By the early 1980s, the debates on this social phenomenon sparked confusion among migration researchers because there was no consensus on the appropriate scale at which U-Turn should be defined. As a result, new turner patterns emerged like I-Turn, J-Turn, and O-Turn. I-Turners are those who grew up in the metropolitan areas and decided to move to the rural side for the first time because of work re-assignment or because of personal lifestyle choices. J-Turners are those who moved to the urban areas and moved back to rural areas different from their original hometown. O-Turners are people who attempted to do any kind of turning, only to find out that they are not suited for a rural life (Ri, 2015, n.p.).

2.2 Turners in Rural Toyota

While the Japanese government has been devoting efforts to increase its population by creating numerous innovation policies, programs, and solutions at the national level, cities double their efforts to revitalize their rural areas and increase socioeconomic activities. Toyota City's rural set-up, like many of Japan's rural areas, is no exception to the country's depopulation issue and revitalization initiatives. Alongside its efforts to create better and stronger institutions and facilities to attract more people, especially to its rural areas, Toyota acknowledges the contribution and influence provided by its turner populations. In fact, in 2010, the number of farming households, shops, sales, factories, and value of manufactured item shipments increased due to industrial mergers and a growing movement of people—especially turners— into Toyota City and its rural areas (Toyota Guide Book, 2016, p. 44). The number of turners in rural Toyota has increased gradually over the last five years. In 2014, there were a total of 15,714 turners that moved into rural Toyota (Population of Toyota / 豊田の人口, 2016).

2.3 Learning Environment

Learning is a concept whose improvement has most often been attempted in schools through the application of creative forms of pedagogy, assessments, technologies, and standards. Yet learning is highly influenced not only by the activity associated with it, but also by the design of the environment where the learning takes place. For example, the inside of a train can be considered a learning environment in which the posters seen inside it facilitate gaining unintended knowledge (i.e. what to do during emergency situations) in which a mediator (i.e. a teacher) is not present. As simple as it may seem, the location where the posters are placed is important to engage passengers; if they are placed on the seats or on the doors, it is likely no one will notice these posters, and that defeats the purpose of teaching them safety lessons on the train.

Over the past decade, a number of studies on education have included the birth of several developments in the category of learning and instruction, especially in the domain of learning environments. Innovative policy designs, theoretical frameworks and methodologies that focus on the creation, implementation and evaluation of learning environments have continued to surface as a response to the changing demands of a complex and diverse society.

Among the many characteristics of a highly effective learning environment include building student confidence and curiosity to encourage asking, valuing questions more than answers, sharing ideas that come from several perspectives, utilizing a variety of learning models, personalizing the learning experience for each type of student, giving constructive, persistent and authentic feedback to students, building good learning habits, and creating opportunities where students can practice what they learn in the real world (Heick, 2014, n.p.). According to De Corte (1990), effective learning environments are also characterized as "environments for learning that aim at the development of complex and higher-order skills, deep conceptual understanding, and metacognitive skills such as the ability to regulate one's own learning" (cited in van Merrienboer and Paas, 2003, p.3). De Corte emphasized that such outcomes are necessary for the transfer of learning, especially from the classroom to the real world—outside the classroom— as well as for the productive application of acquired knowledge to new challenges and real-life situations. On the other hand, there are four distinct characteristics of a powerful learning environment:

(1) The use of complex, realistic, and challenging problems that elicit in learners active and constructive processes of knowledge and skill acquisition;

(2) The inclusion of small group, collaborative work and ample opportunities for interaction, communication and cooperation;

(3) The encouragement of learners to set their own goals and provision of guidance for students in taking more responsibility for their own learning activities and processes; and

(4) The application of new information and communication technologies [in the lessons taught] (Van Merrienboer and Paas, 2003, p.3).

Creating effective and powerful learning environments is important in fostering student well-being and high-quality learning. The learning environment affects a learner's health, moods and attitudes, efficiency in work and play, and the ability to form relationships with those around him or her. A good learning environment, therefore, allows students to feel motivated, comfortable, secure, and responsible for themselves.

To children, the importance of the learning environment lies in creating a strong foundation during the early stages of their rapid brain development. The kind of learning environment provided for them has a strong impact on their experiences and the kinds of synapses they build or memories that their brains will retain (Bullard, 2010). Moreover, because children spend a large portion of their lives in their learning environments, the kind of environment they enter will also reflect the philosophy, values and beliefs taught to them at a young age which they are likely to carry throughout their adult lives. As for adults, the importance of the learning environment lies in the promotion of their social education and lifelong learning, or shougai gakushuu. In a 1999 survey conducted by the Public Relations Office of Japan's Cabinet, it was shown that 52.4% of the respondents said that lifelong learning with a good learning environment is an important factor in supporting their desire to enrich their adult lives, while 43.1% said it is important in maintaining or improving their health (Ogden, 2010, p.8).

2.4 Aspects of a Learning Environment

Graetz (2006, n.p.) argued that the learning environment has several aspects: (1) a physical environment that has "quantifiable and perceptible physical characteristics" wherein all learning takes place, (2) an ability to create a space in which students feel, look and listen actively, and (3) emotional, cognitive and behavioral consequences from the activities in which students participate. In other words, these aspects are the locations or spaces, culture or behavioral codes, and context or organization.

The physical aspect of the learning environment, whether sitting inside a classroom, in front of computer screens, underneath trees, or beside a machine, draw the student's attention and affect concentration and motivation, according to Graetz. In any learning environment, the sights and sounds of the learning spaces all affect the learning outcomes of the student. Fischer (2005, p.162) referred to two case studies from the United Kingdom and New Zealand that emphasized the "spaciousness of the classroom, its adaptability, the ability to control the layout, natural and artificial lighting and temperature control… [and] close access to support spaces" like libraries and teacher meeting spaces in the creation of a good teaching environment for students to learn. Bernard emphasized in his independent research study for UNESCO that the physical environment of both the school and the classroom indeed create a climate for educational effectiveness (2012, p.36). Several physical elements, including the architecture (e.g. design of the building, ventilation), physical conditions (e.g. type of construction materials used, colors), and geography (e.g. placement of the building, nearby accessible facilities), enhance the quality of learning. However, "school architecture conveys cultural messages [that are] often overlooked" because it is assumed that, as Nair, Fielding and Lackney (2009) pointed out, a "predetermined number of students will all learn the same thing at the same time from the same person in the same way for several hours a day" (Bernard, 2012, p.30).

Students try to understand information from their senses by "piecing bits of information together from the bottom up and by applying existing thoughts and perceptions from the top down" (Graetz, 2006, n.p.). In other words, students direct their attention to particular targets that they not only personally find interesting and important, but also that are directly or indirectly taught to them and expected of them. Furthermore, the perceptions, attitudes and expectations not only of the students towards their school and education, but also that of the teachers and parents, also affect the learning environment that creates quality education (Bernard, 2012, pp.41-42). A case study in Kenya, for example, underlined the importance of culture and values in creating a learning environment that is connected to the life and aspirations of the community (Misha, 2000, as cited in Bernard, 2012). Furthermore, a research study initiated by Deakin University argued that there are other several external factors that affect the learning environment's socio-cultural aspect, such as the type of neighborhood, social practices of teaching and leading, relationships within the community and between education colleagues, interactions among students, and the kinds of policies that the community adapts (Blackmore, et al., 2011, p.48). According to Deakin University (Blackmore, et al., 2011), several studies have also pointed out that the instabilities within communities and policies disrupt the internal capacities that manage educational changes and programs in schools.

Finally, Graetz stated that the interplay between the learner and his or her learning environment is a product of several emotional, cognitive and behavioral consequences that are influenced by a series of structures and management standards set by an organizational body. Bernard further emphasized in his study that the "organizational dimension of classrooms and schools is made up of elements that determine their structure, rules and degree of openness to change" such as "instructional time…class size, discipline codes, management structure, parent and community involvement…class size, and pupil-teacher ratio" according to certain institutional systems (2012, pp.45-46). The institutional legitimacy and cognitive aspect of a learning environment in this sense are reflected in the educational systems—formal and non-formal— of the community.

2.5 Education and Lifelong Learning in Japan

Japanese education is often cited among the factors that contributed to the rapid industrialization and development of the country. In order to harmonize the standards of education in both urban and rural areas, the national government enacted the Hekichi Kyouiku Sinkouhou in 1954, which promotes equal education in both urban and rural areas, as well as the creation of an association that ensures quality education in areas with limited resources. However, a 2012 survey conducted by OECD established that there continues to be a serious gap between the performances of students in rural areas and those in urban settings. According to this OECD survey, 53% of rural students were likely to underperform compared to urban students based on an assessment of math test performance (Aoki, 2016, n.p.). Rural students also face more challenges compared to their urban counterparts like smaller student populations that cause a lack of variety in sports and clubs, limited transportation vehicles going to school causing longer traveling times, and long distances between home and school, leading to less time for individual or group study and chatting with friends. Besides the unavailability of higher education or alternative learning facilities, these factors affect the decision of students and youth to move away from their rural hometowns.

On the other hand, Japan's Ministry of Education, Culture, Sports, Science, and Technology (MEXT) defines lifelong learning as the "the concept to comprehensively review various systems including education in order to create a lifelong learning society, and the concept of learning at all stages of life".[1] MEXT states that lifelong learning, especially among adults, encompasses both learning via a structured school system, and learning via sports, cultural activities, hobbies, recreation, and volunteer activities. When the idea of lifelong learning was introduced in Japan during the 1970s, it was initially done as a response to the 1972 UNESCO Faure Report. Gradually, however, the concept became widely known, especially when the Lifelong Learning Promotion Law in 1990 was established to give "support for local promotion of lifelong learning, provisions for development of lifelong learning in designated communities, and surveys for assessing the learning needs of prefectural residents" (Ogden, 2010, p.7).

[1]Harvey, L. (2004-17). *Lifelong Learning Analytical Review* (Analytic Quality Glossary). Retrieved on January 16, 2017 from http://www.qualityresearchinternational.com/glossary/lifelonglearning.htm
Original Citation by: Ministry of Education, Culture, Sports, Science and Technology (MEXT). (2004). *[Japan] Lifelong Learning: What is Lifelong Learning?* Retrieved from http://www.mext.go.jp/english/org/lifelong/11a.htm, accessed, November 2004, not available 20 January 2012;
Supported in: MEXT White Paper, Chapter 1. (2011). Retrieved from http://www.mext.go.jp/b_menu/hakusho/html/hpab201201/1324356.htm

However, Ogden also wrote that the promotion of lifelong learning in Japan continues to face barriers. For example, formal education in Japan is given more preference because the society values credentialism, something that most lifelong learning activities cannot provide. A person's academic path and university prestige affects his or her future career growth and job opportunities. Another barrier is Japan's high preference on content mastery which is enhanced in a traditional teacher-centered classroom, thus demotivating learners to take up other learning activities (Ogden, 2010, pp.11-12).

2.6 Educational and Learning Needs

Identifying educational and learning and development needs involves an assessment of a student's capabilities and the current or anticipated gaps in knowledge or skills. Identifying the education needs is necessary to enable an effective learning environment and a sustainable quality education, which is also aligned to the goals of the community involved.

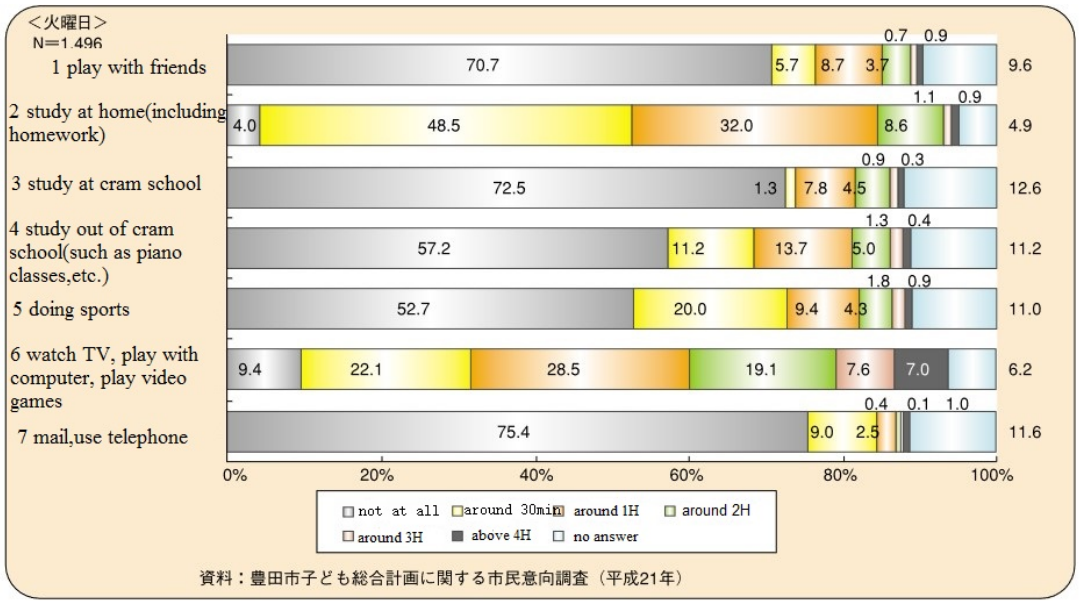
According to a report published by UNESCO, basic learning needs are defined as the essential learning tools (e.g. numeracy and literacy, problem solving, oral expression, thinking) and also the basic learning content (e.g. values, knowledge, attitudes, skills) that are "required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning" (1990, p.11). Every country, culture, and community has different scopes of their basic learning needs and the strategies for how they should be met. UNESCO further emphasized that basic learning needs also include "early childhood care and development opportunities; relevant, quality primary schooling or equivalent out-of-school education for children; and literacy, basic knowledge and life skills training for youth and adults" (2007, p.6)

Satisfying the educational and learning needs relates to a community's responsibility to respect and further enhance its "collective…heritage, to promote the education of others, to further the cause of social justice, to achieve environmental protection, to be tolerant towards social, political and religious systems which differ from their own, ensuring that commonly accepted humanistic values and human rights are upheld, and to work for international peace and solidarity in an interdependent world" (UNESCO, 1990, p.6).

2.7. Educational and Learning Needs in Toyota

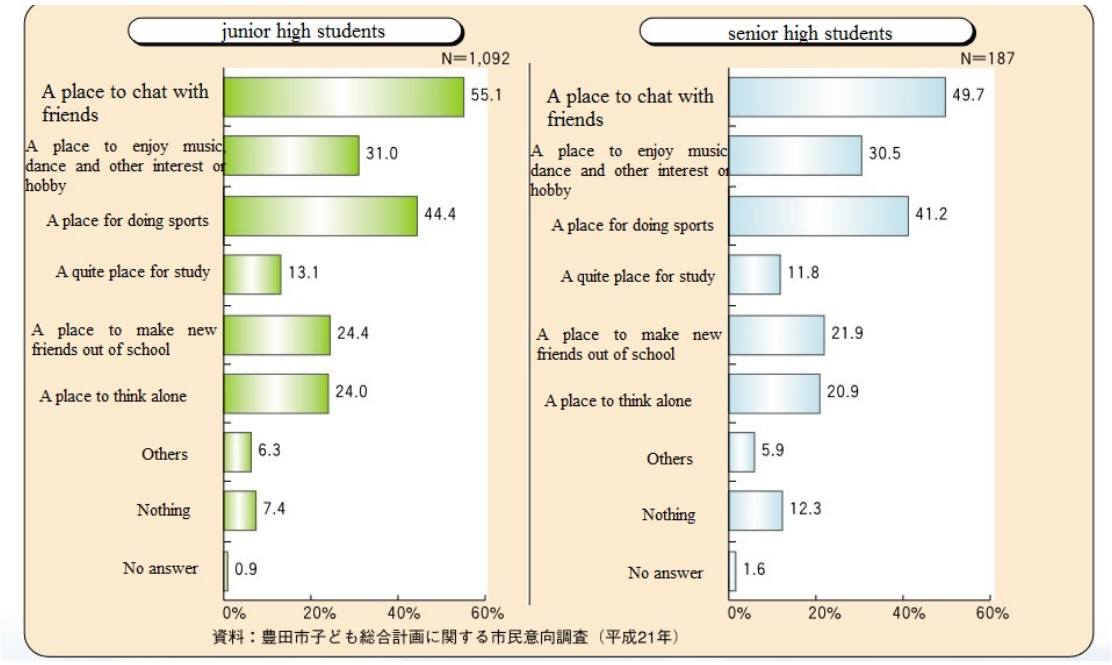
A recent study conducted by the Toyota City government revealed that most of the students surveyed spend most of their time indoors after classes. 70% answered that after school they did not play and communicate with their friends or other children their age. Most of them also raised the desire for common spaces where they can spend more time to talk and do sports with others (Toyota City Children`s Comprehensive Plan / 豊田市子ども総合計画, 2010, p.5).

Figure 1. Ways of Spending Time after School Hours among Primary School Senior Students.



Source: Toyota City government website.

Figure 2. Kinds of Places That High School Students Wish to Have.



Source: Toyota City government website.

In summary, the literature on the learning environment mainly focuses on the school education system, whereas educational and learning needs are broader and more diverse. With no relevant previous studies regarding the learning environment of rural Toyota, further research is needed in this area. Specifically, the aspects of the learning environment should be given attention at this point. A study to identify the educational needs of both turners and local residents should also be included. Furthermore, studies and reports related to

the learning and educational needs of the turners and how they are affected and/or contribute to the learning environment have been overlooked.

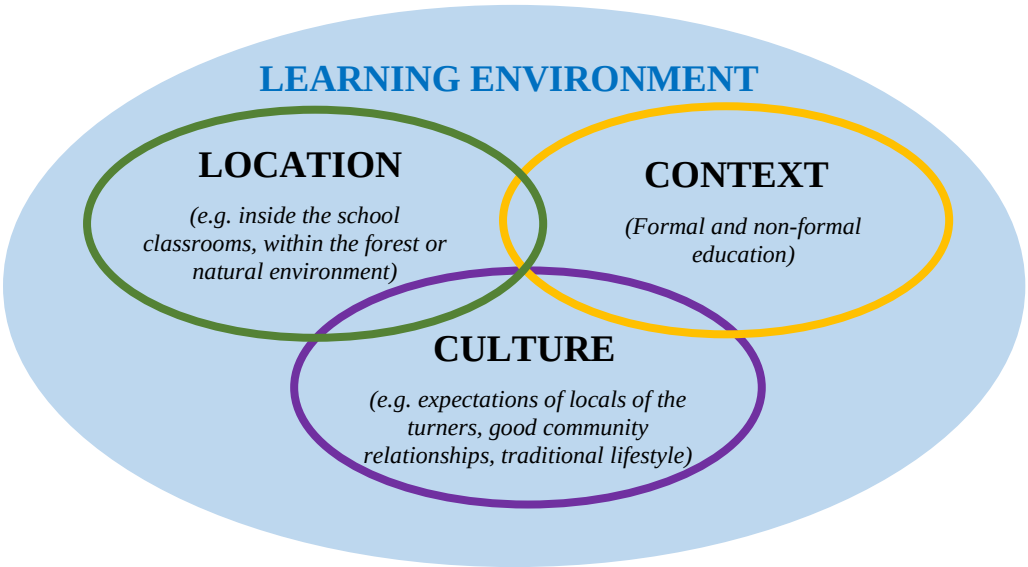
3. Methodology

3.1. Conceptual Framework

The focus of this study is to understand the learning environment and educational needs of rural Toyota. The conceptual framework in Figure 3 was developed and used to describe the learning environment of rural Toyota. To have a common understanding of how the physical, social, and mental dimensions of a learning environment influence the quality of an individual's learning process, an exploration of the factors that create these dimensions and how they relate to one another is needed.

Based on this study's definition of the learning environment, Figure 3 shows the elements of the learning environment and their relationship with one another. First, the location is the space or area where learning and education takes place; second, the culture involves the characteristics and norms of the community that enable and/or affect education and learning in a specific location; and third, the context of education explains what is being taught through the formal and non-formal educational systems. These three main aspects, when nurtured and developed, will have a tremendous interlocking relationship where success in one aspect results in success in the other two, and a highly effective learning environment overall.

Figure 3. Framework Based on This Study's Definition of 'Learning Environment'.



Source: Developed by DFW 2016 Working Group 2.

According to Bernard (2012, p.12), the learning environment is the "complete physical, social and pedagogical context in which learning is intended to occur". While learning environment is usually associated with school classrooms, it encompasses a broader scope to include "any designated place of learning such as science laboratories, distance learning contexts, libraries, tutoring centres, teachers' lounges, gymnasiums, non-formal learning spaces... [and] the natural environment". The three aspects aforementioned (location, culture, and context), therefore, are conceptualized and considered in relation to their impact on the learning outcomes in the physical, social, and cognitive domains.

UNESCO further notes that education and learning take place "in multiple settings" in which the learning environments can be structured (formal education) or unstructured (non-formal education). The importance and necessity of creating conducive learning environments wherein the learner—child, youth or adult—can "feel safe and nurtured" is a critical component for the development of each individual and society as a whole. For the purposes of this research, this study employs UNESCO's emphasis on the learning environment as a "primary transformative force", especially significant in areas with limited financial and human resources (UNESCO, n.d., n.p.).

As this research focused on the learning environment and educational and learning needs of both turners and local residents of rural Toyota, this conceptual framework was utilized to study the important features of rural Toyota's learning environment by identifying the features of its location, culture, and context. Through this framework, the potential effects of rural Toyota's learning environment on its residents' learning outcomes, as well as their educational and learning needs, were identified.

3.2. Research Design

This study used an exploratory research design and a qualitative method to gain insights into the chosen theme and topic. The field interviews were conducted mainly in the Asahi area of Toyota City in Aichi Prefecture, Japan last October 12, 13, and 14, following a pre-survey interview that was conducted last July 7 in Asuke. The group also joined and observed an interview between the local residents and potential turners last September 3 in Asuke.

One focus group discussion (FGD) with seven turner participants and simultaneous in-depth interviews (IDI) with six local resident participants were conducted. IDIs were also carried out to interview two owners of vacant houses, and representatives of four study groups and organizations: Next Generation Settlement study group, Nature School for Kids (Sakura Mura), Asahi Junior High School, and Oiden Sanson Center.

Figure 4. Field Interview with the Founder of Sakura Mura

Photo © J.Y.Tolimao

Figure 5. Focus Group Discussion with the Turners

Photo © Oiden Sanson Center

3.3 Variables and Measures

The table below shows the variables or factors that the researchers used to answer the research questions, and the units or standards of measurements employed to extract the necessary answers for the chosen variables.

Table 1. Variables and Measures Used to Answer the Research Questions

Variables	Measures
Socio-Demographic Profile	**Age:** as of last birth day **Sex:** Male or Female **Civil Status:** Single, Married, Widowed, Separated **Family Background:** number of family members living in rural Toyota **Current Status or Occupation:** paid work after moving to rural Toyota, student, retiree, decision-maker of the family, homemaker, etc. **Educational Background:** highest formal education level attained **Years of Residence in rural Toyota** **Number of Dependents still in School**
Learning Environment and Available Educational and Learning Programs and Activities	Verbatim Response

Educational and Learning Needs of Turners and Local Residents	Verbatim Response
Other Concerns of the Residents	Verbatim Response

Source: Developed by DFW 2016 Working Group 2.

3.4 Data Collection and Ethical Considerations

The researchers sought the aid of Oiden Sanson Center in choosing and gathering all respondents. FGD and IDI question guides were prepared in both English and Japanese and were sent to Oiden Sanson Center for review and approval before the fieldwork commenced. A tick-box survey forms customized for turners and local residents were also prepared to collect the socio-demographic profiles. A camera and recorder, which were permitted by the respondents, were utilized to record all necessary information and answers from the respondents. While two of the group members served as relief translators, a teaching assistant was assigned to the group to do the official translations. Japanese was the main language used in all interviews and data gathering.

3.5 Socio-demographic Profile of Turner and Local Resident Respondents

Below is a summary of the profiles of turners and local residents who were interviewed:

Table 2. Summary of the Socio-Demographic Profiles of the Research Respondents

Criteria	Turners (7 in total)	Local Residents (6 in total)
Age	As of last birthday, 5 belong to the age group of 36-45, while 2 are aged 25-35	As of last birthday, most are aged 61 and above
Sex	All female	4 male, 2 female
Civil Status	All married	1 single, 4 married, 1 widowed
Family Background	All have 4 or more family members; most have parents and grandparents who are from rural Toyota	Most have ancestors from rural Toyota, 1 has parents or grandparents who were from rural Toyota
Current Status or Occupation	Most are part time teachers and housewives who support their husband's work	Most are retired with pension
Educational Background	Most attained a university degree before moving to rural Toyota	Most have graduated from high school, 2 have attained a university degree
Years of Residence in rural Toyota	3 have been living in rural Toyota for 2-5 years, 1 for 5-10 years, 3 for more than 10 years	Most have been living in rural Toyota for more than 10 years
Number of Dependents still studying in school	5 have 1 or 2 dependents who are still in school, while 2 have no dependents	2 have more than 3 dependents who are still in school, 2 have 3, and 1 has none

Source: Socio-demographic profile survey results from WG2`s fieldwork, October 2016.

4. Results and Discussion

As provided earlier in this report, the main purpose of this study is to understand the learning environment and the educational and learning needs of rural Toyota. Based on several interviews and observations, it was clear that the learning environment of rural Toyota is good with room for enhancement. The needs and desires of the interviewees also, more or less, relate to the education and learning and to the learning environment of rural Toyota per se.

This section provides the findings on rural Toyota's learning environment, the knowledge or awareness of the residents on the available educational and learning programs of rural Toyota, the ways rural Toyota is providing education and learning, the educational and learning needs of the turners and local residents, and the other needs and concerns that are not directly related to education and learning but were raised by interviewees who were involved in the education and learning programs, activities and services of rural Toyota.

4.1 Overall Learning Environment of Rural Toyota

Earlier in this report, it was established that there are three main elements of a learning environment: location, or the space where learning and education takes place; culture or the characteristics and norms of the community that enable and/or affect education and learning; and context, or the things taught through the formal and non-formal educational systems. This part describes the learning environment of rural Toyota.

4.1.1 Location

The lifestyle in rural Toyota is generally good and the respondents have a high level of satisfaction with their lives. Living within an environment surrounded by nature was believed to result in an upbringing with positive values and good education, especially for the children. Seeing and being with nature also inspires and motivates adults to learn new knowledge and skills that can influence the economic development of the community by creating their own small enterprises such as farms, hotels, convenience stores, repair shops and more. Because this part of Toyota is far from the highly-urbanized areas, the cost of living is also relatively low. The lower cost of living makes produce like fruits and vegetables very affordable and readily available, thus making cooking meals for students and families healthier, faster and easier, especially for busy parents. The long distance between houses also makes it convenient for meditation and focus, especially for students, writers and artisans. Announcements about community events and other local information such as education policies, learning activities, and even accommodation options—which are especially directed to potential turners through the vacant house bank system—are readily available online and through social media applications like Facebook.

4.1.2 Culture

The relationship among neighbors is also relatively good and has inspired community efforts such as learning how to do agriculture and forestry to take care of the surrounding fauna and flora, as well as setting up activity centers to bring joy to fellow community members such as festivals, plays, and outdoor movies.

For the local residents, the responsibilities you have during community events give them a sense of accountability and importance—a feeling that they are needed—in the community. Local norms also expect all residents to participate and help out in community affairs and events, and local residents are even allowed and encouraged to participate in their selection and screening of turners. Moreover, the small population results in students focusing more on their studies and building closer and more meaningful relationships with their parents and friends. Local residents also mentioned that adults used to teach their kids household chores and bring them to help out and experience farm and forest work before, but after urban and rural educations were standardized and made similar, children were not allowed to experience and help in these types of physical experiences anymore.

4.1.3. Context

The formal education in rural Toyota, like many other areas in Japan, has an established system that can support both turner and local students. While there is no special formal policy targeted at the turners, the transfer of turner students to rural Toyota's schools is easy and administratively assisted by the school staff and the local government. Curricula between urban and rural schools are not different and are standardized according to the national government law; however, Asahi Junior High School, for example, provides a more local-based curriculum specific to meet the learning needs of rural students and the expectations of their parents. Educational facilities and resources are likewise available in rural Toyota. However, universities are non-existent, so students who go to university have to move into the metropolitan regions. Due to the long and expensive legal process of acquiring permission to construct universities, there has been no plan to build one in rural Toyota. Only a small number of high schools are available across the regions of rural Toyota due to the low student count. Schools are sufficiently staffed and the small student population actually creates closer relationships between the students and their teachers, and even among students themselves. The small student population also creates more chances for each student to practice leadership in the school. In addition, there is no discrimination between turners and local students, or between turner and local resident school employees.

Non-formal education, on the other hand, is widespread and more diverse. For example, forest schools were created to teach knowledge about nature and techniques to preserve their flora and fauna biodiversity. Interested students, usually from the urban areas, can join these classes by signing up three weeks in advance through telephone, mail or telegraph registration. Urban to rural exchange programs in which urban students experience harvesting crops, building their own stoves, and cooking their own produce in a traditional way are also available. Vacant houses are turned into hotels for exchange students to stay in. A Vocational Training School for the Future is also open to teach people how to make use of local resources and earn from them. The Koryukan (Exchange Hall) provides a variety of classes like piano lessons, English tutorials, jazz and dance sessions, and photography classes. Another interesting program is the Smile Plan for Toyota Children which aims to support new mothers going through maternity stages, and to provide mental and physical health care and education to children below 19 years by giving them space to communicate their feelings and thoughts (Toyota City Social Division Children`s Division / 豊田市社会部子ども課, 2005).

4.2 In Focus: The Context of Rural Toyota's Learning Environment
(Available Educational and Learning Programs and Activities Provided in Rural Toyota)

The findings above show that the context of rural Toyota`s education is relatively good. Both its formal and non-formal educational systems provide a satisfactory learning environment for all students and learners of all ages. Rural Toyota`s formal educational system, in general, includes customized school activities and programs, adequate facilities, student-centered staff, and good relationships among students and teachers. Its non-formal educational system is more diverse and involves student exchange programs, outdoor learning, freestyle learning, and various club activities.

Below are the available formal and non-formal programs and activities related to education and learning that are specific to the organizations interviewed.

4.2.1 Asahi Junior High School

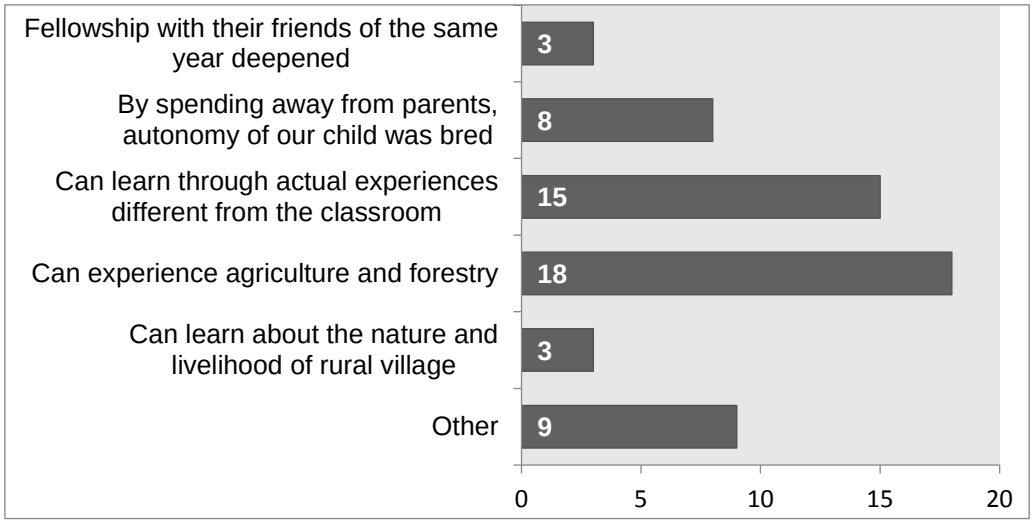
Besides the formal school curriculum, Asahi's junior high school provides study groups after class hours and during summer vacations, especially for Grade 3 students, to prepare for their examinations. Asahi Junior High School provides a school-based curriculum that is customized to meet the rural students' learning needs and expectations and is more enjoyable and participatory. Their school facilities, like classrooms and laboratories, were physically poor before but now they continue to improve them for more efficient student learning. Parents are also encouraged to engage in school festivals and other activities like the choir with their children. Some of their programs also include internships where they send their students to partner companies and businesses for volunteer work and learning. According to the school's principal, even the mentally- and psychologically-challenged students and their needs are given special attention by the school staff and teachers.

4.2.2 Secondary School and *Toyomori*

Urban elementary school students from Toyota City are invited to experience agriculture and forestry in rural Toyota through the secondary school's exchange program. Participating students will stay one or two nights at a farmhouse homestay and experience things that can only be done in rural areas, such as vegetable harvesting, bamboo craftsmanship, plant dyeing, sand dripping art and play, and astronomical observation to deepen the children's understanding of agriculture and forestry.

In a recent survey led by the Next Generation Settlement study group during the summer of 2016, it was found out that urban parents felt that the benefit of the exchange programs is its first-hand experience of nature activities that are not felt, seen, or done inside the school classrooms. The survey also added that after the program, children seemed to have become more interested in living in the countryside because they can have real experiences in nature and the mountain areas. The following is a summary from the survey which highlights the positive learning that the students experienced during the summer exchange program in rural Toyota:

Figure 6. Good Things that Were Experienced by Students from the 2016 *Yamakko* Club



Source: Questionnaire Survey Results for *Yamakko* Club, Summer 2016 (8/1~3 and 8/8~10)

4.2.3 *Sakura Mura* (Nature School for Kids)

Based on the philosophy that children can raise children, this hidden gem of a nature-based school is located within the forest. It teaches children to be responsible and to learn by themselves, like making their own tree houses, cutting trees, selling soba and firewood, doing Zen meditation, and crafting wooden toys without depending on adults or on others but by helping their fellow classmates. Sakura Mura proudly advocates its children-made playgrounds where children can play and spend time after school hours, and where both urban and rural children can decrease their anxieties about each other by communicating, playing and learning together. This camp school also teaches kids how to have a healthy relationship with adults, where children do not fear adults and where children can freely speak their minds but in a respectful and polite manner.

4.2.4 Asahi *Koryukan* (Asahi Exchange Hall)

As part of Toyota's lifelong learning and next-generation development, several exchange halls were established that promote the growth of local residents by opening free courses and providing venues for volunteer groups' activities. Asahi *Koryukan* currently has five meeting rooms, viewing rooms, a library that houses about 12,000 books, group rooms, and cooking laboratories. As of December 2015, the volunteer groups that were active at the Asahi *Koryukan* held classes on herbicide technology, tai chi, hip hop dance, weaving, hula dance, mushroom cultivation techniques, and even communication activities between parents whose children are uneducated. In the following table, according to Toyota City's education program, the exchange hall plays the following roles:

Table 3. Roles of a Koryukan or Exchange Hall.

Role as a Place	Role of Officials
Offering a place of community exchange (Free space such as lobby)	Coordinate exchange opportunities for local residents
Provision of a place to send municipal information and regional resources (free spaces such as the lobby)	Fostering people who are responsible for new regional activities
Offering a place for lifelong learning (Rental room, books, lectures)	Collection and transmission of regional information
Providing a place for parenting support (Child-rearing salon)	Pioneering new users; offering lifelong learning opportunities
Offering spaces and play venues for children (ex: free space for play and meetings, rental room, lobby)	Consultation and support for lifelong learning and community activities

Source: Asahi Center, retrieved from http://ph-toyota.jp/guide/asahi/index.php

4.2.5 Oiden Sanson Center

Oiden Sanson Center is a platform that coordinates resource and capital exchange between urban and rural areas of Toyota through information sharing. The role of this center ranges from creating communication with potential residents about inquiries on moving, facilitating cooperation and communication exchange between locals and potential residents, surveying land for vacant house system registration, implementing projects of both national and local governments, liaising for urban and rural exchanges, providing brokerage services, providing matching support for companies to set up business in rural Toyota, arranging training and corporate social responsibility (CSR) activities, giving advice to local businesses and entrepreneurs, and disseminating information about Toyota's initiatives and activities.

Among the purposes of Oiden Sanson Center is to create a more cheerful and comfortable living experience in rural Toyota. Many of Oiden Sanson Center's staff are volunteers who help out in road clearance, fence and security installations, village festival preparations, and landscape maintenance. Various departments like the regional small business study group, expert group on immigration and settlement, next generation development group, food and agriculture special committee, and forestry committee, aim to incorporate solutions to various problems from different angles of education, economics and society. These departments also offer many learning opportunities to local residents for a richer educational environment in Toyota's mountain areas.

4.2.6 Next Generation Settlement Study Group

This group began its activities in 2013 with three goals in mind: (1) creating communication between urban and rural children, (2) allowing children to experience the traditional cultures and the beauty of playing in the natural environment of the mountain areas of Toyota, and (3) sustaining child development. Teaching

urban and rural children about the consistency of things through food, clothing, shelter and livelihood is also important to them.

4.3 Knowledge of the Residents on Education and Learning Programs and Activities

Most of the turners interviewed have little to no knowledge about any other educational and learning activities except those provided by the koryukan or those that they hear from their friends. For some, the koryukan's initiatives are quite attractive and useful to them, especially the sports clubs for their children and dancing clubs for themselves. Two out of the seven turner interviewees are staff of their own koryukan, so they are aware of its existing learning activities, including other initiatives like the toyomori where traditional learning is more encouraged. The same goes for the local resident interviewees. While half of them (three out of six) are not interested in any educational or learning programs and activities anymore due to their old age, some are only aware of koryukan's educational and learning initiatives. One local resident was able to point out a non-koryukan activity, that of the forest and agriculture non-formal schools wherein primary students from urban areas are invited to experience rural agriculture, farming, and forestry.

4.4 Educational and Learning Needs of Turners and Local Residents

4.4.1 Turners

Turner interviewees were satisfied with the formal education provided in rural Toyota. However, they stress the importance of play and sports to be included in the learning curve of their children. The small student population seems to hinder the creation of clubs for bigger sports like swimming and soccer. In terms of the physical aspect of human development, the turners enumerated a need for a review center for students, an indoor swimming pool to teach swimming lessons for both children and adults, more common areas with a relaxed and open atmosphere, and more playgrounds for the children. Under the social aspect, the turners wished for longer opening hours of schools so children can stay longer and chat or play with their friends more, and more opportunities to have dialogue with foreigners and with local residents, and the latter to talk about the differences between urban and rural lifestyles. One turner also raised the inconvenience of having children leave for the urban areas after high school, so they are unable to keep track of the educational progress and upbringing of their offspring.

4.4.2 Local Residents

Local interviewees were likewise satisfied with the formal education provided in rural Toyota. However, to them, the preservation of a traditional lifestyle which does not rely on technology, and the passage of wisdom and values of the older generations to the younger generations are most important to them in the learning curve of both children and young adults. Under the physical aspect, the local residents emphasized a need for good school dormitories or hostels where students and/or visiting researchers can stay, especially when doing overtime research and school work since houses are far and transportation vehicles have limited schedules and availability. On the cognitive aspect, some local residents raised the desire to learn more agriculture techniques to increase the value and quality of rice crops, and traditional art classes (e.g. Kabuki, Noh, dance, songs, and

others). Furthermore, local residents also emphasize the necessity of freestyle or unstructured learning where mentors teach kids and young adults the value of independent learning.

4.5 Other Needs and Concerns of the Residents

Socially, the interviewees raised a need for more community events that promote outdoor activities among children, friends, and families. To them, there is also a need for more social and healthcare services for the seniors, especially regarding various self-care skills and knowledge. The local residents' expectations and the almost compulsory participation of the turners in all community events are quite a challenge to the turners in adapting to the community's environment.

Physically, both turners and local residents have raised the need for more public transportation vehicles, especially for students, mothers, and those who do not own private cars. Turners have also expressed their needs regarding their new houses. While the vacant houses they transferred to are lovely, most of the houses are quite old and moldy and sometimes cannot withstand the cold weather in the winters.

Economically, the provision of paying jobs, especially for turners, which depend on their skills and capabilities has been raised as another need and concern. Job hunting becomes a challenge for some turners. On the other hand, local residents have expressed their need for new ways and techniques to prevent wild animals from destroying their crops, as well as a desire for more young people to help out in farming and agricultural activities. As for the organizations, Oiden Sanson Center raised some difficulties in staff and budget constraints as well as the limited financial support for incoming turners and the lack of resources for investment such as in tourism, entrepreneurship, and transportation.

On the cognitive and emotional aspect, Oiden Sanson Center also stressed a need to bring back the traditional lifestyle, as well as the bridging of urban and rural lifestyles of the turners and local residents respectively. The Next Generation Settlement study group likewise expressed the need for more creative ways to teach children the value of good manners and to teach the adults how to understand and be more aware of the children's feelings, thoughts, and actions. The Asahi Junior High School principal, on the other hand, emphasized a need to rethink how local resources and knowledge can be maximized in school education.

4.6 Other Findings

This research study also discovered that the decision or motivation of turners to move to rural Toyota is mostly based on the spouse's decision, as well as the chaos and high cost of living in the urban areas. Another discovery made, as pointed out by the community group representatives, was that the vacant house owners had initial hesitations about renting their house and land to strangers. Convincing vacant house owners often takes a long time before they are willing to register their houses in the vacant house bank system. It was also discovered that among other rural areas, as pointed out by some turners, rural Toyota has good initiatives for turners such as the the vacant house bank system, community interviews where local residents (not the local government) are the main interviewers, online information and procedures to acquire new land and/or

accommodations, and equal opportunity among the residents to become community leaders after living in their area for at least three years.

4.7 Discussion

On the Learning Environment of Rural Toyota.

Rural Toyota's learning spaces are among the top reasons for life and educational satisfaction according to the interviewees. The natural environment of rural Toyota provides a good learning environment of real-life sounds, sights, smells, and feelings that make a learner feel secure, motivated, inspired, and healthy. Within the schools, the low student count actually creates more thinking and learning areas for the children. As described by the school principal who was interviewed, the low student count also makes classrooms and school facilities like laboratories, libraries, and the cafeteria more spacious and readily available, especially for other group work projects or school activities. The koryukan also provide other learning spaces for classes, lessons, and activities that are not provided within the standard school curriculum, such as theatre, health seminars, and even reading areas for non-students.

Among the three elements of the location aspect of a learning environment, geography was consistently raised as a concern among the interviewees. The far distances to the school and the koryukan are a concern, especially for mothers. Moreover, two other elements of the location aspect are, if not ignored, overlooked. As pointed out in the literature review, the architecture and physical conditions are important also in designing the schools and learning spaces or centers for both children and adults, especially if the community desires to maintain and promulgate its cultural heritage and traditional lifestyles.

At the beginning of this research, depopulation was the main concern pointed out in rural Toyota. However, after the interviews, the relationship between the turners and local residents, albeit good, was repetitively brought up. Concerns primarily in harmonizing urban and rural lifestyles between the new and old residents as well as the recurring hesitation among local resident owners about selling or renting their vacant homes to turners were highlighted during the interviews. Further concerns were raised about how to make children appreciate their own community resources to encourage them to stay in rural Toyota. While the standardized laws on education influence the pedagogy of the school teachers and the educational policies adopted in rural Toyota, a customized educational and learning plan must be adapted to its non-formal educational system at least. Sakura Mura provides a good example of a new learning concept where danger is used not as a hindrance to development; rather, it is used as a driver of excitement and curiosity to let children become responsible and independent thinkers and learners.

Finally, rural Toyota's learning environment excels in both its formal and non-formal educational systems. Despite the low student count in its schools, rural Toyota is able to engage its students and parents through school activities, and while rural students may underperform or may experience fewer academic opportunities than their urban counterparts, class lessons in rural schools are not rushed and teachers are able to focus more closely on their students' quality learning. Long-lasting friendships among students are also

formed. Several non-formal learning programs and activities are also made available to residents of all ages. They can learn life skills, upgrade their knowledge, pursue lifelong learning, and enhance their creative sides.

As provided in the literature review, while formal education is given more attention due to the customs of the Japanese society, non-formal education provides a good way to create career opportunities that are specific to rural Toyota. Moreover, ways to address the relatively limited knowledge and awareness of the residents, especially through non-formal education and learning, can promote engagement and motivation among children and adults.

On the Educational and Learning Needs.

Rural Toyota provides the essential tools of education and learning such as numeracy and literacy in its schools and curriculum. The learning content made available to children and adults is enhanced by the community relationships, policies implemented, and even by the teachers, parents, and families who give direct and indirect lessons to all learners. What is learned directly or indirectly in turn facilitates the residents' abilities to meet their other basic needs like nutrition, shelter and clothing.

The non-formal educational and learning activities and programs of rural Toyota also complement the area's socio-economic development. Priorities of the residents also involve a transmission, preservation, and enrichment of rural Toyota's cultural and moral values. Furthermore, while the turners and local residents have similar types of development needs, such as physical, social, economic, and cognitive ones, the turners have a stronger learning and educational need in the physical aspect, while the local residents have a stronger inclination towards the cognitive or emotional aspect.

5. Conclusion and Recommendations

5.1 Conclusion

This study has provided an overview of rural Toyota's educational and learning environment, as well as the educational and learning needs of its turners and local residents—two areas where neither research nor surveys have been initiated to date. This research aimed to understand the learning environment of rural Toyota, how it was providing the education and learning of its residents, and what the available educational and learning programs and activities were. This study also aimed to identify the educational and learning needs of rural Toyota's turners and local residents specifically.

Based on the findings, it was apparent that the learning environment of rural Toyota is quite good. Its location and learning spaces provide the perfect nature-based learning that most parents and artisans desire, and which make old and new residents feel satisfied with their lifestyle and education in rural Toyota. The culture and norms in the area, on the other hand, provide for a good community relationship and influence on the upbringing of the children. Having good relationships among neighbors and an open understanding of the different perspectives and desires of both turners and local residents are very important in the learning environment of rural Toyota. Finally, its formal and non-formal educational systems excel in providing

residents, both young and old, with the necessary educational and learning opportunities for individual growth and development. A number of study groups and organizations were also established to help foster the well-being and active engagement of rural Toyota's residents. It was clearly established during this study that the number of students in schools does not necessarily affect the quality of education in rural Toyota. In addition, it was observed that both turners and local residents are satisfied overall with their lifestyles and of course the learning opportunities made available through formal and non-formal educational systems in rural Toyota.

However, while rural Toyota performs well in the context or cognitive aspect of its learning environment, most of the residents and community group representatives have pointed out educational and learning needs that are related to the cultural aspect or social dimension, such as foreign exchange dialogues and more varied outdoor activities, as well as the location or physical dimension of its learning environment, such as review centers and school dormitories or hostels. This study, in fact, discovered that there were actual needs such as having more playgrounds, preserving traditional cultures and values, using local resources to teach students, and others. A focus, therefore, on creating learning spaces wherein the unique culture of the area is reflected is imperative in the educational development of rural Toyota.

As indicated in this research, all three aspects (location, culture, and context) are necessary and important in creating effective, attractive and powerful learning environments. As such, in any given learning environment, it is shown in this research study that the location enhances where learning takes place, the context enhances what is being taught and learned, and the culture enhances how information is taught and learned.

5.2 Recommendations

Based on the findings, this study recommends the following:

5.2.1 Establish a Yorozuya-style Lifestyle Center

A new environment can sometimes be tough for newcomers who long for the rural lifestyle but who have been accustomed to urban life for a long time. To provide for a lifestyle transition for turners, a Yorozuya-style lifestyle center can be envisaged where a one-stop shop for all information, products, and services of rural Toyota are provided in one place. Thus, they do not need to keep transferring from one area to another for their lifestyle needs. The center will be a venue to sell urban and rural commercial and traditional products and produce. This will let local residents experience a taste of urban lifestyle while turners can slowly adapt to the rural lifestyle. To encourage the acquisition of traditional knowledge and skills, the center will provide training in traditional craft making and the establishment of small and medium enterprises (SMEs) in the area. To solve the need for learning and social facilities, communication areas, indoor swimming pools and playgrounds or daycare centers, and an indoor gym or exercise corner, especially for the elderly, can be provided inside. To address the need for areas for group work and research after school hours, a few spaces inside the lifestyle center can be designed to create meeting spaces for students, visiting researchers, guests, teachers, and local leaders. These rooms can either be borrowed by the residents or rented by visitors. A good example of this kind of one-stop shop lifestyle center is the Woodland Lifestyle Center in Texas, U.S.A.

To address the physical aspect of the learning environment, engineers and architects can coordinate with local leaders and artists to create an architectural design of the building and its surrounding landscapes that reflect rural Toyota's traditional culture, values and lifestyle. This will not only preserve the traditional heritage of rural Toyota, but it can also bring together urban and rural perspectives. A good example of a learning facility that maintains open-air classrooms and boasts architecture inspired by local animals is the Green School in the rural village of Sibang in Bali, Indonesia[2]. Another good example is the Gawad Kalinga (GK) Enchanted Farm in Bulacan, Philippines[3]. Just like the Green School, children and adults in the GK Enchanted Farm learn to tend their own gardens, care for their forests and endangered animals, think of other economic opportunities, and be responsible for their own actions.

5.2.1. Increase partnership with Nagoya University

Enhancing the existing exchange programs of rural Toyota by promoting cultural exchanges through homestay programs and educational trips will help increase the link between urban and rural people. Current exchange programs tend to focus on children from urban areas coming into rural Toyota to experience country life first-hand, but there should also be exchange programs for rural students to experience urban lifestyles to establish the large differences between urban and rural life and to create an understanding and appreciation among rural students about the things they have in their hometowns. Exchange programs can also involve making urban and rural students bring their knowledge and skills to their exchange and homestay programs. A good example of this is the Nong-Whal Program in South Korea[4] where university students from the urban areas go to the countryside to experience rural lifestyle, and at the same time teach local residents and students some new skills like contemporary art, computers, and technology. This can address the need of local residents for new ways to increase the value of their agricultural products or new ideas to prevent wild animals from destroying their crops. Moreover, customized exchange programs that involve young adults, start-up entrepreneurs, newlywed couples, and even rural to rural exchange programs must be organized. Rural Toyota can partner with Nagoya University on these programs, especially since Nagoya University has a good educational and learning program for international development; this will solve the need for more dialogue with foreign students and visitors. Vacant houses can be refurnished and refurbished with local resources so they can be transformed to good homestay venues or they can be redesigned to become common areas for play, study, or socializing.

5.2.2 Run apprenticeships or mentor programs

To address the cognitive and emotional aspect of the learning environment, mentor programs can be run to pass on the traditional knowledge, skill sets, and wisdom of the older generations to the younger generations. While freestyle learning is encouraged in most of the non-formal educational programs of rural Toyota, a tendency to set aside the beauty of how traditional knowledge and skills are learned can occur. As such,

[2] Green School, Indonesia, see https://www.greenschool.org/ for more details.
[3] *Gawad Kalinga* Enchanted Farm, Philippines, see http://gk1world.com/visit-enchanted-farm for more details.
[4] *Nong-Whal* Program, South Korea, see "Improvement of the Rural Education Environment by the 'Nong-Whal' Program" report by Sung ho Seo of Kyungpook National University.

seasoned artisans and experts skilled in the traditional arts and crafts of rural Toyota can take in one apprentice to mentor and make sure that the tradition is passed on. A good example of this apprenticeship can be seen in medieval times, where the traditional way of creating weapons and swords was passed on from a mentor to a specific student. Another example of apprenticeship can be seen from Kalinga master weaver and artist Jenny Bawer Young who has taken an apprentice to pass on this Philippine ancient art of weaving, music, dance, and chants[5].

5.2.3 Create a 'mom club' and enhance advertising strategies

To address the need for longer opening hours at schools after classes or the concern for limited transportation vehicles, mothers can get together every week to agree who can be in charge to ensure children are taken to or fetched from the school or to take and fetch children to the non-formal schools, the koryukan or the lifestyle center recommended earlier. A carpool system can be arranged among the mothers or fathers. Also, to address a gap in the awareness and knowledge of the residents on available educational and learning programs and activities, word of mouth must be utilized more between the residents and social media like Facebook, Twitter, or Instagram must be used to reach out to urban people and potential turners. House-to-house and/or monthly caravans can also be carried out to inform and remind the residents about the available educational and learning programs, activities, and opportunities for both children and adults.

5.2.4 Future studies

Finally, this study recommends that future studies related to I-Turn and U-Turn in rural Toyota include research on the relationship of pedagogy and the learning environment. Students and children can also become a focus of study, since early education is important in human and community development. Future research can also focus on the vacant house bank system, and its procedures and challenges, and future survey studies to learn about the needs of the community with regard to public transportation such as buses and new public transportation routes can also be conducted.

[5] *Kalinga* indigenous artist Jenny Bawer Young trains and passes her tribe's ancient arts to a young female apprentice, see https://www.facebook.com/parangal/photos/a.1416654645255140.1073741834.1397974397123165/1759313704322564/?type=3&theater

Acknowledgement

As a working group, most of the group members did not have any experience of doing fieldwork. We had many troubles, especially with the definition of the topic, finding materials, and translations. At the end of our research, we found the most important thing is still time management.

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Appendices

Definition of Terms

Below are the key words used throughout this report and were defined for this research study only:

a. **Rural Toyota** – mountain areas of Toyota City

b. **Turner** – a Japanese citizen who is either an I-Turner or U-Turner

c. **Local Resident** – a Japanese citizen who was born and raised in rural Toyota and has lived in rural Toyota for at least more than 20 years

d. **Education** – the act of imparting or acquiring specific knowledge and skills; basic education includes all forms of education: basic or formal and social or non-formal, as well as the instruments that enable it, to help realize one's full potential (UNESCO, 2007)

e. **Formal Education** – education acquired in a typical classroom setting and taught by licensed teachers with a standard curriculum as prescribed by law and of public nature (Kyoiku Kihon Ho, 1947, Law No. 25, Article 6)

f. **Non-Formal Education** – a form of social education that is conducted to meet the demands of individuals and societies (Japan's Fundamental Law of Education, 2006, Law No.120, Article 12), and that promotes systematic educational activities, including physical education and recreation, primarily for young people and adults outside the school; they are distinguished from the educational activities conducted as part of the curriculum in accordance with the School Education Law (Japan's Social Education Law, 1949, Law No.207, Article 2)

g. **Learning or Learning Opportunity** – an individual right wherein a society enables people to continue to learn throughout their lives outside the classroom, on all occasions and in all places, and in which they can suitably apply the outcomes of their lifelong learning to refine themselves and lead fulfilling lives (Basic Act on Education, Act No. 120 of December 22, 2006)

h. **Learning Environment** – the diverse physical locations, contexts, and cultures in which students learn (Glossary of Education Reform, 2013)

i. **Need** – basic learning needs that include early childhood care and development opportunities, quality primary schooling or equivalent out-of-school education for children, functional literacy, basic knowledge, and life skills training for both youth and adults (Jomtien World Declaration on Education for All, 1990)

Tick-box Survey Form for Socio-demographic Profile of Turners and Local Residents

Survey Form 1: For Turners

SOCIO-DEMOGRAPHIC PROFILE
Focus Group Discussion

Respondent's Name: _____

1. Age Group

   25-35 36-45 46-60 61 above

2. Sex

   Male Female

3. Civil Status

   Single Married Widowed Separated

4. Family Background

4.1. Number of children	0	1	2	3 and more
4.2. Number of family members	1	2	3	4 and more

5. Family History

   ☐ My ancestors were from rural Toyota
   ☐ My parents or grandparent were from rural Toyota
   ☐ My grandparents were from rural Toyota
   ☐ Others _____

6. Current Status or Occupation (check all the applies)

☐ Student	☐ Retired	☐ Staff at Oiden Sanson Center
☐ Housewife	☐ Community Leader	☐ Teacher
☐ Breadwinner	☐ Decision Maker	☐ Recent Graduate
☐ Others _____		

7. Highest Formal Education Attained

   High School University Masters Degree PhD

8. Years of Residence in rural Toyota

   20-25 years 26-30 years 31 years above

9. Address in Rural Toyota (just the district and region)

   _____

10. Number of Dependents who are still in school

    0 1-2 3-4 5 and more

11. Status or Occupation before moving to rural Toyota (check all the applies)

☐ Student	☐ Retired	☐ Government Worker
☐ Teacher	☐ Community Leader	☐ House wife/husband
☐ Breadwinner	☐ Decision Maker	☐ Recent Graduate
☐ Office Worker	☐ Others _____	

12. Place of Origin _____

13. Type of Turner ☐ I-turner ☐ U-turner

Survey Form 2: For Local Residents

SOCIO-DEMOGRAPHIC PROFILE
In-Depth Interview

Interviewer: _____
Respondent's Name:_ _____

1. Age Group

   25-35 36-45 46-60 61 above

2. Sex

   Male Female

3. Civil Status

   Single Married Widowed Separated

4. Family Background
   4.1. Number of children 0 1 2 3 and more
   4.2. Number of family members 1 2 3 4 and more

5. Family History

   ☐ My ancestors were from rural Toyota
   ☐ My parents were from rural Toyota
   ☐ My grandparents were from rural Toyota
   ☐ Others _____

6. Current Status or Occupation (check all the applies)

   ☐ Student ☐ Retired ☐ Staff at Oiden Sanson Center
   ☐ Housewife ☐ Community Leader ☐ Teacher
   ☐ Breadwinner ☐ Decision Maker ☐ Recent Graduate
   ☐ Others _____

7. Highest Formal Education Attained

   High School University Masters Degree PhD

8. Years of Residence in rural Toyota

   20-25 years 26-30 years 31 years above

9. Address in Rural Toyota (just the district and region)

   _____

10. Number of Dependents who are still in school

    0 1-2 3-4 5 and more

Question Guide for the In-Depth Interview (IDI)

IN-DEPTH INTERVIEW GUIDE QUESTIONS

Working Group 2
October 12, 2016

Respondents:
6 Local Residents
**simultaneous interviews (2 people will be interviewed at the same time)*

Guide for Interviewer:

1. *Introduce yourself, your translator, and documenter.*
2. *Ask your interviewee's complete name and write it down on his/her survey form.*
3. *Ask permission to record the interview and take photos, only for research documentation.*
4. *Introduce the research purpose or objective.*
5. *Make sure you stay within 45 minutes only and all questions were asked.*

Research Objective:
To understand the needs and expectations of the local residents on education and other learning opportunities provided in rural Toyota.

1. How long have you lived here in rural Toyota?
2. What are the changes to your lifestyle compared to 20 years ago?
3. What is the best thing about living here in rural Toyota? What makes living here comfortable and happy? (ex. health, work, education, relationships)
4. What are the inconvenient things about living in rural Toyota? How do you compare them with the urban areas?
5. Do you know the education policies and programs in rural Toyota? What education and learning programs or activities did you join?
6. Can you tell us about your experience? Was it helpful?
7. What were your needs (ex: have to learn a skill, have someone to take care of my kids while I work), and expectations (ex: expected to know new ways to take care of the forest) when you joined an education or learning program/activity?
8. Did the program/activity meet your needs and expectations?
9. Do you have dependents who are still in school?

   If None, proceed to Q10, if yes proceed to Q11.

10. Do you want to learn a new skill or talent now? Why?
11. What are the most important education and learning needs for your dependents? (ex: good teachers, books, child-rearing, etc.)

Question Guide for the Focus Group Discussion (FGD)

FOCUS GROUP DISCUSSION GUIDE QUESTIONS

Working Group 2
October 13, 2016

Respondents:
*5 to 7 Turners, *everyone will be interviewed together at the same time in the same room*

Guide for Interviewer:

1. *Introduce yourself, your sub-interviewer, translators, and documenters.*
2. *Ask your interviewees' complete names. (Give the survey form after interview.)*
3. *Ask permission to record the interview and take photos, only for research documentation.*
4. *Introduce the research purpose or objective.*
5. *Make sure you stay within 60-90 minutes only and all questions were asked.*

Research Objective:
To understand the needs and expectations of the turners on education and other learning opportunities provided in rural Toyota.

1. How was your experience during the selection process? What was the easy and difficult part?
2. How different was your lifestyle before and after moving here to rural Toyota?
3. Are you satisfied with your current lifestyle? What is the best thing about living here in rural Toyota? (ex. health, work, education, relationships)
4. What are the inconvenient things about living in rural Toyota? How do you compare them with the urban areas?
5. Do you know the education policies and programs in rural Toyota? What education and learning programs or activities did you join?
6. Can you tell us about your experience? Was it helpful?
7. What were your needs (ex: have to learn a skill, have someone to take care of my kids while I work), and expectations (ex: expected to know new ways to take care of the forest) when you joined an education or learning program/activity?
8. Did the program/activity meet your needs and expectations?
9. Do you have dependents who are still in school?

   If None, proceed to Q10, if yes proceed to Q11.

10. Do you want to learn a new skill or talent now? Why?
11. What are the most important education and learning needs for your dependents? (ex: good teachers, books, child-rearing, etc.)

Optional:
Who or what helped you adapt to your new lifestyle here in rural Toyota?

Question Guide for Community Representatives, page 1

INTERVIEW GUIDE FOR COMMUNITY LEADERS
Working Group 2

Guide for Interviewer:
1. *Introduce yourself, translator, documenter, other group members..*
2. *Ask your interviewees' complete name and occupation, write them down.*
3. *Ask permission to record the interview and take photos, only for research documentation.*
4. *Introduce the research purpose or objective.*

Research Objective:
To understand the needs and expectations of the residents on education and other learning opportunities provided in rural Toyota.

Respondent A:
Junior High School principal

1. Has the number of students changed since 2010? Has it increased or decreased? By how much? (ask for statistics if available)
2. To maintain your school, how many enrolled students are needed per year?
3. Are there students moving from other cities to your school? Where are these turner students from?
4. What are your programs and activities to attract more students to your school?
5. Do you have any special programs/activities that you provide for your students that you think is different from other urban schools? (Ex: tutor/buddy system, Saturday/Sunday classes)
6. What is the difference between education here than that in urban areas? How difficult or easy is it to teach a smaller class?
7. How do you consider the needs and expectations of both turner and local students in your school? How do these students get along?

Respondent B:
Forest School Representative

1. What are your current programs and activities for the students of this school?
2. What are the goals of these programs/activities?
3. What was the reason you started this activity or program? Whose initiative was it?
4. Do you get support from the local and/or national government for these programs and activities? What kind of support (ex: money or sponsorship, trainers/teachers, advertisement, etc.)
5. What are the requirements for a student to join this school? Or can anyone just come and join this school?]
6. What are the successful results or projects of this school?
7. Do you still have problems or difficulties now? How do you plan to solve them? What do you need to make your school better?
8. What are your plans for the future for your school?What are your expectations for the future of your school?

Respondent C:
Vacant House Representative/Owner

1. What is your definition of a vacant house? (ex: no tenant for ten years or more, etc.)
2. How do you select the houses that will be registered in the vacant house bank? What are the requirements or characteristics of the house or land area you need (ex: built on 1980 and above only, 200sqm or more, 3 bedrooms only, near the hospital, etc.)
3. What is the process of transferring the ownership of the house to the new owner?
4. What kind of support do the turners/new owners get?
5. What do the local resident or the previous owner of the house get from giving the vacant house?
6. How do you select the new owner of the house? Among the selected turners, how do you match a house to a turner/new owner?
7. Do you still have problems or difficulties now with this vacant house system? How do you plan to solve them? What do you need to make this system better?

Respondent D:
Mirai Juku Representative

1. What are your current programs and activities for the students of this school?
2. What are the goals of these programs/activities?
3. What was the reason you started this activity or program? Whose initiative was it?
4. Do you get support from the local and/or national government for these programs and activities? What kind of support (ex: money or sponsorship, trainers/teachers, advertisement, etc.)
5. What are the requirements for a student to join this school? Or can anyone just come and join this school?]
6. What are the successful results or projects of this school?
7. Do you still have problems or difficulties now? How do you plan to solve them? What do you need to make your school better?
8. What are your plans for the future for your school?What are your expectations for the future of your school?

Respondent E:
Oiden Sanson Representative

1. What are your current educational and learning programs and activities for the local residents and turners?
2. What are the goals of these programs/activities?
3. What was the reason you started this activity or program? Whose initiative was it?
4. Do you get support from the local and/or national government for these programs and activities? What kind of support (ex: money or sponsorship, trainers/teachers, advertisement, etc.)
5. Why do you support these kinds of activities and programs (mirai juku, forest school, study groups, vacant house system, etc.)?
6. How do you think do your educational programs and learning activities benefit the local residents and turners? Do they improve relationships and communication?
7. What are the qualifications you look for among the turners?
8. Why did you decide to let the local residents have more participation in choosing turners?
9. What are the best practices that you do to make the lifestyle here nore comfortable and happier? (ex: local resident participation, etc)

社会統計調査

グループディスカッション

参加者の名前：_____

1. 年齢
   25－35　36－45　46－60　61以上
2. 性別
   男性　女性
3. 市民のステータス
   独身　既婚　死別　分離
4. 家族構成
   4.1 子供の数　0 1 2 3人以上
   4.2 家族の人数　1 2 3 4以上

5. 家族の歴史
   - ☐ 先祖は豊田山村地域出身
   - ☐ 親と祖父母は豊田山村地域出身
   - ☐ 祖父母は豊田山村地域出身
   - ☐ 他:_____

6. 現在の職業
   - ☐ 学生　☐ 定年　☐ おいでんさんそんセンターの役員
   - ☐ 主婦　☐ 地元のリーダー　☐ 教師
   - ☐ 一家の稼ぎ[illegible]　☐ 亭主　☐ 卒業したばかり
   - ☐ 他: _____

7. 学歴
   高校　大学　修士　博士
8. 豊田山村地域に何年住んでましたか。
   20－25年　26－30年　31年以上

9. 豊田の住所（大体の地域）
   _____

10. 今学校に通ってる子供は何人いますか
    0　1－2　3－4　5人以上

11、豊田山村地域に引っ越す前の職業は何ですか。
- ☐ 学生　☐ 定年　☐ おいでんさんそんセンターの役員
- ☐ 主婦　☐ 地元のリーダー　☐ 教師
- ☐ 一家の稼ぎ手　☐ 亭主　☐ 卒業したばかり
- ☐ サラリーマン　☐ 他: _____

12. 出身地. _____
13. あなたはどうな形で豊田山村地域に来ましたか：　Ｉターン　Ｕターン

社会統計調査

深層インタビュー

インタビュアー：
参加者の名前：

1. 年齢
   25－35　36－45　46－60　61以上

2. 性別

   男性　女性

3. 市民のステータス

   独身　既婚　死別　分離

4. 家族構成
   4.1 子供の数　0 1 2 3 人以上
   4.2 家族の人数　1 2 3 4 以上

5. 家族の歴史
   - ☐ 先祖は豊田市山村部出身
   - ☐ 親と祖父母は豊田市山村部出身
   - ☐ 祖父母は豊田市山村部出身
   - ☐ 他: _____

6. 現在の職業
   - ☐ 学生　☐ 定年　☐ おいでんさんそんセンターの役員
   - ☐ 主婦　☐ 地元のリーダー　☐ 教師
   - ☐ 一家の稼ぎ手　☐ 亭主
   - ☐ 卒業したばかり　☐ 他

7. 学歴
   高校　大学　修士　博士

8. 豊田市山村部に何年住んでましたか。
   20－25年　26－30年　31年以上

9. 豊田の住所（大体の地域）
   _____

10. 今学校に通ってる子供は何人いますか
    0　1－2　3－4　5人以上

和文要約

国内実地研修 2016

ワーキング　グループ 2: I ターン、U ターン・教育

豊田山村地域における学習環境と住民の教育ニーズについての調査

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目次

1. 導入

1.1 背景

日本国内の人口移動現象は１９９０年代の前半から始まる。その後、移動の形態に合わせ、I ターン、O ターン、J ターンなどの用語も使われるようになった。このような人口の移動は、東京、大阪、京都のような大都市への人口集中による政治、経済、教育面での問題の軽減にも寄与するため、政府からも推奨されてきた。(Goozner, 1992, n.p.)。しかし、移住者の多くは定年退職者であり、仕事、人間関係、教育に関する問題もあり、若い世代の移住は進んでいない。

教育を通じた開発は優れて総合的な機会を提供し、それにより人々は、能力を最大限に活かし、自己と社会を成長・発展させることができるが、全体的開発や幸福のための教育の可能性は極めて過小評価されている。ユネスコ (2007) によると、教育は教室・学校内で子どもや若者に対し行なわれる教育に限定されるものではない。教育はすべての人々の基本的人権であり、生涯の学習を通して「年齢を問わず、人々が、個人としても集団としても、自己の潜在的能力を[最大に]実現する機会を持つこと」を保証するものである。教育は、学校外でも習得可能な継続的な学習の過程であり、誰もが自己や社会のニーズを満たすために「自己の能力を育成し、知識を豊かにし、技術的・専門的な能力を向上させる」ことを可能にするものである。また、21 世紀においては、継続的な知識・技術の習得・向上に加え、より総合的な学習が必要とされ、効果的な学習環境の構築のために、家族、仲間、コミュニティの参加がより強く求められている。

全国共通の標準的で平等な教育が望まれる一方、都市部であれ農山村部であれ、コミュニティごとに異なるニーズがあり、また、個人レベルにおいてもニーズは異なる。農山村部においては、限られた資源でこれらの多様なニーズを満たす必要があり、コミュニティが提供する教育と学習プログラムが最大限に活かされるよう、その内容、提供方法が吟味される必要がある。

1.2 課題

豊田山村地域では様々な住民向けの教育と学習プログラム・活動が存在するが、これまで学習環境を中心とした研究や調査は行われておらず、また、移住者と地元住民の学習、教育に対するニーズを中心とした研究や調査も行われてこなかった。

1.3 研究問題

a 豊田山村地域の教育環境の現状を明らかにする。

a1 豊田市による山村地域住民への教育と学習の機会の提供方法。

a2 現在の豊田山村地域で行われてるプログラムや活動。

b 移住者と地元の住民の学習、教育に対するニーズを明らかにする。

1.4 研究意義

このような状況を踏まえ、本研究が、おいでん・さんそんセンターとコミュニティー（特に移住、定住、開発、子育てに関わる研究グループ）にとり有益なものとなるよう、現在提供されている教育プログラム・学習機会が、共同体の移住者・地元住民の期待とニーズに対し効果的・効率的なものであるかどうかに関して、基礎となる研究を提供することを目指す。地元住民の関係・理解の促進・全体的な福祉の提供・促進を可能にするような、現在の状況等の提示を通じ、おいでん・さんそんセンターおよび研究会が、教育により提供される重要性と利益に関する住民の認識について概観できるようにしたい。また、山間地域の共同体内でのコミュニケーション、開発、実り豊かな関係の促進における教育や学習の重要性・影響に関するメッセージを、政策立案者や住民に理解してもらうことも本研究の目的の 1 つである。

2. 先行研究

社会が複雑化・多様化するのにともない、すべての成員に対し、継続的な学習、自立的な思考、協同作業を可能とする知識・技術の習得を保障することが求められるため、学習環境は、質の高い教育のみならず、コミュニティの長期的な発展にも重要となる。したがって、効率的な良い学習環境は移住プランを考える際にも大切な条件となる。

本先行研究では、学習環境の主要因に加え、効率的な学習環境が学習の質に与える影響に関する研究も含めて紹介する。また、豊田市において提供されている教育および農山村部における移住者の現状に関して概観する。

2.1 移住者の種類

岡田は 1976 年、U ターンを逆流的人口移動という意味で、この単語を日本語に再導入した (Wiltshire, 1979, p.2)。また、U ターンを出身地に戻るという人口還流現象に定義する研究もある (Kuroda 1969, p.29, cited in Wiltshire, 1979)。規模がどれぐらいの人口移動は U ターンに定義すべきか、どの程度の規模の人口移動を「U ターン」とするかに関し明確な定義がなく、1980 年代、人

口移動研究者の間で激しい議論があった。また、移動の形態も一律ではないことを捉えるため、I ターン、J ターン、O ターンなどの新しい概念も導入された。

2.2 豊田山村地域の移住者

豊田市も他の農村地域と同様に人口が流出しており、移住人口の重要性が明確に認識されている。過去五年間、山村地域への移住人口は漸増し、2014 年までに累計 15,714 人が移住している（『豊田の人口 2016』）。

2.3 学習環境

効率的な学習環境の特徴には様々なものがあるが、学習者に自信や興味を持たせ問いを発することを推奨をすること、答えよりも問いに重きを置くこと、複数の観点からの考えを共有すること、タイプの異なる学習者それぞれに適した学習体験の機会を与えること、よい学習習慣を養うことなどが挙げられる(Heick, 2014, n.p.)。

効率的な良い学習環境の構築は、学習者の興味を高め良質な学習を促進する上でも重要である。学習環境は学習者の健康、態度、勉強の効率、周囲との人間関係の形成にも影響を与える。そのため、良い学習環境は学習者にとり極めて重要なものである。

2.4 学習環境のいくつかの側面

Graetz (2006, n.p.) は学習環境にはいくつかの側面があると論じている： (1) 物理的環境、(2) 能動的に感じ、見、聞く能力、(3) 行った活動による感情面、認知面、行動面における影響。

2.5 日本の生涯学習と教育

生涯学習という概念が日本に導入されたのは 1970 年代のことである。1972 年提出の国連教育科学文化機関（UNESCO）の報告書への対応として導入されたのが最初であるが、1990 年には生涯学習振興法が実施され、現在ではよく知られた概念となっている(Ogden, 2010, p.7)。生涯学習に関して文部科学省は、生涯学習社会と生涯にわたって取り組む学習など、いくつかの概念を定義している（『平成 23 年度文部科学白書』第 1 章）。

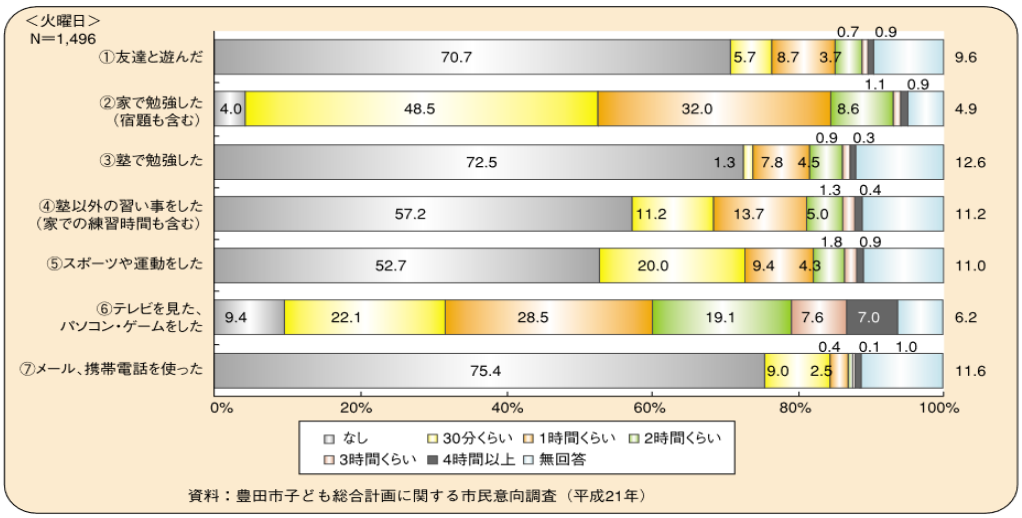
2.6 教育と学習のニーズ

国、文化、コミュニティの違いによって、学習に対する基本的なニーズとそれを達成するための対策も異なっている。国連教育科学文化機関は保育・幼児教育、質の高い初等教育、または大人向けの知識と技術訓練の重要性を強調している（UNESCO, 2007, p.6）。

2.7 豊田の教育と学習のニーズ

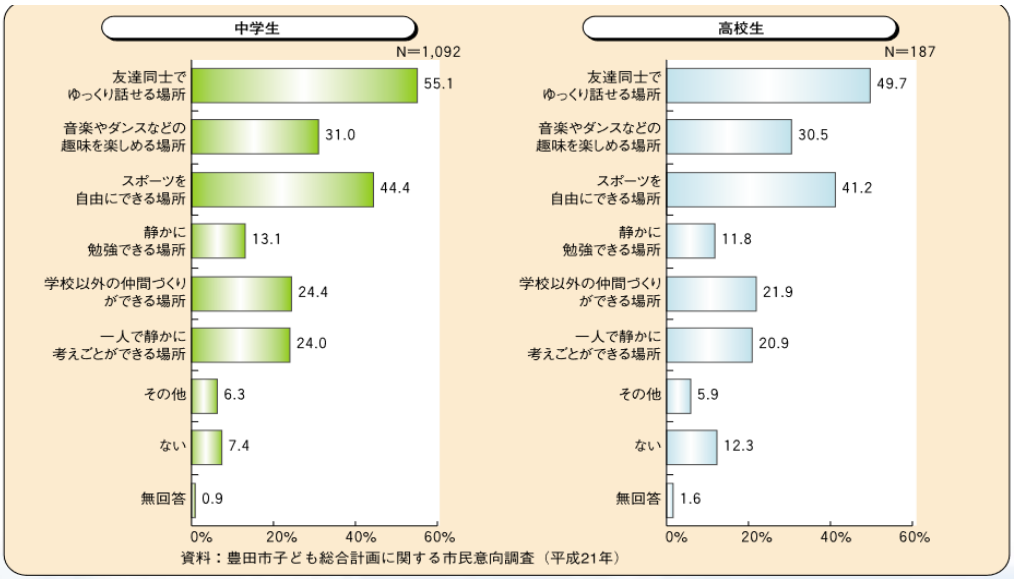
豊田市の調査の結果によると、生徒の多くは放課後の大半の時間を室内で過ごす。70%以上の生徒は、放課後、友たちやほかの同世代の人と一緒に過ごしたことがないと答えた。また、多くの生徒は友達同士でゆっくり話せる場所を求めている（豊田市子ども総合計画, 2010, p.5）。

図 1　平日の放課後の過ごし方（小学生高学年）



出所：豊田市子ども部次世代育成課（2010 年 3 月）、『豊田市子供総合計画概要版』p.5 より

図 2　あったらよいと思う場所



出所：豊田市子ども部次世代育成課（2010 年 3 月）、『豊田市子供総合計画概要版』p.5 より

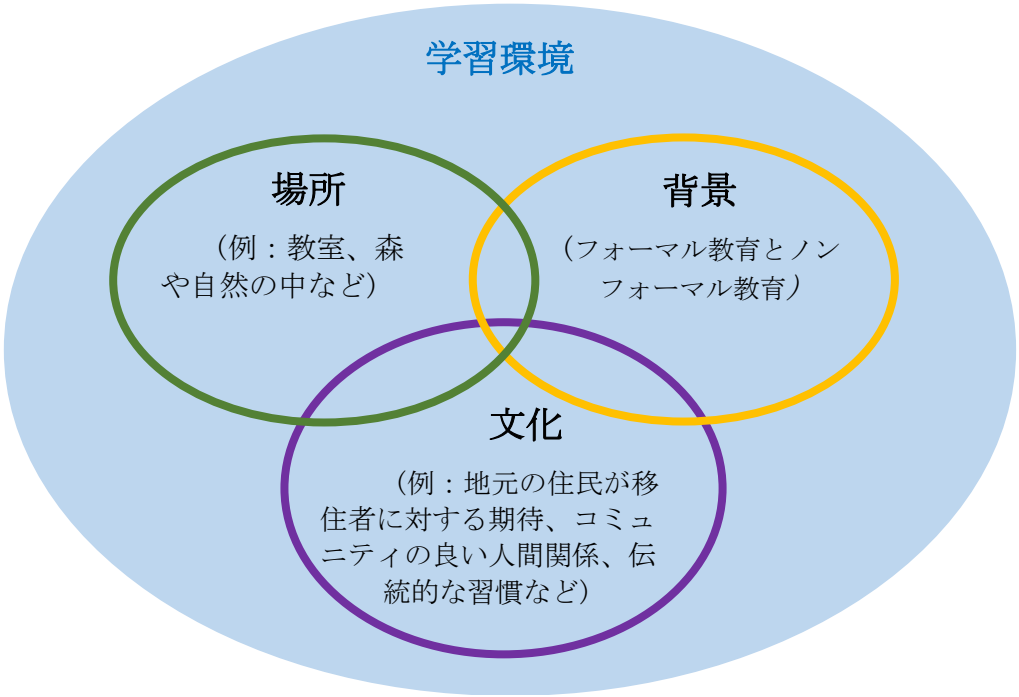
要約すると、教育・学習のニーズは極めて包括的かつ多様であるのに、学習環境に関する先行研究では主に学校教育内の一側面にしか扱われてこなかった。また、豊田市の学習環境に関する研究はほとんどなく、さらなる研究が必要であり、これらの研究では移住者と地元の住民の教育と学習に対するニーズを明らかにすることも必要である。また、移住者の学習・教育のニーズとそれが地域の学習環境に与える影響に関する研究もこれまでなかったというのが現状である。

3. 調査方法

3.1 フレームワーク

豊田山村地域の学習環境を明らかにするために図 3 に示すフレームワークを設定した。本研究の学習環境の定義に従い、図 3 に学習環境のいくつかの側面とその間の関連を示した。第一、場所：それは教育が行われる空間と地域を指す；第二、文化：それはコミュニティの特徴と規範を含め、とある地域の教育と学習を影響するものを意味する；第三、背景：この部分はフォーマル教育とノンフォーマル教育を紹介する。効率的ないい学習環境を作る際には、この三つの側面は強くつながっている。ある側面の成功はほかの二つの側面に良い影響を与える。

図 3　本研究の学習環境についてのフレームワーク



出所：筆者が作成。

3.2　研究地域

本研究のフィールドワークは 2016 年 10 月 12 日から 14 日まで、愛知県豊田市の旭地区で主にグループと個人半構造化インタービューとアンケート調査を行った。

図 4. さくら村の企画者とのフィールドインタビュー

出所：ジャイトリマォ，2016 年 10 月 13 日

図 5. 移住者とのグループディスカッション

写出所：おいでん・さんそんセンター

3.3 データ収集

本研究の参加者はすべておいでん・さんそんセンターの紹介により集まってもらった人達である。情報の漏れがないように、回答者から許可を得て、カメラとレコーダーにより記録をとった。すべてのインタビューとデータの収集には主として日本語を用いた。

3.4 参加者の基本情報

表 1. 参加者の基本情報

	移住者 (7 人)	地元住民 (6 人)
年齢	36-45 才　5 人、25-35 才　2 人	大多数は 61 歳以上
性別	全員女性	男性 4 人、女性 2 人
ステータス	全員既婚	独身 1 人、既婚 4 人、死別 1 人
家族の背景	全員 4 人以上家族; 大多数は親或いは祖父母が豊田山村地域の出身	大多数は先祖は豊田山村地域の出身, 1 人親或いは祖父母は豊田山村地域の出身
職業	大多数は専業主婦	大多数は年金生活
学歴	大多数は豊田山村地域に移住してきた前に大学に出た	大多数は高校卒業, 2 人は大学卒業
豊田山村地域にいた年数	2-5 年 3 人、 10 年以上 3 人、 5-10 年　1 人	大多数は 10 年以上
今学校に通っている子供の数	子供 1－2 人：5 人, 子供 0：2 人	子供 3 人以上:2 人、 子供 2 人：3 人, 子供 0：1

4. 結果と考察

この部分では、豊田山村地域の学習環境に関する発見と豊田山村地域で利用可能な教育と学習のプログラムに関する住民の知識や意識、教育と学習方法、必要性と教育と学習に直接関係していないが、豊田山村地域の教育・学習プログラム、活動に参加している人たちによって提起されたその他のニーズと需要が含まれている。

10 月 12 日から 10 月 14 日まで行ったフィールドワークから得られた結果は以下のようにまとめられる。

4.1 豊田山村地域の学習環境

前述したように本研究の学習環境は三つの側面から成り立っている：(1)場所：教育が行われる空間と地域；(2)文化：コミュニティの特徴と規範など、当該地域の教育と学習に影響を与えるもの；(3)背景：フォーマル教育とノンフォーマル教育。以下、これら学習環境について説明する。

(1) 場所

豊田山村地域での生活は全体的に良好であり、回答者の生活満足度は高い。生活の満足度に貢献した主な要因は、豊かな自然環境に住み、子供の成長に　よい影響を与え、経済成長につながるインスピレーションと新しいスキルを習得するための動機が得やすいことである。都市部から離れているため、手頃な価格で容易に入手できる野菜や果物があり、生活コストが低い。互いの家は遠く離れているため、学生、作家と職人たちにとっては静かで集中しやすい。 フェイスブックや空き家情報バンクなどを通じて外部からも地域のイベントや教育政策、学習活動、宿泊施設などの地元情報は容易に入手できる。

(2) 文化

隣人との良好な人間関係により地域における互助と福祉が促進される。例えば、地域の動植物を守るために農業や林業の講座を開いたり、交流館を設立しコミュニティメンバーに演劇、イベント、野外映画などを提供するなど。地元住民にとっては、地元のイベントで責任を負うことで、地元社会において責任と重要性を感じることができる。地元の伝統ではすべての住民が地域の行事に参加することが期待されている。地元住民は入居者の選考の過程にも参加している。生徒の人数が少ないため生徒は勉強に集中することができ、親と友達の間にもより親密な関係を持つことができる。地元住民の話によると、現在は行われていないが、以前は子供は家事を教えられ、農業や林業の仕事の手伝いも行っていた。

(3) 背景

豊田山村地域のフォーマル教育カリキュラムは都市部と同じであり、教育施設やリソースが整っている。移住してきた生徒と地元の生徒の間、また移住してきた教職員と地元の教職員の間に違いはない。生徒数が少なく高等学校の数が限られるなどのデメリットもあるが、生徒間の関係が密接で、教師の生徒への関心も高く、すべての生徒がリーダーシップを向上させる機会があるというメリットもある。移住者を対象とした特別な政策はないが、学校への転校は簡単で、学校の職員と地方自治体による支援を受けている。カリキュラムは国の法律により標準化されているため都市部と大きな違いはないが、例えば旭中学校では、地元生徒の学習ニーズや両親の期待に応えるために、地域に根ざしたカリキュラムを提供しているなど、独自の部分もある。高校卒業後の進学先がないことは過疎化の一因でもあるため大学の設置・誘致が望まれるが、生徒数や申請手続きにかかる手間や時間のため、高等教育を提供する計画は現在のところない。

(4) 他方、ノンフォーマル教育は充実している。例えば動植物の生物多様性を保全する知識を教え

るために設立された森林学校など。興味のある生徒は三週間前に電話、手紙、ファックスなどを通じて申請すれば参加することができる。作物収穫の体験、ストーブの製作などを行うことができる都市と農村の交流プログラムも設立している。 空き家は都市からの生徒の宿泊先として使っている。とよたまちさとミライ塾では地元の資源の活用方法を学ぶことができる。交流館はダンスやピアノ教室、英語会話教室のようなノンフォーマル教育の学習活動を提供している。他にも、新しい母親を支援し、子育ての過程での経験や考えを交わすためのスペースを提供し、19 歳未満の子供が心身とも健やかに生まれ育つことを目的とした「とよた子どもスマイル・プラン」がある(豊田市社会部子ども課, 2005)。

4.2 豊田山村地域の学習環境の背景

本研究には旭中学校、豊森なりわい塾、セカンドスクール、さくら村、旭交流館、おいでん・さんそんセンター、次世代部会など、豊田山村地域の学習環境を構成する重要な組織に関する詳しい情報をインタービューにより収集した。

綜合的に言えば伝統文化の保全、コミュニケーションの重視、快適な生活環境の整備、子どもの成長とニーズを満たすことがこれらのグループの主な目標である。

4.2.1 旭中学校

旭中学校はフォーマルなカリキュラム以外に、放課後と夏休みに三年生を対象とした高校受験のための学習グループを設けている。学園祭や他のイベントには、生徒の親たちも積極的に招いている。校長の話によると、少人数学校だからこそ、教職員は生徒たちを大事に思い、いろいろな面でしっかり手伝うことができるとのことである。

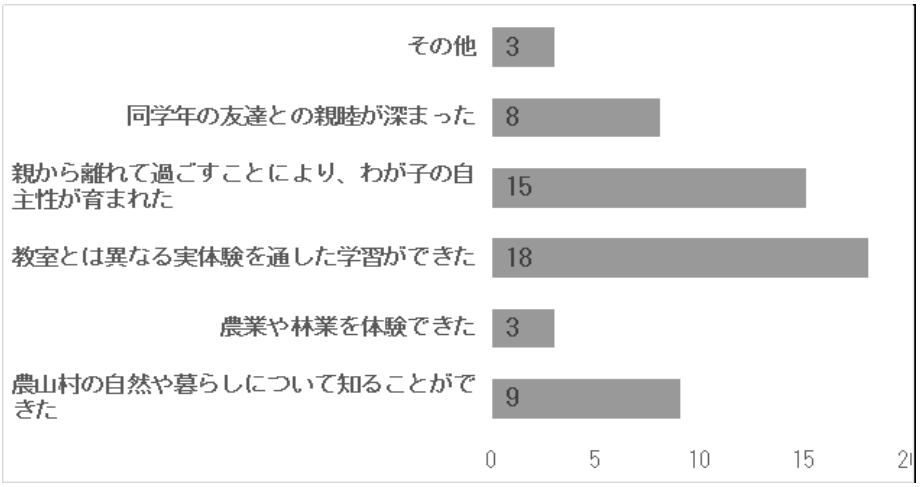
4.2.2 セカンドスクール

セカンドスクールは、2005 年に豊田市と合併した農山村地域が抱える高齢化、過疎化などの課題を解決するために、豊田市内の小学生に農山村地域での農林業などを体験してもらうことによって、都市部と農山村地域の交流を促進することを目指している取り組みである。学校側の許可をもらった全学年の学生を対象とする学校版と、学校の休みの日に希望する子供だけ自由に参加できるフリー版の二種類がある。参加する小学生は農家のホームステイ先で一泊～二泊し、野菜の収穫、竹細工づくり、草木染め、流しそうめん、紙すき、天体観測、生体観察など農村部でだけできることを体験し、子供の農林業への理解を深める。農山村地域の魅力を伝えることは、将来の移住者を増やすことにもつながる。2016 年夏に開催された「山っこくらぶ」と名付けられた活動の親に対するアンケット調査によると、参加して「良かったこと」と感じるところの結果は

以下のようになる。2016 年夏に開催された「山っこくらぶ」という活動に参加した親を対象としたアンケート調査によると、参加して「良かったこと」は以下図 6 の通りである。

以上の結果によると、親たちが一番良かったと感じた点は、子供の自主性を育めたことと、自然ならではの活動ができたことである。さらに、「山での生活にとても興味をもった」や「自然のことや山村の暮らしなど実体験できてよりリアリティを持って感じたり考えたりするようになったようです」や「たくましくなりました」などの感想もあった。

図 6. 2016 年夏山っこくらぶ参加して「良かったこと」



出所：山っこくらぶ (2016 年 8 月 1 日～3 日、8 日～10 日開催)アンケート調査より

4.2.3 さくら村

テレビで報道された子供が子供を殺した事件をきっかけに、「子供が子供を育てられる、子供を作る」という理念を基に、あさひガキ大将養成委員会が子供の秘密基地―さくら村を企画し始めた。森の中に秘められているさくら村は、禁止事項なしで子供が自分で責任をもって、思い存分にツリーハウスを作ったり、遊び道具を作ったりして、お互いに助け合いながら最高の時間を送っている。100%子供たち自身で作った遊び場は、放課後遊ぶところが少ない山村地域の子供たちにとっては、大事なところである。子供の居場所を作るだけではなく、さくら村は「健全な大人との付き合い、母親同士の仲間づくり、生きる力を育み、移住定住に向け」などの機能もに持っている。「難しいからこそ面白い」をモットーに、さくら村は自然の中で困難と立ち向かいながら、常に挑戦する子供を育てている。長野県への遠足やお寺で座禅、薪売りやそば売りなどの活動によって、お金の大切さと心の静けさや助け合うことの重要さなども教えている。豊かな自然環境の中で山村地域ならではの魅力を子供に教え、よりよい教育環境を提供している。

4.2.4 旭交流館

生涯学習・次世代育成の一環として豊田市各地に交流館が設置されている。各交流館には交流館運営委員会が設置され、地域の住民の意見を聞きながら講座を開いたり、自主グループの活動の場所を提供したりすることにより、地域住民の交流を促進し、よりよい教育環境を提供する役割を担っている。インタビューでは地元住民も移住者も「子供の遊び場所がない」ことを問題として挙げているが、『豊田市の教育』によると交流館は図 7 に示した役割を担っており、この問題の解決に交流館が大きな役割を果たす可能性がある。旭交流館の開館時間は火曜日から日曜日の午前 9 時から午後 9 時までで、五つの会議室、視聴室、図書室、団体室と調理実習室などが揃っており、図書室の蔵書も約 12,000 冊と、住民へ最大限の支援を提供している。旭交流館で活動をしている自主グループは、2015 年 12 月 15 日現在で、草木染技術、太極拳、ヒップホップダンス、機織技術、フラ

図 7　交流館の役割

場としての役割	職員の役割
・地域の交流の場の提供 （ロビーなどのフリースペース）	・地域住民の交流機会のコーディネート
・市政情報や地域資源を発信する場の提供 （ロビーなどのフリースペース）	・新な地域活動の担い手の育成
・生涯学習の場の提供 （貸し部屋、図書、講座）	・地域情報の収集と発信
・子育て支援の場の提供 （子育てサロン）	・新たな利用者の開拓
・子供の居場所の提供 （貸し部屋、ロビーなどのフリースペース）	・生涯学習機会の提供
	・生涯学習や地域活動の相談と支援

出所：『豊田の教育』　豊田市教育委員会　2016 年 5 月 1 日

ダンス、きのこ栽培技術の学習と未就園児親子の交流などをテーマとして全部で九つある。子供からお年寄りまで参加可能な様々な技術を教えるグループが集まっており、選択肢豊かな教育環境を提供している。

4.2.5 おいでん・さんそんセンター

「人と人、まちといなか、地域と企業をつなぎ、豊かな暮らしを提案します」をモットーにしているおいでん・さんそんセンターは、様々な目標を持っている NGO や組織をつなぐプラットホームになり、各団体の情報シェアや活動支援を行っている。「都市と農山村の交流をコーディネートする豊田市の取り組み」としてのおいでん・さんそんセンターは一般の行政組織と違い、住民と各民間団体自らの力で山村地域が抱える様々な問題を総合的に解決する活動を支援するプラットホームである。2015年9月の時点で、おいでん・さんそんセンターに登録している団体は全部で 22 あり、地域スモールビジネス研究会、移住・定住専門部会、次世代育成部会、食と農専門部会と森林部会の五つの部門があり、教育、経済と社会などいろいろな角度から様々な問題への解決方法について研究している。これらの団体、部門は地域住民に多様な学習機会を提供し、豊田山村地域をより豊かな教育環境にするのに貢献している。

4.2.6 次世代部会

次世代部会は 2013 年から活動し始め、1. 都市と農山村の子供の交流 2. 山の伝統的な文化と自然での遊びの良さの体験　3. 持続可能児童育成の三つのキーワードを中心に活動をしている。特に衣食住の様々な面で、農村と都市の子供を問わず、稲刈りなどの体験によって、子供にものごとの連続性を知ってもらう活動をしている。

4.3 学習活動への認識

しかし、これらすべての学習活動が住民にとって容易に利用可能であるが、プログラム自体への認識状態は比較的複雑である。インタビューした大半の移住者は、交流館が提供しているものを除いて、他の組織の活動についてほとんど知らなかった。

例えばインタビューに参加してもらった 7 人のうち 2 人がプログラムのスタッフであるため、上記の学習活動を知っているが、他の人は知らなかった。地元住民の認識状態も同じと言える。地元住民の半数は、交流館が提供している学習活動にもあまり興味は示さなかった。

4.4 住民の学習ニーズと需要

住民の学習ニーズについては、豊田山村地域で提供されている正式な教育に満足しているが、十分でないところもある。

4.4.1 移住者

移住してきた人々は、フォーマル教育カリキュラムに対して満足しているが、 児童・生徒の放課後の活動と運動はカリキュラムに欠けていることが気になる。特に児童・生徒の数が限られているため、少人数で行えるものに限定される。水泳や野球など大きい会場と人数が必要な運動も生徒に体験してもらいたい。子供のための遊び場としての運動場ももっとあれば、学習や教育環境を改善する要因になる。それに、高校卒業後に子供を都市部に送らなければならないことにも気になる点の一つである。

4.4.2 地元住民

地元住民もフォーマル教育カリキュラムに対して満足しているが、伝統的な習慣や文化の継承と若い世代への知恵と価値観の伝達は、学習環境において不可欠である。また、学校と家が離れている生徒に放課後の居場所を確保すること、学生や訪問研究者のための良い宿泊施設の整備も必要である。農業知識と伝統的な芸術に対して勉強したいという意見もあった。

4.5 住民の他のニーズと需要

移住者と地元住民両方とも強調したのは子供と友達の間、コミュニティの中の交流を深めるための屋外イベントであった。また高齢者向けの自己介護知識の講座も求められている。移住者にとっては地元住民が望むように地元のイベントに参加することが難しいこともある。物理的な環境を改善するには、地元住民と移住者両方から公共交通機関の整備が必要とされた。特に母親や児童・生徒など車を持っていない人や、週末にスクールバスが利用できない時には影響が大きい。経済面について言えば、移住者たちにとり仕事の確保も重要なポイントである。組織については、おいでん・さんそんセンターは問題点として、スタッフや予算の制約、潜在的な移住者のための財政支援の限界、観光業、交通機関などの投資リソースの不足などを挙げている。また、同センターは、伝統的な習慣や文化の継承、都市と農村の生活の橋渡しの必要性を強調し、次世代部会も、子供たちに良いマナーの価値を教え、大人に子供の気持ち、思考、行動を理解する方法を教えることの必要性を指摘している。また、旭中学校の校長は、学校教育で地元の資源と知識を最大限に活用する方法を再考する必要があると述べている。

4.6 その他の発見

配偶者への考慮、または都市部の混雑の生活環境、高額の生活費なども、移住者が豊田山村地域に移住する原因になる。

空き家の持ち主は時間をかけ慎重に検討した上で登録の決定、情報提供を行い、移住者たちは空き家情報バンクを通じ必要な情報が得られる。空き家の持ち主は選考段階でも参加し、入居者決定に関わっていることが良好な人間関係の構築という点などからも高く評価される。

5. まとめと提言

5.1 まとめ

本研究では豊田山村地域の移住者と地元住民の教育と学習環境、および教育と学習ニーズについて概説し、住民と移住者間で求める教育、学習環境の違いについて明らかにした。

調査により、豊田山村地域には上質な学習環境があり、地理的環境や伝統・文化が重要な役割を果たしていることがわかった。子供の成長環境として多くの親が望む大自然の中で子供を育てることができ、また、現在も維持されている伝統的な習慣や文化は、暮らしやすいコミュニティの形成・維持に貢献しており、このことは移住者と地元住民双方にとって大事なことである。

コミュニティには数多くの学習グループや団体が存在し、様々な世代の住民に有益な教育プログラムを提供している。概ね回答者は、生徒数は教育の質と関係なく、フォーマル、ノンフォーマル教育のどちらについても、現在の仕組みに満足していると答えている。しかし同時に、地域外の人との交流、社会体験の機会を増やすことが必要との回答も多く、また、運動場の設置、伝統文化や習慣の維持を望む声もあった。

5.2 提言

上記の結果に基づいて、以下のように提言したい。

(1) 万屋のようなライフスタイルセンターの設立

米国テキサス州のウッドランドライフスタイルセンターのような、豊田山村地域のすべての情報、製品、サービスを提供することができるワンストップショップの設立が考えられる。住民たちは日常生活に必要性なものはすべて一カ所で手に入れられ、いろいろなところを回る必要はなくなる。一般的な商品と伝統的な品物を両方出す店を出し、伝統工芸の制作講座や小規模ビジネスの訓練も行う。児童・生徒が学習用に利用可能な場所と来訪者のミーティング・学

習場所も提供する。すでに存在している空き家を活用し、室内プールと運動場も設立し、児童の遊び場を増やすことも考えられる。

(2) 名古屋大学との連携を増やす

既存の交流プログラムは、都市部の人に伝統的な習慣や農業を体験してもらうものであるが、逆に、地元の児童が都市での生活を体験するプログラムを導入することも考えられる。都市部での生活を経験することは、地元の文化や習慣の価値を見直す機会ともなる。韓国の Nong-Whal プログラムは、都市部の大学生が農山村地域の農村生活を体験すると同時に、地元住民や学生に芸術やコンピュータなどの新しいスキルを教えるものであるが、名古屋大学と連携し同様のプログラムを立ち上げることも考えられる。名古屋大学は地域の発展のためのプログラムが豊富であり、例えば、名古屋大学の留学生との交流により子供と大人の異文化体験機会を増やすことが考えられる。

(3) 見習い或いはメンタープログラム

次世代へ伝統的な価値観や従来の知恵を継承するため、メンタープログラムを設立する。豊田山村地域ではノンフォーマル教育プログラムが奨励されているため、伝統的な知識や技術の美しさを若い人に伝えることを目的にするプログラムが可能である。見習いの典型例は、中世における刀剣作成技術の師匠から弟子への継承などにおいて見られるが、現在においても、フィリピンの Kalinga Apayao で最後の Kalinga 刺青芸術家が若い弟子に伝統の刺青技術を伝えるケースなどもあり、参考となるかもしれない。

(4) 共用車プログラムとマム・クラブ

毎週順番に 1 人の母親が子供たちの世話をするマム・クラブを作る。これにより子供同士、母親間、また子供と母親の間の関係をより良くする効果などが期待できる。スクールバスのない週末には、交替でメンバーの子供の学校への送り迎えを行う。教育・学習プログラムや活動の広報、情報交換には、Facebook、Twitter、Instagram などのソーシャルメディアを活用する。これらは一般公開とすることにより移住希望者への情報元ともなる。共用車プログラムにより参加者間で、子どもと大人の両方に利用可能な教育と学習のプログラム、活動、機会について情報が共用されることも期待できる。

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Working Group 3
Forestry

Discovering Toyota City's Forestry:
An examination of volunteering in the forest management system

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Table of Contents

1. Introduction

The purpose of this research is to present a forest management framework in Toyota City by clarifying the role of forest volunteer groups and cooperation with other forest management actors in Toyota City such as the Forestry Association and forest owners.

1.1 Forestry issues in Japan

Forests provide multifunctional benefits which are vital for urban and rural livelihoods and well-being, including soil and water conservation, carbon storage, air regulation, water preservation, landslide prevention, timber production, wildlife and biodiversity, and recreational activities among other functions (Weng & al, 2013). When managed well, forests can be used at their full potential to fulfill such functions.

Japan has also embodied this concept in its history. Therefore, when forestry in Japan is considered, we need to look back at how Japanese people have been living with forests. According to Tanaka (2014), Japanese forestry is considered to have started in the 3rd century. During that era, people utilized large amounts of wood which were carried from other places. This discovery indicates that forestry had already been established in that period. From that point on, the Japanese utilized forest and wood products in their daily lives. The concept of “satoyama” was born in the late 17th century. According to Tanaka (2014), “satoyama” is the mountain that is closely related to local agriculture and it establishes its own eco-system in the region. Satoyama and Japanese helped each other and through the combination of the mountain and agriculture made rural life sustainable. As can be recognized in the concept of satoyama, Japanese and forests rely on each other and have a close relationship from ancient times and are also obtaining benefits from each other for a long time. This style of relationship between forests and Japanese were seen in all Japanese rural areas.

The decline of Japanese forestry was one reason why forest volunteers appeared. The policy of expanding forestation was first initiated by the Japanese government after World War II. However, a drop in cash circulation and wood distribution between urban areas and satoyama soon resulted from the conversion to oil energy and the import liberalization of wood from other countries in the 1960s. Citizens started reorganizing themselves as spontaneous forest volunteers to preserve their forest for which functions were considered as having drastically declined. According to Okumura and Katsura (2006, p141), forest volunteer activity can be defined in general as the voluntary participation of citizens and citizen group in managing and maintaining forests. Hence, forest owners or indirect forest stakeholders voluntarily participate in the management of forests and consequently spread their activities and inspire others. Forest volunteers contribute both to society and practical activities in the field (Yamamoto, 2014, p8). Forest volunteers’ activities develop forest management as a citizen activity, such as dissemination of information and awareness raising, reuse of local woods and forest health checks, and lead to appropriate forest management through the building of collaborative relations between the government, satoyama residents and forest workers. In addition, forest volunteers play a role in connecting the satoyama concept and the Japanese people because they work to achieve a common purpose while understanding the executive authority of the government and coordinating

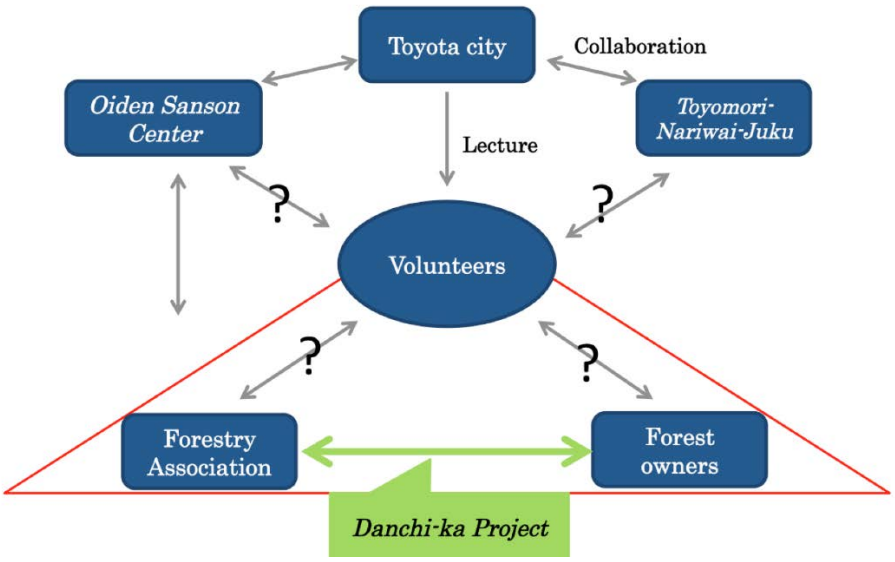
with it. To focus on forest volunteers as research subject is synonymous with an examination of the future of Japanese forestry.

1.2 Problem statement

Toyota City is composed of a total forest area of 92,000 hectares, managed primarily by the Forestry Association, consisting of 138 workers in the field (Toyota Forestry Association, 2015), which is very low compared to the amount of work that is required in the vast forest area. The city government supports forest management activities financially, administratively, and technically, including the provision of equipment, training programs and so on. In addition, there are fourteen volunteer groups which are conducting various activities related to forest management. These activities may consist of thinning trees, conducting forest health checks, raising awareness on the different functions and requirements of the forest, and so on. Still, the city is faced with the same issue as elsewhere in Japan: the lack of forest workers. While this insufficient workforce can be explained by several reasons, the city still has the largest number of forest volunteers, and yet these volunteers and their activities do not seem to be used to their full potential to meet the basic requirements of forest management activities. This seems to be a loss of opportunity for a more effective coordination of activities. Therefore, at this stage, it is difficult to determine exactly the contribution of volunteer activities to forestry, the level of skills that the volunteers actually have, and how these volunteers interact or cooperate with the other two main actors (forest owners and the Forestry Association).

The current cooperation framework between the different actors is summarized in the diagram below:

Fig. 1 – Initial Cooperation Framework



Source: Written by Author.

The diagram puts volunteers as the central focus of the study, and seeks to explain the relationship between the volunteers and all the other actors, with more concentration on forest owners and the Forestry

Association which are the other two actors that do the work on the ground with the volunteers. The forest owners and Forestry Association are connected through the Danchi-ka Project. Danchi-ka is an area of a group of forest owners, in which they share knowledge, information about and the expenses of the common management of their individual forests. Management activities include providing access roads and thinning trees. Despite such efforts and initiatives, there remains the problem of insufficient forestry workers. Volunteers and the Toyota City government are connected through lecture programs and the Toyomori-nariwai-juku program. The training program consists of providing information to volunteer citizens on the forestry issues and the practices related to forest management.

In other words, there is an unclear process flow within the forest management system, as well as a need to determine the kind of cooperation existing between the Forestry Association, owners and volunteers work considering the fact that volunteers, who can be useful additional workforce to forestry, represent only a small part of the system and yet are considered to be a successful model of Toyota City's forest management.

1.3 Research objectives

Within the framework of promoting rural-urban linkages in the Toyota City area, this study aims to achieve the three following objectives:

To explore the type of cooperation or connection of activities between volunteer groups, the Forestry Association and forest owners.

To identify the level of contribution of volunteering to forest owners' and the Forestry Association's activities.

To suggest an alternative cooperation framework between the three major actors in Toyota city forest management.

1.4 Research questions

In order to achieve the research objectives, the following main question will be addressed:

Why is Toyota City's forestry volunteering system considered in Japan as an exemplary component of forest management, while the volunteers themselves seem to be a small part of the workforce?

The sub-questions are as follows:

What is the current relationship between the three actors' activities?

What kind of activities do volunteers do?

What factors motivate volunteers to join forestry activities?

1.5 Significance and contribution of the study

In this survey, the relationship between the three actors' roles will be clarified in order to make a final suggestion about a cooperation framework model for Toyota City's forest management. This alternative model will reflect the three actors' perspectives on effective forest management.

The role of volunteer groups is especially regarded as significant in this survey. According to Yamamoto (2014), the volunteer groups in Toyota City are unique due to the forest health checking program, which they conduct themselves. This program is highly evaluated and other regions such as Kumamoto, Ehime, Mie, Shiga and so on have also adopted this program (Yamamoto 2014). The volunteer groups in Toyota City are distinguished from those in other regions in terms of citizen involvement. Volunteer groups are normally recognized as the groups which actually take actions such as cutting trees in forests. However, the volunteer groups in Toyota City are also doing activities that involve citizens in forest management such as the forest health checking program. They set their goal to support professional forest workers or residents through such activities (Yamamoto 2014).

It is important to note that Toyota City was recognized in 2009 as a model in environmental management and carbon regulation. Such recognition was based on the city's eco-policy, consisting of transportation, urban center, industry, public welfare and livelihood, and forests (Ito, 2014). The study revealed the importance of forest management in Toyota City since more than half of the city area is composed of forests, and emphasized the importance of the awareness and involvement of the local citizens in the participation of and understanding in such eco-policy. Therefore, other regions could imitate and adopt the Toyota volunteer groups' system. Moreover, this is the first research that explores the actors' model of cooperation in Toyota City. Therefore, establishing a new forest management model with this research can also influence other regions' effective forest management systems or frameworks in Japan.

2. Research method

2.1 Research methodology

This study is based on qualitative research, using semi-structured interviews, focus group discussions and field observations. Additional secondary data from reports and literature were also used to gather information and perform data analysis.

Due to the lack of information on forestry in Toyota City and for better understanding of the situation at the grassroots level, two preliminary surveys were conducted before the actual field survey. The field surveys consisted of the observation of a training program for volunteers and short interviews with Forestry Association members. The two visits to the area revealed interesting contradictory information which encouraged this group to do more exploration of the relations between the forest management's main actors: forest owners, the Forestry Association and forest volunteers.

The first trip consisted of participating in a part of the Toyomori Nariwai Juku, which is a one-year program conducted twice a month. The session attended was the 6th or 7th of the year, and requires a total fee

payment of 20,000 yen; seats are limited to forty. The program is designed and managed by Toyota City, one non-profit organization, and Toyota Corporation. The non-profit organization is the main organizer and head of the program. Participants to this program usually come from the city, including employees of the company who usually end up quitting their jobs at the end of the program and move to the rural areas. This program is funded by Toyota Corporation as a compensation for CO2 and greenhouse gases emitted in the atmosphere during production processes; in addition, it possesses a mountain in which it conducts conservation activities.

Additional information to note is about the volunteer groups in the city. There are fourteen forest volunteer groups in Toyota City, which seems to be a fairly high number. The question still remains how many members one group has on average. They receive volunteer education program prior to forming the group, and almost every year, there is one additional group that forms. These volunteers, however, since they are not experts, are not fully trusted by forest experts and owners in conducting thinning activities in the forests, and therefore, are limited to certain amount and type of activities only.

The second trip, a preliminary field survey, provided the opportunity to have a discussion with a representative of all three actors (forest owner, Forestry Association, and volunteer), among other participants. The discussion revealed that cooperation between the three actors is going well, and that volunteers do contribute to activities related to forest management. The question then arises how or based on what criteria and conditions such successful cooperation is based. There needs to be deeper exploration and understanding of the interaction and cooperation level between these key actors in order to have a clearer idea of the exemplary forest management system in Toyota City, and ways in which it can be replicated in other cities throughout Japan. The present study focuses on three actors within the Toyota City forest management system: forestry volunteer groups, forest owners and the Forestry Association.

More specifically, the following types of informants were interviewed:

Forestry Association: one leader, two staff members and one fieldworker

Forest owners: two, both members of the Danchi-ka project

Volunteer groups: six members and one leader

2.2 Theoretical framework

Pimbert and Pretty Model of Participation

This study revolves around the concept of participation proposed by Pimbert and Pretty (1994) who believe that participation occurs when community members participate by taking initiatives independent of external institutions to change systems. Community members develop contacts with external institutions for the resources and technical advice they need, and retain control over how resources can be managed. Pimbert and Pretty also believe that for resources to be managed well, community people have to participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones. These groups take control over local decisions, and so people have a stake in maintaining structures.

Pimbert and Pretty mentioned that people participate by being told what is going to happen or has already happened. However, this study will use this model to assess the participation and explore the relationship between volunteer groups, forest owners and the Forestry Association in forestry management in Toyota City.

2.3 Limitations of the study

The primary limitation of this study was time. The survey was conducted over three days only, so there was no opportunity to conduct more in-depth or a higher number of interviews or questionnaires. For this reason also, among others, there was no chance to interview more than two forest owners.

Secondly, all interviewees were men who are over 55 years old, most of them retired, so the study lacks the point of view of women and younger participants in forestry, if any, whether among volunteer groups or in the Forestry Association.

Thirdly, since the study was conducted in the forest areas, it lacks the actual perception of Toyota citizens on forestry issues and whether or not there is a need to manage the forests. In fact, since this study aims to link rural and urban areas through the needs and issues of forestry, further study is needed to understand such perception of the citizens, especially in relation to the last Tokai heavy rain that nearly flooded the entire city due to poor forest conditions. In relation to this limitation, further study with volunteer groups is also needed on why forestry volunteering began. While the long-term history between Japanese people and the forests (satoyama) could explain the remaining connection of the majority of people with nature, it is still unclear at what point in history or based on what reasons volunteering appeared solely within the forest industry and not in any other industries in Toyota City.

Furthermore, the issue of forestry in Toyota city as it is in whole Japan is a complex issue that does not depend only on performing work on the ground and involving Forestry Association, owners or volunteers, but also on government policy, market conditions, human resources management and so on. While this study could provide empirical facts on the conditions of the forests and their management, as well as the local efforts to deal with the current situation, there needs to be further action at higher levels of the industry.

3. Results and Discussion

The results of the field survey were quite different from the initial expectations and research framework. The initial cooperation framework was based on cooperation between actors and participation of citizens in the management of forests, especially considering the issue of insufficient forest workers. The interviews with the different actors, however, revealed otherwise, thus emphasizing the frequent gap encountered between theories and the actual situation in the field.

Out of the fourteen interviewees from the three different groups, six were from Toyota City, two from Nagoya, and one from Nagakute; the city of origin of the remaining five interviewees was not determined.

Figure 2 shows the demographic information of all interviewees, in relation to their age, gender, occupation, as well as the number of years of activity within the forestry industry, whether as a volunteer, owner, or member of the Forestry Association. Although the table does not determine the years of experience of the owners and members of the Forestry Association, it was assumed that those from the Forestry Association would have more experience since their occupation is within the forest industry. All volunteers started their activities upon retirement, which is why they all have less than ten years of experience in the field. Also, the number of years of experience between volunteers and Forestry Association members is not comparable because of the difference in expertise.

Fig. 2 – Interviewee Demographics

	Forest Association	Forest Owners	Volunteers
Occupation	Active	Retired	Retired
(Range) Average age	n/a	(66 – 77) 71,5	(61 – 70) 67,5
Average years of activity in forestry	n/a	n/a	6,5
Gender	Male	Male	Male

Source: Written by Author

3.1 Current situation of forestry in Toyota City

Toyota City is no exception to Japan's forestry problems: aging forest owners, the low number of forestry workers, the overabundance of trees, and the low profitability of the industry, among other issues (Forestry Agency, 2014). According to the 100 year forestry plan which started in 2007, the total surface area of Toyota City forests is 35,178 hectares, representing 68% of the whole city; 55% of these forests are artificial forests. In addition, 88% of the forest area is privately owned, and 12% is public (Toyota City, 2007). The average individual land size is one hectare or less. These numbers therefore indicate that the management of private forests is crucial to making a healthy forest and fulfilling all of its functions. There are also three main types of forests: city forest, national forest (managed by the government) and private, artificial forests. The city and artificial forests are managed by the Forestry Association.

On one hand, it is not evident for private forest owners how to properly manage their properties. A survey conducted in the Toyota area on the reasons why landowners do not cooperate in the management of their forests came up with the following factors: unclear boundaries; lack of benefits compared to costs of forest management; the problem of aging landowners; lack of leaders in forest management; lack of motivation to manage forests in the whole region; Toyota City itself does not recognize forest management as a problem;

and lack of know-how and information in the region. On the other hand, one way in which motivated forest owners in Toyota City area proceed to the common management of their forests is the Danchi-ka Project.

3.2 Current situation of forest owners

Forest owners are divided into two main categories: those that rely on themselves to self-manage their land, and those that rely on either the volunteer groups or the Forestry Association.

On one hand, those that manage their forests without assistance from others are owners that do not cut or only partially cut their own trees, and have their own strategies in cost-effective forest management compared to the standardized strategies of the Forestry Association. They also have their own strategies for accessing the wood market, as well as in determining environmental issues and solutions that could prevent disasters in forests. For example, one of the government-set standards to receive subsidies is to do thinning on 40% of the forest area. The usual procedure would be for the Forestry Association to conduct a survey, then to determine the kind of management plan that would suit the forest. In some cases however, some forest owners consider that 40% thinning is too much, either for attachment to the trees or for personal judgment on what kind of management plan would actually be better. Therefore, such owners end up drafting their own plan or cutting the trees themselves rather than relying on the Forestry Association.

Those that rely on services from either volunteer groups or the Forestry Association on the other hand, depend more on the latter's recommendations, because such owners face the challenge of having insufficient skills and knowledge of forest management. This is for instance the case of one of the owners who moved to the city and returned to his forest land only after retirement. Now, he is trying to manage his forest so that it can be of more benefit to his descendants.

The hiring of volunteers or the Forestry Association depends on thinning cost and location of the land. Forest lands that are located near access roads are generally managed by the owners themselves, but those lands that have difficult access or are too high in elevation create difficulty for all. For instance, if owners were to hire either volunteer groups or the Forestry Association for tree thinning, the differences in price and productivity are separated by a wide gap. The work to be done by volunteers would be to conduct forest management at low cost without limitations in terms of time, and the work to be done by the Forestry Association is professional with high productivity. These are often the choices that make forest management decision difficult for forest owners that cannot do it on their own. Forest owners do receive subsidies for cutting and thinning their trees, as an incentive from the government to encourage forest management, but they claim that such subsidies are too low and insufficient, compared to the total cost it would take to cut and transport and then sell the trees; in the end, they get negative benefits despite the positive incentive of the subsidies. This is not to say, that self-management is better than requesting work to be done by the Forestry Association or volunteers. In fact, while self-management demonstrates diversity in forest management systems and strategies, as well as individual histories and information about the forestry of Toyota City, requesting work to be done by volunteers and/or Forestry Association does contribute to outsourcing activities, thus promoting economic transactions and growth within the region.

The main issue faced by forest owners is the low value of timber in Japan and the lack of profitability from the forest industry. When the millions of hinoki and sugi trees were planted after the World War II, there was no guessing how history would turn and how such a vast reforestation program would become a major issue nowadays. Benefits are not immediate compared to initial investment, and much less compared to management costs that so many forest owners have other sources of income, thus making the forest industry a different form of savings account. This lack of profitability, however, is also the main reason why so many forests have been left abandoned, in parallel to the developing manufacturing sector that attracted more job seekers and provides better income. The forest owners still keep a positive attitude towards the future of the industry, however, as they plan to leave a healthy and sustainable forest for their children and grandchildren, and especially as they encourage them to take an interest in forestry.

3.3 Current situation of the Forestry Association

Being the main actor of forest management, the Forestry Association has the professional skills in managing the forests. The association currently consists of 51 staff and 141 field practitioners. They are managing 8502 privately-owned lands, of which 70 of the land owners have joined the association. In addition, there are two kinds of staffs: the survey staff and field practitioners. It was stated by one of the interviewees that while the number of staff poses no problem to the management activities, it is the number of field practitioners that is insufficient. The main reason for this lack of personnel – excluding the depopulation and aging population issues in rural areas – is that fieldwork in forestry requires skills and several years of training, considering the danger associated to the work; furthermore, because the benefits of the forestry industry are currently very low, and so is the price of wood, employment in forestry practice is lower paid than work in factories.

Forest management consists of many activities related to managing private lands but also to promoting growth within the wood industry. Such activities consist of planting, cutting grasses, thinning trees, cutting trees for market, cutting trees in special places (backyards, gardens, parks), selling machine tools for forest management and repairing services, or growing and selling mushrooms and baby mushrooms. One activity that is also conducted on a daily basis is the tree survey, which consists of measuring land borders, surveying tree characteristics and the degree of management of the forest, as well as the geographical nature of the land and its location in relation to the nearest access road. One survey unit consists of two or three people, and in total there are five or six units dispatched to various areas for measuring forest data using digital devices and other tools. In previous years, the most common tool that was used was the chainsaw, but with technological advancement, nowadays the association uses heavy machines. The next five-year plan consists of investing in a timber processing company to provide a service system and machines; currently all cut trees are shipped to processing companies in other prefectures.

The Forestry Association faces two main challenges: delimitating boundaries between private lands and identifying missing owners and matching them with their abandoned lands on the map, so the association focuses largely on forest owners for now. The daily survey is one of the ways in which the Forestry Association

tackles the first issue, in order for them to create a customized version of the official cadastral map published by the Ministry of Justice, by adding the field data as per the actual situation on the ground. The daily survey is also part of the Danchi-ka project which is also an integral component of the 100-year forest management plan supported by the Toyota City government, to tackle the issues in the forestry industry and to make forest management more efficient for future benefits. It is important for the Forestry Association to concentrate on and find forest owners, because without owner consent and authorization, the private forests would be inaccessible and unmanageable, thus rendering the forest issues even more difficult to solve.

The next important concern of the Forestry Association is safety, because forestry is a very dangerous activity. Within the past six months alone, there were already four cases of incidents and injuries. Thus the working conditions in forests have a high risk of affecting the lives and abilities of field practitioners, which is the reason why the Forestry Association has great concern for the subject and does not take safety rules and professional standards lightly. Employees are all subscribed for insurance and are subjected to professional standards so that they can be ensured safe working conditions under government rules and regulations. Such concern and risks associated with work in the forests is also communicated to trainees during the volunteer training programs held every year.

The other challenge for the Forestry Association is the decreasing number of forest workers, especially those specialized in fieldwork. In fact, it is not evident how 192 workers in total can manage 35,178 hectares of forests, and this issue is increasingly challenging with the decreasing population in rural areas and the aging overall population of Japan. The association is making efforts to recruit four to five employees every year and two or three new recruits per year are joining the team. The increase of the forestry workforce might be slower than planned or expected, but it is improving step by step and the necessary advertisements related to recruitment also play a role in such increase in interest in the industry, in addition to other governmental projects of attracting younger generations to live in rural areas.

3.4 Current situation of volunteers

Volunteers differ from forest owners and Forestry Association members in that their activities are primarily related to life-long study, outdoors activities, and social contribution rather than forest management in its literal sense.

Volunteer activities consist of forest health check (the landmark project created and conducted solely by the very first volunteer groups), education programs for elementary school children, Ki-no-eki Project (an economically impactful project initiated by volunteers), and other activities and creative ways to promote the value of forests as well as of local woodland products such as mushroom, woodcrafts and so on.

On one hand, through the enjoyment the volunteer activities as leisure rather than actual work, they do contribute to public welfare; they encourage and show an example of public participation in contributing to solving forestry issues, especially following the recent heavy rain and flooding problem that resulted from poorly managed forests. This participatory aspect towards a common public objective is reflected in the increasing number of volunteers every year, and even though the main objectives are to make friends and enjoy

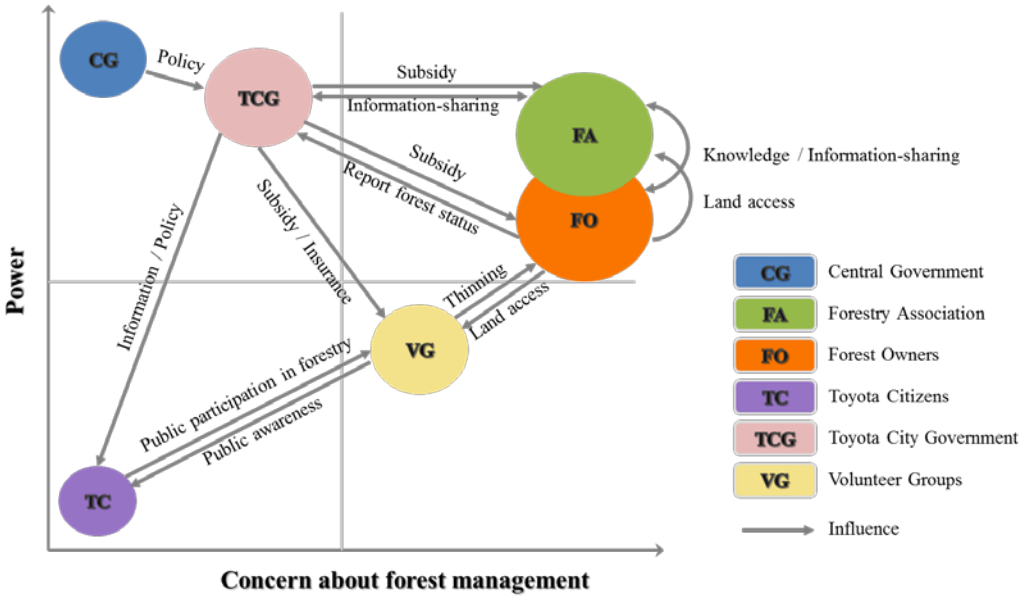
life in a different way after retirement, the activities are still related to forestry issues, which mean that they are still contributing to forest management in an alternative way.

On the other hand, the volunteers have limited capacity in terms of skills, equipment, time and number of participants per group. Their activities are not only the forest health check but also education program for children and citizens in Toyota City or other prefectures. The volunteers still seek to grow and share their knowledge and insights through conferences and lectures, between themselves and especially target the public and Toyota City citizens, for the purpose of informing the public about forest issues and the actions that they could take individually to help solve such issues or prevent any related risks.

3.5 Individual roles towards rural livelihood valorization

Firstly, in order to understand and reflect the ways in which the different activities of each forestry actor are conducted, a stakeholder analysis is necessary. The stakeholder analysis is a tool that can be used to analyze the relationship and mutual influences different stakeholders or on a specific project and objective. The analysis framework, as depicted in Figure 3, is constructed based on forestry as a whole, on the situation in Toyota City and how each actor is positioned based on their degree of power and of interest or concern about forestry. It also reflects the various levels of influences that exist between the stakeholders. In general, within a stakeholder analysis and influence/impact grid, influence can be described as power, support, interest, attitude or impact, depending on the project or the role of individuals involved (Morphy, 2017). Influence can also be defined as the level at which a person is involved within the processes of planning, decision-making or execution of a specific project, while impact is their ability to affect a change (Sharma, 2010). For the current analysis, influence encompasses the above-mentioned definitions, and is described based on the different influences that one stakeholder has on one another.

Fig. 3 – Stakeholder Analysis of Toyota City's Forest Management System



Source: Written by Author

The framework shows that the Forestry Association and forest owners have the highest concern and next to highest power over forest management – after the Toyota City government and central government – since they are the principal actors directly involved in the activity. They also have mutual influence over one another thanks to their long history of communication and mutual growth, as the very first Forestry Association was formed by forest owners themselves who realized the need to manage the degrading forestry situation. In addition, they share information and basic knowledge on forest management practices and standards, and the Forestry Association may also interact with independent owners when they sell services and materials related to tools and machineries. Those owners that do participate in the Danchi-ka project interact equally with the Forestry Association. Since both groups possess the professional skills and knowledge about forest management on the ground, the Forestry Association and owners may have potential influence on policy-making within the Toyota City government, which may in turn, provide valuable information to the central government; such flow of information and influence, of course, goes both directions.

The volunteer groups are positioned at the medium levels of power and concern over forest management. Ultimately, they do not have as much power as the other stakeholders, much less in decision-making over private forests and management practices, and since they do forestry activities for leisure rather than as a permanent occupation, they may not have equal concern over the management part as the other stakeholders do. They are also under influence of the Toyota City government since they can apply for insurance when volunteering in the forests. The principal contribution of volunteers, however, is their influence on Toyota City citizens in providing information on forest issues and education to children and younger people, even if such impact is still minimal and is only gradually increasing. The influence from the citizens is also equal since they can join the volunteer groups or form new groups as participants in the Toyomori-Nariwai-Juku.

3.6 The commonality between forest volunteer and the forest management

The initial objectives and research questions of this study were based on the assumption that there exists a cooperation model between the three actors, and that such cooperation is the basis for forest management in Toyota City. The field survey, however, demonstrated the opposite case. Therefore, since the findings of this research show that there are different forest-related activities, such findings led to the conceptualization of forestry within Toyota City as two main types of forestry: conventional forest management and social forestry.

On one hand, forest management can be defined as the process of planning and conducting activities that enhance the production and use of forests and forest products, in order to meet economic, environmental, or social objectives. The processes include the administrative, legal, technical, economic, or scientific aspects of cutting, planting, maintaining, conserving or improving natural and artificial forests goods and services (FAO, 2017). This type of forest management can be considered conventional due to its long history of practice over many years and throughout many countries in the world. Within the Toyota City system, conventional forest management is measured by daily surveys, involving the measurement, counting, labeling and delimitation of trees and forest lands.

On the other hand, social forestry is the process of maintaining and protecting forests, as well as conducting forestry-related activities for the basic and economic benefits of rural and urban communities. The main characteristic of social forestry is that it involves the direct participation of members of these communities, and that they get direct benefit (whether it is economic, social, or moral) from the forest-related activities that they conduct. It can consist of farm forestry, community woodlots, recreation forestry, rehabilitation of degraded forests, or extension forestry (Magid & ElSiddig, 2003; Roberts & Fing, 2009-2010). Therefore, social forestry can include but goes beyond traditional activities of cutting, thinning and producing timber or sustaining forest goods and services, and especially goes beyond economic profits. Activities can be aimed towards development such as employment, tourism, wood and non-wood products processing, recreation (wildlife discovery, walking, trekking, and so on), quality of life (landscape views, health, seasons appreciation, habitat protection) or public participation and awareness (education, social inclusion) (O'Brien, 2001). For instance, the Ki-no-eki Project can be considered as a social forestry activity because it provides economic benefits for rural and social development within the local communities.

Following the above definitions, the activities conducted by the Forestry Association and forest owners, and supported financially and politically by the government, are categorized as conventional forest management, whereas those activities conducted by the volunteer groups are categorized as social forestry. In Toyota City, the forest volunteers play an important role especially in social forestry. They thin fewer trees and manage smaller areas compared to the Forestry Association, but they contribute their own unique approach to forest management by creating a connection between rural livelihood and urban citizens. This is the reason why the forest volunteer in Toyota City is considered an exemplary model of Japanese forest management.

Nevertheless, it is safe to say that even though the individual groups, especially the Forestry Association and volunteers, claim that there is no cooperation whatsoever between them, there still exist invisible connections between their activities that could have positive impacts on forest management and the forest industry as a whole. The Toyota City forest management system is characterized by the diversity of actors that have their unique style and way of contributing. There are indirect connections that complement each stakeholder's activities. Additional linkages between actors within such diversity can create a synergic system for sustainable resources in the future. Forest volunteers' activities develop forestry as a citizen activity, such as dissemination of information and awareness raising, reuse of local woods and forest health checking, and lead to appropriate forestry through building collaborative relationship between the government, local residents and forest workers. Forest owners lead appropriate forest management by providing good forest areas to the next generation and through beneficial use. The Forestry Association leads appropriate forest management through skills and knowledge, safety as a forestry professional and, more efficient forest use through the Danchi-ka project. Hence, the three actors have indirect connection based on their own concept of forestry and forest management even though they do not approach each other actor nor have close communication with one another to solve forest issue.

For instance, one interesting fact about the formation of volunteer groups is that each group is the result of the Toyota City program, a three-to four-day training on forest management offered by the Forestry

Association organized by the Toyota City government. As reported by the volunteers, and supported by the Forestry Association, most volunteer groups are born from the bond that the participants develop from this training, and the consequent activities of each new group are based on the interests and objectives of the group members. However, the more important point is that such training is the basis for knowledge and interest in forestry for these volunteers, and they are trained by the professionals themselves, thus acquiring the information that they would need at the end of the training, whether they decide to form volunteer groups or not. It is important to note that the formation of volunteer groups is not mandatory after the training; it is rather a trend that has developed in recent years. Following this trend, there exist fourteen volunteer groups in Toyota City now, with a total of around one hundred members.

Another example is that one of the purposes of the Danchi-ka project is to diversify the species of trees. In fact, the Japanese people now understand the difficulty in maintaining hinoki and sugi trees, especially given the state that they have left the forest and the natural environment at the moment. The idea behind diversification of tree species is to bring biodiversity back to its natural state, to create natural food for the wild animals, and especially to lessen the requirements for management of the forests. On the Forestry Association side, such a diversification strategy is achieved through the Danchi-ka project; on the volunteers' side, they promote diversification by encouraging some forest owners to diversify their trees as part of their education and lecture activities. The government branches eventually provide support and attention through policies and subsidies.

Overall, all actors have a common understanding of the current forestry issues in Japan, and the need for thinning, identifying missing forest owners and delimitating forest properties are more essential than ever. In addition, even though they act independently of one another, the three actors' activities are all connected to rural livelihood valorization, by making forest management efficient and creating social forestry activities for themselves and for future generations, which could lead to a stronger linkage between rural and urban areas.

3.7 *Recommendations*

One of the interviewees even stated that the forestry issue in Japan will not be solved soon, nevertheless each effort on a daily or weekly basis and at individual levels is important, because it shows their dedication to a difficult task, even if their contribution is still small at the moment. Eventually, the government is the actor that has most power to intervene in the forestry industry in order to improve the overall situation and increase the value of Japanese wood products.

The following are suggestions about how to facilitate surveys, promote diversity in volunteering and attract urban citizens to rural areas:

3.7.1 Recommendation for forest surveys

First, the method for the forest survey and data sharing is discussed using the case of the system of forest management in Maniwa City Okayama Prefecture. This case introduces the Information and Communication Technology (ICT) system which is the focus of this recommendation. In Maniwa, the forest experts made a database that clarifies how many trees are on the mountain or who owns the land and so on (Nogawa & Maruta,

2016). If Toyota City adopts this ICT system in their forest management, it will be easy for every forest stakeholder to share and recognize the current forest situation or information at any time. As a part of the ICT system, drones can also be utilized for monitoring of the current situation. In the forest, it is difficult to perceive the current situation. Drones can be utilized without such difficulties. By utilizing drones, people in the forest can easily obtain current forest aerial photographs. Moreover, when data such as land owners is recorded, it can be combined with aerial photograph and it is possible to use this as Geographic Information System (GIS) (Nogawa & Maruta 2016).

3.7.2 Recommendation for volunteers

Secondly, involving more varieties of forest volunteers is recommended. Most of Toyota City's forest volunteers are composed of men. For attracting and involving a greater variety of people, they should involve more female participants at first. As an example of female participants in forest related activities, Morimori Network is mentioned. Morimori Network was established in 1995 for rural and urban linkage and forest conservation. Their activities are based on raising awareness of the forest, residence interaction between urban and rural residents, and so on. This organization was established by women and spread throughout Japan (Morimori Network, n.d.). This case shows female citizens can be involved in forest-related activities, especially education and communication programs. If the number of female forest volunteers increases, it can lead to attracting a greater variety of people, such as youth from female volunteer activities.

3.7.3 Recommendation for forest-related activities and regional tourism attractions

Finally, increasing the opportunities for forest-related activities and regional tourism attractions is recommended. For involving more citizens in forest issue or management, it is significant that citizens are first interested in local forest. Therefore, creating opportunities to go into the forest is important. Some examples of potential forest-related activities and regional tourism attractions are:

- Cooking competitions using mountain ingredients or tools such as mushrooms, wild boar meat, wood stoves for cooking, and so on;
- Trail running competitions in the forest.
- Adventure parks in the forest

Families or groups of friends can participate in these activities. Therefore, they can attract various types of citizens and can be a trigger to awareness and knowledge of forests.

4. Conclusion

In conclusion, although at the moment there is no direct organization of activities between the three key actors in forest management of Toyota city in terms of forest management itself, there exists tacit cooperation in forestry industry as a whole that cannot be overlooked. Each group has their own interest, goal and activities, and even if they do not openly recognize such link between their activities, the Forestry Association, volunteers,

forest owners and even the Toyota city government still face the same issue of forestry, and address it in diverse ways that provide local solutions or contributions at macro and micro levels. If Forestry Association executes forest management in a professional way, as well as other forest owners that independently manage their forests, volunteers can support the needs for low-cost thinning, forest health-check and other areas that require management but are not part of the Danchi-ka project. As estimated by the Forestry Association members, compared to them, volunteers contribute to only 1% of forest management work. Besides this 1%, however, forest volunteer's activity has an important value due to the opportunity that volunteering programs provide to citizens in participating in forestry activities, which are also sometimes facilitated by the Forestry Association and the Toyota city government. The current system of volunteer activities fits the Pimbert and Pretty model of participation, in which participants seek to change systems by taking their own initiatives independently of external institutions. The volunteers decide to participate in forestry activities because they understand the general forestry issue and know the danger of the previous heavy rain and consequent flood that reached the city boundaries. Despite the non-involvement of external institutions in decision-making, communication is still maintained at necessary level in order to conduct the activities, such as communication with the Toyota city government which provides insurance to volunteers, and forest owners who provide land access, or even the Forestry Association that provides training and technical knowledge. Consequently, new forms of local institutions are established, or existing ones are strengthened. As stated by one of the interviewees, the current forestry issue in Japan cannot be solved immediately, and there is a need to address it in a different way, through government policy change for example. While they, as individual volunteers cannot make such macro-level change, they still try to find local solutions to fix the problem at their level, with their own means. The limit of the Pimbert and Pretty model of participation in this case is that while it may not be possible or practical for volunteers to take control over local decisions, they have the potential to influence forest owners who are hesitant to conduct thinning, as well as to encourage citizens to take the forestry issue more seriously and to contribute to the solution while having fun in the process.

The issue of forestry in Japan is undeniably worsening, considering issues such aging population, rural depopulation, or land abandonment. One of the strengths of the Japanese people though is their will to work together to fix a common issue, as demonstrated in previous examples of reconstruction times after the World War II or natural disasters like earthquakes and tsunami. One reason why volunteer groups formed in the first place is the realization of the forestry issue and the need to at least try solve the problem at individual and community levels in rural areas. While the forestry issue may not seem to be pressing for the moment, there may come a time in the upcoming years where it will become urgent, and will eventually draw more attention from the general public, especially people who live in urban areas that do not face the problems directly. As the number of volunteers increase on a yearly basis through the program of Toyota forest school, there is a possibility that urban public awareness of forestry situation and needs will increase in the future, as well as the participation of citizens in such activities. Therefore, for future study or consideration, there is an opportunity for analyzing how the cooperation or coordination of activities between the various actors of forest

management can be improved based on such changes, as well as based on the current research findings and recommendations.

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Appendices

Appendix 1a – Interview questions (English)

Category and informants	Questions
FORESTRY ASSOCIATION	What motivated you to join the Forestry Association?
(Association leader)	What kind of activities do you do?
(Fieldwork member)	How many recruits per year do you have?
	What do you think about the current forest management situation? What issues can you identify?
	Are your activities connected to volunteering activities?
	What are the needs for the involvement of volunteer groups in managing forests?
	How do you organize or coordinate activities with volunteers and with forest owners?
	What do you think about involving more citizens in forest management?
Category and informants	Questions
FOREST OWNERS	Do you agree with the necessity to conduct thinning programs for forest management?
(Danchi-ka member)	What reasons make you opposed to cutting trees?
(Danchi-ka non-member)	How is the management of your forest planned? Do you plan it by yourself or do you work with the Forestry Association?
(Not cutting trees)	Who currently cuts your trees and how long have you been working with them?
(Living outside region)	In the last two months, how much benefit did you get from your forest?

	What kind of support does Forestry Association give you in managing your trees?
	How do volunteer groups contribute to the treatment of your forest?
	What differences do you find between a Forestry Association member and a volunteer in cutting trees?
	What do you think about involving more citizens in managing forests?
Category and informants	Questions
VOLUNTEER GROUPS	How many people are there in your group?
(Volunteer group leader)	What are the current activities of your group? How do you advertise your group activities?
(Recent member)	What is the average attendance rate during a group activity?
(Long-term member)	How do you organize volunteering activities?
(Frequent participant)	What motivates you to join forest volunteering work? What is your goal or objective?
	How often do you volunteer?
	What kind of benefits do you think volunteering activities bring to forest management?
	What results do you see so far from volunteer activities related to forest management?
	What kind of other activities would you like to do if you had no limitations as a volunteer?

Appendix 1b – Interview questions (Japanese)

森林組合の方々への質問

・森林組合へ加入された動機はなんでしたか。

・1 年間にどのくらいの方々が森林組合に加入されますか。できれば、加入者数の記録をみせていただくことは可能ですか。

・最近の豊田市の森林管理の状況についてどう思われますか。何か問題などはありますか。

・森林組合の活動はボランティアの方々の活動と何かしらのつながりがありますか。

・森林管理においてボランティアグループの方々を参画することに対してしての要求などはありますか。

・森林組合はどのようにしてボランティアグループや森林所有者さんとの活動をおこなっていますか。

・より多くの市民の方々が森林管理に参画することについてどうお考えですか。

森林所有者の方々への質問

・森林管理のために間伐を行う必要性があるということについて賛成しますか。

・もし、反対されるなら、それはどのような理由によるものなのでしょうか。

・あなたが所持されている森林についてどのような管理を計画されていますか。また、誰と管理を行おうと考えていらっしゃいますか。（ご自身で、森林組合と、など）

・最近の森林管理について、誰が間伐を行っていますか。また、その方はどのくらいの期間やられていますか。

・月にどのくらいの利益をご自身の森林から得られていますか。（先月は？2 か月前は？）

・森林組合はあなたの森林に対してどのようなサポートをしていますか。

・森林ボランティアの方々にご自身の森林を管理してもらうということは可能でしょうか。また、どのようにすれば、ご自身の森林管理に参画できるでしょうか。

・森林組合の方々と森林ボランティアの方々が間伐を行う上で、どのような違いがあると思われますか。

・より多くの市民の方々が森林管理に参画することについてどうお考えですか。

森林ボランティアの方々への質問

・あなたが所属されているグループには何人のメンバーがいらっしゃいますか。

・あなたが所属されているグループの最近の活動について教えてください。また、あなたが所属されているグループの活動についてはどのように宣伝されていますか。

・グループの活動の平均的な出席率について教えてください。

・どのようにボランティア活動を企画されていますか。

・あなたが森林ボランティア活動に参加しようと思われたきっかけは何ですか。あなたの目標やゴールを教えてください。

・どのぐらいの頻度でボランティア活動をされていますか。

・ボランティアグループが森林管理を行う上でのメリットは何だと考えますか。

・これまでの森林管理において、ボランティアグループはどのような成果を出しているとお考えですか。

・もし、活動に関する制限がなかったとしたら、ボランティアグループとして他に行ってみたい活動はあります.

和文要約

国内実地研修 2016
ワーキング　グループ 3: 森林

豊田市の森林管理におけるボランティアの役割

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目次

1. はじめに

森林は我々の生活と密接に関係しており、自然環境の保全、防災、大気の浄化などの働きを潜在的に有している。森林の適切な管理を行うことができれば、森林を有する地方に住む人々だけではなく、都市部に住む人々も多大な利益を享受できる（Weng et al. 2013）。このような考え方は、日本の森林にも当てはまる。

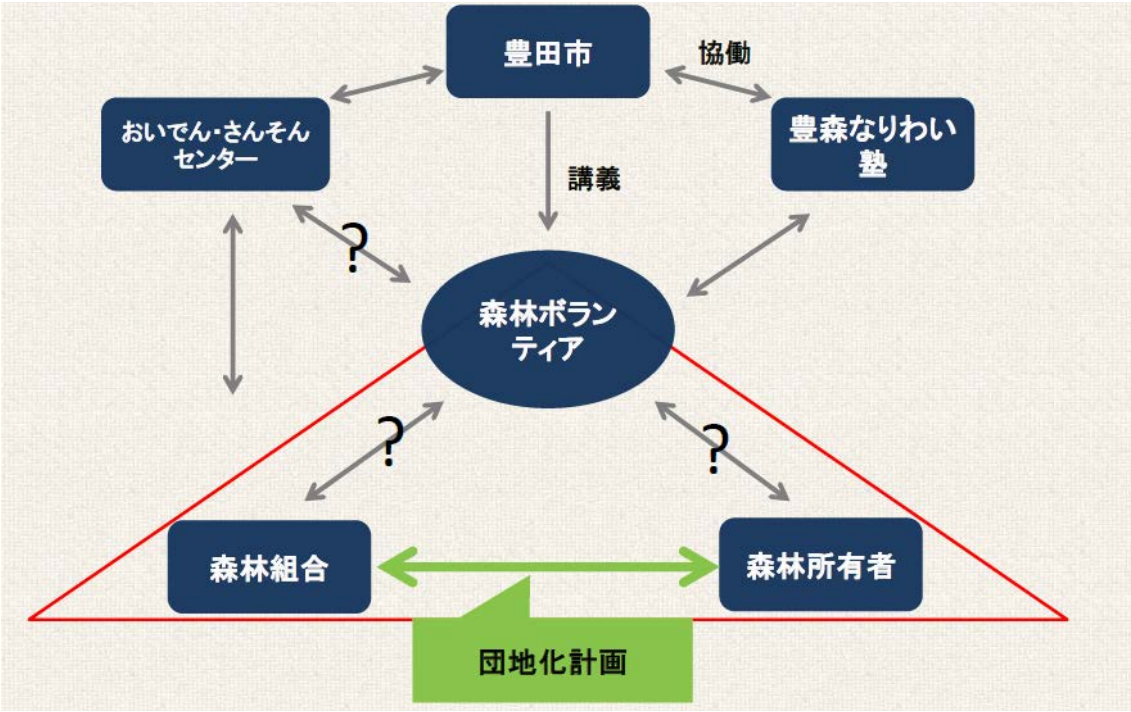
日本における森林や、その適切な管理について考察を行うためにはまず、どのようにして日本人が森林とかかわってきたかという歴史を振り返る必要がある。田中（2014）によると、日本における林業は 3 世紀ごろにはじまり、それ以来人々は生活の中に木を取り入れてきた。17 世紀に入ると、森林と日本人の新たな関係性を示す「里山」という概念が誕生した。里山は農業と密接に結びついた山であり、農と林が密接に結びつき、相互に利益を得ることによって持続的な関係を生み出したのである。このような日本人と森林との関係性は日本中で見られ、日本人が森林と密接な関係を築きあげてきたことがうかがえる。第 2 次世界大戦後、日本では資源の確保が急務となった。そのため、大量の杉や檜を山に植林し、資源となる木材の育成を行った。しかし、新しい資源として注目され始めた原油や木材の関税撤廃によって国内で植林された木材への関心が薄まっていった。

結果、人工林は放置されることになり、本来森林が持つはずの機能は著しく低下してしまった。この問題に取り組むために、自発的な市民によって生まれたのが森林ボランティアである。奥村と桂（2006）によると森林ボランティア活動を、一般的に森林管理・維持における市民と市民団体による自発的な参加であると定義する。森林ボランティアは、社会に働きかける開放性・社会性を持ちつつ、直接、汗を流す実践性も兼ね備えた活動と考えられている（山本 2014）。つまり、森林ボランティアは市民活動の延長であり、住民に森林管理の重要さを伝えたり、森から取れる材料で製品を作り出すことにより、人工林の放置に伴い忘れかけていた「里山」という概念の復興に貢献していると考えられる。これからの日本の森林と日本人との関係性を再考していくためにも、森林ボランティアに関する考察は必須である。

1.1 問題提起

豊田市には 92,000 ヘクタールの森林があり、豊田市の約 7 割を占めている。それらの森林は 138 人（豊田森林組合 2015）の現場作業員をもつ森林組合によって主に管理されており、この人数は森林の面積を考慮すると極めて少人数だといえる。豊田市は、森林管理活動に関して経済的・行政的な支援を行っている。その他にも 14 の森林ボランティアのグループが存在しており、森林管理活動に携わっている。森林管理活動には、間伐、森の健康診断、森林関する知識の普及活動などが含まれる。豊田市には、他の都市と比べ非常に多くの森林ボランティアグループが存在しているが、彼らの持つ潜在的な森林管理能力は十分に発揮されていないと考えられる。事前調査において、どの程度の技術が森林ボランティアにはあるのか、どのようにして森林ボランティアグループは他のアクター（森林所有者や森林組合)と協働しているかという点が不明確であることを発見した。

図 1 調査前の段階における関係性の把握



出典：筆者作成。

図 1 は事前調査において明らかとなった各アクターの関係性を図式化したものである。本研究では、森林ボランティアに焦点を当てているため、図の中心に森林ボランティアを置いている。森林ボランティアを一つの頂点とし、森林管理に関する他の重要なアクターである森林組合、森林所有者とを線で結び、これらのアクターとの関係性を三角形で表した。事前調査で明らかとなったのは、森林組合と森林所有者は主に団地化計画[6]でつながっているという関係性だけである。森林ボランティアと森林組合・森林所有者の関係性がどのようになっているのかは、依然不明確なままである。これらの状況から、本研究では以下の 2 点を本研究の取り組むべき問題であると規定した。

1) 森林管理システムの一連の流れが不明確である。

2) 森林ボランティアグループが森林管理のシステムにおいて決して中核を担うような大きな存在とは言えないにもかかわらず、豊田市の森林管理を成功事例と見なされる現状を踏まえて、森林組合、森林所有者、森林ボランティアグループ三者の協働を認識しなければならない。

1.2 研究目的

本研究では、以下の 3 点を本研究における目的と設定する。

(1) 森林組合、森林ボランティア、森林所有者の間でどのような協働やつながりが存在するのかを明らかにする。

(2) 森林ボランティアグループによる森林所有者、森林組合の活動への貢献度合いを明らかにする。

(3) 以上の点を明らかとした上で、豊田市の森林管理における三者の協働の新たなモデルを提案する。

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[6] 団地化計画とは森林所有者の集まりによって区画(団地)をつくり、団地内で知識や情報などを共有し、効率的な間伐をすすめる。さらに団地内に搬出路を建設することによって、間伐後の木材搬出を効率的に行おうとする計画である。

1.3 研究における問い

上記の研究目的を達成するために、以下の問を設定する。

・なぜ豊田市の森林ボランティアグループは森林管理の中核的な役割を担ってないにも関わらず、日本の前進的な森林管理の様態と考えられるのか。

また、副次的な問として、以下の問を設定する。

(1) 現在の三者間の関係はどのようになっているか。

(2) ボランティアグループはどのような活動を行っているのか。

(3) どのような要因がボランティアグループを動機づけているのか。

1.4 研究意義

本研究の目的の 1 つでもあるアクター間の関係モデル構築はより効率な森林管理や、森林管理における参加者の増加への貢献が期待される。また、豊田市のボランティアグループは他の地域よりも先進的な事例として取り上げられ、森の健康診断プログラムが他の県や地域に広がりを見せていることから（山本 2014）、豊田市における新しい森林管理のメカニズムは他の地域にも活用できると考えられる。そして、豊田市は 2009 年に環境モデル都市となり、温室効果ガス削減の政策を積極的に推し進めている（伊藤 2014）。約 7 割を森林が占める豊田市において、森林活動の活性化は環境政策に不可欠である。森林活動におけるボランティアの位置づけの明確化は、森林活動に対する市民の関与を促すと共に、豊田市の環境政策への関心を高めることに繋がる。

2. 研究方法

本研究では質的調査方法を用いた。具体的には、半構造的インタビューとフォーカスグループディスカッションを用いて行った。また二次資料として、書籍、雑誌、論文、報告書を参照した。フィールドにおける調査は 3 回に分けて行い、豊森なりわい塾の視察、おいでん・さんそんセンター職員へのインタビュー、アクターへのインタビューを行った。

インタビューでは、各アクターに対し、他のアクターとの協働の現状や森林管理システムに関するインタビューを行った。インタビュー対象者は、次の通りである。対象者の対象者の詳細は下記の図 2 に示した。

森林組合　　：代表 1 名、スタッフ 2 名、現場作業員 1 名
森林所有者　　：団地化計画に参加している所有者 2 名
森林ボランティア：6 名、代表 1 名

図 2　調査対象者の詳細

	森林組合	森林所有者	ボランティア
職業	現役	退職	退職
(年齢幅) 平均年齢	データなし	(66 – 77) 71.5 歳	(61 – 70) 67.5 歳
森林活動平均期間（年）	データなし	データなし	6.5 年
性別	男性	男性	男性

出典：筆者作成。

2.1 理論的枠組み

Pimbert と Pretty の参加モデル

本研究では、Pimbert と Pretty (1994) によって提唱された参加モデルの概念を理論的枠組みとして利用する。この理論では、コミュニティメンバーの参加が、外部組織の独立した主導権のもとで行われるとき、参加が確立すると信じられている理論である。Pimbert と Pretty によると、良い資源管理のためには、コミュニティメンバーによる新たな地域集団や既存の集団の強化へとつながる分析への協同的な参加が必要であり、これらの集団は地域の人々が利益を得ることができる構造を維持しつつ地域の決定をコントロールすると主張されている。本研究ではこのモデル理論をアクターによる参加、そして、豊田市の森

林管理における主要なアクターである森林ボランティア、森林所有者、森林組合の 3 者の関係性を分析するのに用いる。

2.2 調査限界

本研究では、フィールド調査を 3 日間しか行うことができなかった。そのため、本研究には以下の限界が存在する。

限られた数の対象者にしかインタビューを行うことができなかった。

調査対象者のほとんどが 55 歳以上で、全員が男性であったため、幅広い年代や性別の意見をとりいれることができなかった。

本調査が都市部にて行われなかった点から、都市部の市民の視点から見た森林管理や森林ボランティアについての情報を得ることはできなかった。森林ボランティアは元々市民の自発的な行為によるものであるため、どのようにして森林ボランティアが作り出されたのかという点や、なぜ林業においてのみこれほどにまで顕著なボランティアシステムが存在しているのかという点を調査することはできなかった [7]。

豊田市における森林問題の複雑性はフィールドのアクターだけではなく、政策や市場、人的資源など広範囲にわたっているものであり、それらの範囲にまで及ぶ調査に至ることができなかった。

3. 調査結果・議論

本研究におけるフィールドワークで得られた調査結果は、仮説として考えていた枠組みとは大きく異なっていた。仮説として、豊田市の森林管理におけるアクター間の協働と市民の参加の枠組みは不十分な状態であると考えていた。しかし、インタビューを行うこと

[7] 上記の里山の概念の説明により、日本人と森林が密接にかかわってきたと述べたが、それでも不明確である。

によって、フィールドと二次資料で得られる情報や理論の間に差があるということが明らかになった。

3.1 豊田市における森林の現状

豊田市は日本全体が抱える森林に対する問題と同じ問題を抱えており、森林所有者の高齢化、林業従事者の少なさ、過密林、林産業の低利益性などの問題が存在する（森林組合 2014）。豊田市による 100 年の森づくり構想によると、豊田市の森林は 35,178 ヘクタールであり、この広さは豊田市全体の面積の 68%を占める。豊田市の森林の内 55%が人工林であり、豊田市の森林の 88%が私有林、12%が公有林となっている（豊田市 2007）。本論文で注目するのは 88%を占める私有林であり、この私有林の森林管理についての調査である。私有林の森林管理ではその森林を所有する森林所有者が大きく森林管理に影響する。しかし、すべての森林所有者が森林管理に対して意欲的というわけではなく、現行の森林管理に対してあまり意欲的でない森林所有者も多く存在している。彼らがあまり意欲的でない理由としては、不明瞭な土地境界線、森林管理を行うために必要な費用、情報や方法などの知識の不足などがあげられる。一方で、森林管理に意欲的な森林所有者は多くが団地化計画に参加している。

3.2 森林所有者の現状

森林所有者は豊田市の山間部に土地と森林を所有しており、豊田市、森林組合、ボランティアグループ、その他団体は所有者の許可がなければ管理することができない。森林所有者は豊田市の森林管理において、重要な立ち位置にある。森林所有者のもつ土地は、非常に細かく分割されている。その理由としては、明治時代の廃藩置県（1871 年）と地租改正（1873 年）を経て、国の公共物であった森林が市民らの個人資産として分割されたことが指摘できる。さらに、森林所有者は、子供らに土地を分与してきた。森林所有者が抱える大きな問題としては、木材価格の下落があげられる。日本の高度経済成長期に、国内の木材需要が国産材から外国材に変わったことにより、木材の需要は急激に下降した。彼らが木材を切り出し市場に売りに出しても、儲け分よりコストの方が大きくなるのである。

森林所有者が森林管理を行おうとすると、多額の費用がかかってしまう。そこで豊田市は、森林所有者に対して森林管理に関する補助金を付与している。豊田市は税金から補助金を捻出しており、補助金適用のために一区画当たり 40%の間伐を行うように設定している。豊田市は 30～40%の間伐を行うことで生態系を向上させることができると考えているため、環境整備費用対策として森林所有者に対し 40%という数字で補助金を付与している。しかし、日本の林業は人件費が高いため、森林管理は補助金以上の経費がかかるという現状がある。

森林所有者は、森林ボランティアにも森林管理を依頼することがある。森林管理における森林組合と森林ボランティア両者の違いとしては、森林ボランティアは低コストでの森林管理が実現できるが、仕事を完遂するにあたり時間的な制限はない。森林組合は、森林管理のプロであり、コストは高くなるが、早く、効率性の高い仕事が可能である。これら二者が行う森林管理は、どちらの方が好ましいとは一概には言えず、森林所有者の選択の幅を広げていると評価できる。

森林所有者自身にも課題はある。森林管理に関する知識や技術がないために自己間伐ができず、外部に頼らざるを得ない。また、間伐しても儲けにならず、木材をそのまま山間部に放置すると雨に流される危険性もあるため、木を切らない所有者もいる。経済的価値が下がると思い間伐をしない所有者もいる。一方で、多くの森林所有者は自然との共生を目的に両者に利益ある関わり合いを模索しており、森林を次世代に向けてより良い状態で引き渡そうと考えている。彼らは、林業では即座に利益を生み出せないため、長期的な観点から、次世代だけでなくその次の世代にも森林の恩恵を授けることができればと語る。

3.3 森林組合の現状

森林管理において、専門的な技術を有する森林組合もまた主要なアクターである。現在、70 名の森林所有者が組合に参加しており、51 名の事務所員と 141 名の現場作業員で構成されている。しかし、過疎化と高齢化の影響により現場作業員は人数不足が深刻である。また、木材価格が下落した現在では、林業から得られる収入はほんのわずかである。森林

組合の業務は、山間部の土地と木々の管理がほとんどであり、特に土地境界や森林の特徴と管理の程度を毎日調査している。

森林組合は 2 つの課題に直面している。第 1 に、個人所有の土地間の境界が不明瞭になっており、尚且つ地主不在の土地が存在していることがある。これらの課題に対し、公図と航空写真を用い、土地所有者立会いのもとで、現場確認作業によるデータを地図に落とし込み、一区画毎に境界の確認作業をおこなっている。これは団地化計画の一環であり、森林組合の喫緊の取り組みである。豊田市が策定した「100 年の森づくり構想」[8]の重点プロジェクトとして、将来の森林管理による利益を創出することが目的である。もちろん、森林所有者の理解と協力なしに進めることはできず、団地化計画は森林課題をステークホルダー間の合意形成を促すことにも貢献している。第 2 に、安全性の問題がある。現場作業員は全員、保険に加入し森林組合内でも安全講習といった事故を避ける取り組みを行っている。

3.4 森林ボランティアの現状

森林ボランティアは、森林所有者と森林組合とは異なる活動方針を有する。豊田市の森林ボランティアは、自己実現という形で生涯学習とスポーツ（技術）[9]を念頭に、社会貢献を成すことを目的にしており、自己満足と社会貢献のバランスを保っている。森林ボランティアは森林管理を楽しみながら付随する形で地域への社会貢献がある。彼らは「社会のためだけに森林管理を行っているのではなく、自分たちの楽しみを優先しているからこそ活動が続くのだ」と語る。つまり、森林ボランティアは森林管理を楽しむことによって動機づけられているのである。森林ボランティアの活動は主に、森の健康診断、出前出張講座、木の駅プロジェクトであり、その他にも森林管理を楽しみながら山菜採りや木材工

[8] 平成 25 年、豊田市の「豊田市森づくり基本計画」を見直し森林区分に従って強力に推進することを目標に掲げた構想。平成 39 年度末までに過密人工林を一層し、森林の公益的機能を本来の効果までとり戻すことを企図している（豊田市 2012）。

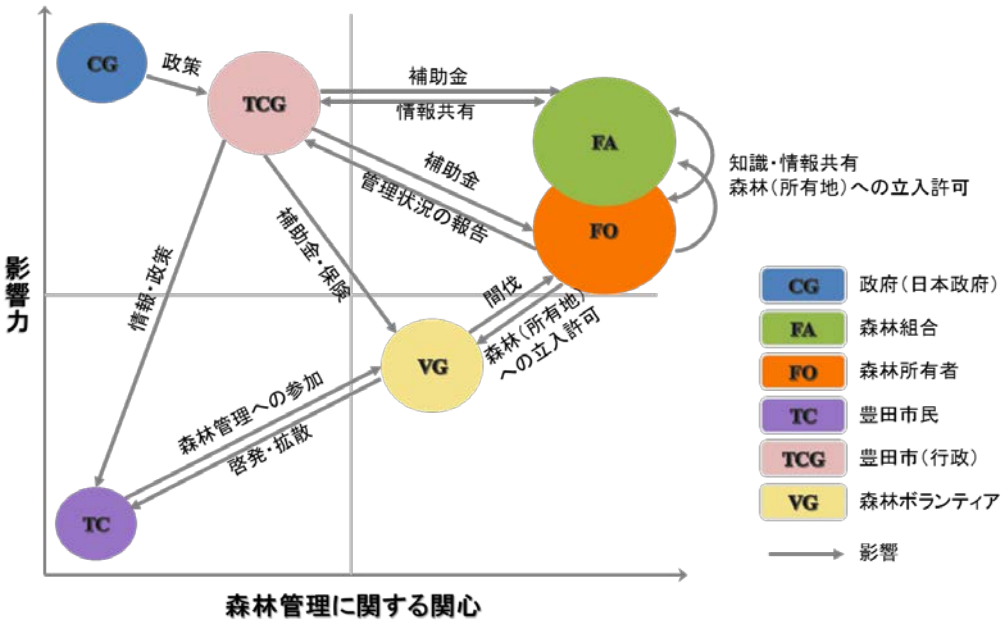
[9] 森林ボランティアへのインタビュー、また矢森協が発行した「仲間づくり 10 年のあゆみ」（矢作川水系ボランティア協議会 2014）によると「スポーツ」と「技術」を同位で定義している。「スポーツ」は体を動かすことであるが、しかし、森林管理においては体を動かすのに「技術」が必要であるということ。

芸を行っている。このような活動は、森林が抱える課題の解決を促しつつ、退職後の友人作りや新たな趣味の創出に寄与している。一方で、ボランティアとして技術、道具、時間、参加人数に限界はあるが、森林ボランティアは、他のアクターには見られない方法で森林管理に貢献している。豊田市民を中心に、森林への接触機会を提供し、一般大衆と森林の課題を共有するといった重要な役割を担っている。

3.5 地方の暮らしの維持および安定に向けた各アクターの役割

森林所有者、森林組合、森林ボランティアにおける各々の異なる森林管理の取り組みを理解し考察するために、ステークホルダー分析は欠かせない。以下の図 3 は豊田市の林業全体を構成した分析枠組みであり、各アクターが森林管理に対しどの程度の影響力（縦軸）

図 3　豊田市の森林管理に携わるステークホルダーの分析



出典：筆者作成

と関心（横軸）を持っているのかを指し示したものである。また、各アクター間の様々なレベルでの影響も同時に反映させている。一般的に、ステークホルダー分析と影響力・関

心（の位置関係）の枠組みの中では、プロジェクトや個人の役割が影響力、支援、興味あるいは態度によって描き表される（Morphy 2017）。また、影響は計画、意思決定の過程に含まれる対象のレベルとして定義づけられる（Sharma 2010）。つまり、上記の定義による影響力は、あるアクターが別のアクターに対して持っている貢献を基準に記述できる。

図 3 は森林組合と森林所有者が森林管理において、活動に直接的に巻き込んでいくために影響力と関心が高いと示している。また、両者は歴史的な相互関係を構築しており、より密接に知識と情報を共有することで互いに影響を及ぼし合っている。加えて、森林組合は森林に入るために所有者の許可を得る必要がある。一方、森林所有者は団地化計画に参加することで、森林組合から専門的な知識と技術を獲得し、さらに森林管理において強い決定権を有することから豊田市の森林管理の政策決定に対し潜在的影響を与える。

森林ボランティアは他のステークホルダーに対し強い影響力は有さない。また森林管理を永続的な生業ではなくレジャーとして活動しているため、影響力と関心において中間程度を示している。また、山仕事をする際に労働災害保険に加入義務があるため、豊田市が少なからず影響を及ぼしている。森林ボランティアの主な貢献である、豊田市民への影響は大きい。森林ボランティアは子どもや若い世代への教育と豊田市民への森林課題の共有を通じて、豊田市民からの森林ボランティアへの加入や森林管理への参加を促進させており、相互的な影響を与えている。

3.6 森林ボランティアという存在と森林管理の共通性

本研究の当初の目的と問いは三者の協力関係があること、そしてその協力関係の中で豊田市の森林管理が行われていること前提に提起していたが、フィールドワークを通じて現場から得た発見と大きく異なっていた。三者は直接的な協力関係で結びついているわけではかったからだ。そのため、現地から得られた情報は二つの林業の形式（伝統的森林管理とソーシャルフォレストリー）に適応させて考察する。

まず、森林管理は経済、環境あるいは社会的目的を満たすために森林と森林生産物の生産と利用を強化する計画的な活動の過程として定義できる。その過程には自然林と人工林

を伐採、植林、維持、管理する行政的な、法的な、技術的な、経済的なあるいは科学的な側面を含んでいる（FAO 2017）。このような森林管理の形式は長い歴史と世界中の多くの国で実践されてきたこともあり、伝統的森林管理であると定義される。もちろんのことながら、豊田市の森林管理もまた現地調査、境界の画定といった点から伝統的森林管理といえる。

一方、ソーシャルフォレストリーとは地方と都市のコミュニティの経済的利益のために林業に関わる活動を行う森林保全と森林管理の過程と定義される。主にコミュニティの所属者の直接的な参加を伴い、彼らの行う林業に関する活動から直接的に利益を得る。そしてソーシャルフォレストリーは林業農家、コミュニティの林地、林業の再創出、損傷を受けた森林の修復と林業の拡大からなる（Magid & ElSiddig 2003; Roberts & Fing 2009-2010）。それゆえにソーシャルフォレストリーは伐採や間伐、木材産出といった伝統的森林管理を含むことが可能となる。ソーシャルフォレストリーの活動は開発（雇用、観光、木材と非木材加工品）とレクリエーション（野生生物ツアー、ウォーキング、トレッキング等）、生活の質（景観、健康、季節の恩恵、居住環境保全）あるいは公の参加と意識（教育、社会的包含関係）（O’Brien 2001）に対して計画されている。例えば、木の駅プロジェクトは地元のコミュニティ内で地方と都市の開発のために経済的利益を生み出していることから社会的林業としてみなすことができる。

前頁のソーシャルフォレストリーと伝統的森林管理の定義によると、森林所有者と森林組合によって行われ、豊田市によって財政的、政治的に支えられている活動は伝統的森林管理に分類されるのに対して森林ボランティアの活動はソーシャルフォレストリーに分類される。豊田市では、特にソーシャルフォレストリーに関して森林ボランティアが重要な役割を果たしている。森林ボランティアは、森林組合と比べて森林管理をおこなっている面積は少ないが、地方と都市部の市民の間の繋がりを創出することで、森林組合とは異なる独自のアプローチにより森林管理に貢献している。このことが、豊田市のボランティアが日本の森林管理の前進的モデルであると考えられている主たる理由であると考えられる。

森林組合と森林ボランティアは互いに協力関係はないが、全体として森林管理と林業への前向きな影響を及ぼす関係性を構築していると言っても過言ではない。豊田市の森林管理はほかにはない貢献の形を有するアクター間の多様性により特徴づけられている。このような多様性を有するアクター間の関係性は未来の持続的な資源への相乗効果となる。森林所有者は次世代へ良好な森林と有益な森林利用の継承を通じて、適切な森林管理につなげている。森林組合は団地化計画のより効率的な森林利用と専門家としての技術や知識、安全性を通じて、適切な森林管理に貢献している。森林ボランティアは他市民への普及啓発や、地域産木材利用活動、森の健康診断のような森林調査を発展させ、また行政や里山住民、林業関係者との多様なアクター間における協同関係の構築を通じて、適切な森林管理に貢献している。三者は森林課題を解決するにあたり互いに近接的な交流を持たないが、森林管理のコンセプトの下、間接的に関係を持っていると言える。

樹木の多様化を巡り、三者の間に関係性が存在する。樹木の多様性は、団地化計画の目的の一つである。植林されたスギとヒノキからなる森林の状態を脱し、森林を自然な状態に回帰させることで、植生遷移のシステムに移行させようと試みている。森林組合の立場からすると、多様化は団地化計画の延長線上にあり、一方、森林ボランティアは活動によって森林所有者に森林の多様化を促している。豊田市森林課は政策と補助金を提供している。

森林所有者、森林組合、森林ボランティアは日本の森林が抱える課題（間伐の必要性、不在山主の特定、土地境界の画定）について共通の理解を持っている。そして、各アクターは独立して活動を行なっているが、次世代と彼ら自身のために効率的な森林管理とソーシャルフォレストリーの創出によって、三者の活動全てが地方の暮らし維持に貢献している。各々の取り組みは、地方と都市のより強固な関係性を生み出している。

3.7 提案

森林組合、森林ボランティア、森林所有者の献身的な取り組みがあったとしても、日本の森林の抱える問題は即座に解決されるような問題でない。このような問題の根深さを考

えても森林問題を解決するためには個人レベルでの日常的そして継続的な活動が重要になる。

以下に示す点は、森林調査、森林ボランティアの多様性、そして都市部の住民との連携という 3 点のさらなる発展のための提案である。

① 森林調査

まず最初に森林調査における方法として情報共有システムを提案する。このシステムの事例として岡山県真庭市の ICT システムを取り入れた森林管理に注目する。真庭市では森林管理において現在山にどのくらいの木があるか、また、それらは誰が保有しているかなどの情報をまとめたデータベースをつくり管理している(野川・丸太, 2016)。豊田市においてこの ICT システムを取り入れることができれば、関係者間での現状把握がアクターの枠を超えて行えると考えられる。また、ICT システムの一部としてドローンの使用が有効であると考えられる(野川・丸太, 2016)。ドローンを用いることで、山中にいても自分たちが現在作業している場所の現状を航空写真で見ることができ、さらに森林所有情報と航空写真、森林の情報などを重ねることによって作業中でも常に現状を知ることができ、効率的な作業が可能となると予測される。

② ボランティアの多様性

豊田市における森林ボランティアの多くは男性によって構成されており、より多くの人々の参加を促すにはボランティアの多様性に注目しなければならない。そこで「もりもりネットワーク」の事例を紹介する。もりもりネットワークは 1995 年に、地方と都市をつなぐ、そして森林保護を目的に作られた。この団体の特徴は女性によって設立されたという点である。女性ができることに注目して、啓蒙活動や都市部と地方の住民交流などを積極的に行っている。豊田市の森林ボランティア活動においても、女性がこのような活動を行うことによって森林ボランティアの活動を多様な人々に広め、魅了することができると考えられる。

③ 森林に関連した活動や地域観光

より多くの市民が森林や森林活動に興味をもつためにも森林を利用した活動は効果的であると考えられる。以下に森林や森林で生産されるものを利用した活動の例を挙げる。

・山で採れるきのこや鹿肉、猪肉などを材料とし、木製ストーブなどを利用した料理大会

・森を利用したトレイルラン

・自然を利用したアドベンチャーパーク　　など

これらのイベントは家族や友人同士で楽しめるようなイベントとなり、より多くの人が豊田市の森林に足を運び、森林に興味を向けるきっかけになると期待される。

4．結論

豊田市の森林管理における三者の間には直接的に組織化された活動はないが、全体的な森林産業の中には暗黙の関係性が存在しており、各アクターは自身の興味と目標と活動を有している。たとえ彼らの活動に相互的な繋がりの認識がなくても、森林組合、森林ボランティア、森林所有者、そして豊田市もが同じ林業課題に直面し、マクロそしてミクロの両面から多様な方法により、地域への貢献、問題の解決に取り組んでいる。森林組合が専門的な方法での森林管理、森林所有者が自己間伐を行うのと同様に、森林ボランティアは低コスト間伐のニーズに応えることが可能であり、また森の健康診断や団地化計画の範囲外のエリアの間伐のサポートを行うことができる。本調査のインタビューにより、森林ボランティアの作業量は森林組合の 1%であるという事実が明らかになった。しかし、この1%の間伐の他に森林ボランティアの活動には市民に対し森林体験の参加機会を提供するという重要な意義が含まれている。ボランティア活動の現システムは Permit と Pretty の参加モデルに合致し、その参加は外部組織である森林ボランティアの独立した主導権を行使することによってシステムの変化を求めているといえる。森林ボランティアは一般的な林業課題を理解し、過去の豪雨と洪水の危険性を熟知しているため、林業の活動に取り組んでいる。意思決定において外部組織を含めないにも関わらず、森林ボランティアに対し保

険を提供する豊田市との伝達や土地使用権を有する森林所有者、あるいは訓練と技術的な知識を提供する森林組合でさえ、森林の活動を行うための連携は必要不可欠なレベルで維持されている。その結果、新しい地域組織が編成されるか、既存の組織が強化されるという結果につながる。ある一人のインタビュー回答者が日本の今の森林課題はすぐには解決されないだろうと述べたように、森林課題の解決には、例えば政策の改変などを通じて、長期的に取り組む必要がある。森林ボランティア個々でマクロレベルの変革をもたらすことは不可能だが、森林ボランティアは彼らの活動範囲内で地域の解決策を探し求めている。本事例における Permit と Pretty の参加モデルの限界に示されるように、森林ボランティアは地域の決定をコントロールすることが不可能であるかもしれない。しかし、森林ボランティアは、間伐を行う森林所有者に影響を与え、市民に対し森林課題を啓発するという現在の森林管理を進める上で不可欠な役割に貢献しているのだ。

日本の森林が抱える課題は高齢化や過疎化、放棄地などを考慮すると疑う余地もなく悪化している。第二次世界大戦後の復興あるいは地震や津波といった自然災害からの復興のような事例が示すように共通課題が与えられた際に共に復興を遂げる強みを日本人は持っている。森林ボランティアはまず初めに森林課題の理解することと地域内で少なくとも個人、そしてコミュニティレベルの課題を解決しようとする必要性があった。森林課題が当座は急を要する自体には迫れない一方で、近くに迫る緊急時に備え、ゆくゆくは地域全体、特に森林課題に直接的な問題に直面していない都市部の人々がより注意深くいる必要性が出てくるだろう。豊田森林学校プログラムを通じて森林ボランティアの人員が年々増加するにつれて都市部の森林の現状への意識が高まり、将来的にそのような活動に市民が参加するようなニーズが生まれるだろう。それゆえ、そのような変化と本研究の調査結果と提案を念頭に、将来的な課題あるいは配慮が、改善していくに違いない森林管理の多様なアクター間においてどのように活動の協力あるいは協働するのかを分析するための機会となる。

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■　国際開発研究科　国内実地研修ホームページ URL
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