# Use Characteristics of Childcare Support Facilities Converted a Traditional Timber House in Yamaguchi City

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#### Abstract

This paper aims to clarify the use characteristics of facilities. The subjects of this paper are five facilities converted traditional timber houses in Yamaguchi city, and they are managed by the regional organization. Findings of this study are as follows.1) Most users are mothers with under two years old infants, and the main using purposes are ensuring infant's play area and friend and interaction with other parents. 2) There are two types about the employment style of staff. One is the case constituted by mothers finished childcare and one is the case including mothers during child-rearing. Working days per month depend on the registering member of staff, for example main pattern is one day per month in case of securing over forty staffs.

**Keywords**: Childcare support, Use characteristics, Functional evaluation, Conversion of timber house

### 1. Introduction

In japan, by the reason of declining birthrate, nuclearization of the family, and decreasing of child care support functions in home and region, the establishment of child care support facilities for parents rearing infants has been started from 1990s. As the purpose, the establishment of one child care support facility per junior high school district is determined, and the creating of child care supporting circumstances has been promoted at the place that users can use easily. In general, the nurseries and kindergartens are used. However, there are some issues that there is no vacant room in day nursery and there is no day nursery in the area and so on.

To solve the problem, the original project has been founded in Yamaguchi City. It is the characteristics to utilize the vacant house for the facility and administrate by local organizations. This paper aims to clarify the use features of facilities and the effectiveness of the conversion of traditional timber houses and the original management system.

## 2. Child care support project in Yamaguchi Prefecture

The number of facilities by local government and the installation rate by junior high school district in Yamaguchi Prefecture are shown in Figure 1.

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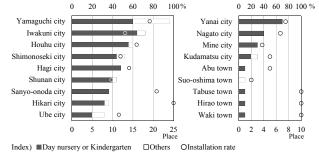


Figure 1 Number of facilities by local government and the installation rate by junior high school district in Yamaguchi Prefecture (2011)

Most local governments have been implementing the project at day nurseries and kindergartens. On the other hand, the installation rate of Yamaguchi City is more than 70%, and there are many inflection examples such as traditional timber houses. This is caused by the original project for promoting the installation of facilities (the left side of Table 1). Although the main role of nation's project is a local government, the main role is local groups composed of the regional organization in Yamaguchi City. Also it is unique point to take advantage of volunteer staff who is interested in parenting, and to give the grant of 2.5 million yen as an expense in the first year.

The nation's project of child care support was started in 2007, this original project was restructured, and installation of facilities were carried out as the part of the nation's project .The project outline since 2007 is shown in the right side of Table 1. The project outline was not change so much. But the grant for the renovation in the first

Table 1 Outline of the project in Yamaguchi City

| F                  | Project Name     |          | The Project of Grant for "Tsudoi-no-Hiroba" in rocal area  | Childcare Support Project   |  |  |  |
|--------------------|------------------|----------|--|---|--|--|--|
|                    | Year             |          | 2005~2006  | 2007∼   |  |  |  |
|                    | Main Role        |          | Local Groups (Residents' association, Social worker,etc)   | Yamaguchi city(Possible to entrust NPO,etc)                             |  |  |  |
|                    | Contents         |          | (1) Interchange between each parents and preparing spots to gather                                   | (1)Provide and promote with spots to interact for parent and child      |  |  |  |
| D                  |                  |          | XOpening three days a week or more and more than 4 hours per day.                                    | *Opening three days a week or more and more than 5 hours per day.       |  |  |  |
| Project<br>Outline |                  |          | (2)Assistance and advice on parenting(3)Information service about child rasis                        | ng in local areas(4)Classes about child rasing and child rasing support |  |  |  |
| Outline            |                  |          | (5)Multi-generational exchanges  | (5)Enforcement of an action to raise local child care power             |  |  |  |
|                    |                  |          | (6)Others(Temporary child care, classes, etc.)   | (6)Holding of the business trip open space                              |  |  |  |
|                    |                  |          | ※The above (1)∼(4) contents is always performed, and opening the facility for more than three years. |   |  |  |  |
|                    | The Kind of Spot |          | Public facilities, vacant shops, community centers, vacant classes of school, f                      | acilities for child rasing support, flats, apartments                   |  |  |  |
|                    | Sta              | ıff      | More than 1 people(Allowing concurrent post)   | More than 2 people(Full-time only)                                      |  |  |  |
|                    | Just 1st year    |          | 2,500,000 yen  | _   |  |  |  |
| Grant              | Standard         | Pay,etc. | 100,000 yen×Months which home has opend for a year   | 165,000 yen×Months which home has opend for a year                      |  |  |  |
|                    | money Others     |          | Amount of money equivalent to property tax   | 80,000 yen×Months which home has opend for a year <sup>1)</sup>         |  |  |  |

Note1) Assistance to the house and land that a regional organization had been renting became possible from 2007.

Table 2 Overview of the facilities surveyed

|     |            |               | Number<br>of Staff | Institution Summary |                       |                      |                              |                                   |  |  |  |
|-----|------------|---------------|--------------------|---------------------|-----------------------|----------------------|------------------------------|-----------------------------------|--|--|--|
| No. | In-<br>dex | Facility Name |                    | District            | Establishment<br>Year | Structure,<br>Floors | Building<br>Form             | Parking<br>Capacity<br>(Off-site) |  |  |  |
| 1   | Т          | тето-тето     | 13                 | Shiraishi           | 2003.7                |                      | Housing-<br>equipped<br>shop | -                                 |  |  |  |
| 2   | S          | SHUPPOPPO     | 41                 | Kagawa              | 2005.7                | Wooden,1             |                              | (15)                              |  |  |  |
| 3   | K          | KIRA-KIRA     | 10                 | Odono               | 2007.9                |                      | Detached                     | 5                                 |  |  |  |
| 4   | R          | RA-RA-RA      | 18                 | Yoshiki             | 2008.7                |                      | house                        | 5(6)                              |  |  |  |
| 5   | Н          | HIRA-HIRA     | 14                 | Hirakawa            | 2010.7                | Ī                    |                              | 8(5)                              |  |  |  |

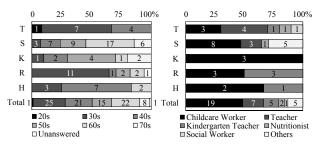


Figure 2 Staff age

Figure 3 Qualification about the child care support

year was abolished, and 80,000 yen came to be paid as rent subsidy.

### 3. Investigation outline

Overview of the survey is shown in Table 2. "Teto-Teto" is utilized vacant store at shopping street and administrated by NPO. The other four facilities are utilized the traditional timber houses and administrated by local resident's organization. The survey was carried out\_for 4-6 days in each facility's opening day, and the contents were observational research and questionnaires. In the observational research, the behaviors of user and staff were recorded throughout the day. By the questionnaires, answer votes of 88 users and 87 staffs were collected. The survey period was September-November, 2011.

### 4. Operation form of facilities

### 4-1. Staff attribute

As for the age of the staff, females of 50-70 year's old occupy 70% or more in "SHUPPOPPO"

Table 3 Characteristics of Facilities administration

|       | О                | peration form   | ı              | Characteristics                                  |  |  |
|-------|------------------|-----------------|----------------|--|--|--|
| Index | Opening day      | Opening         | Charge for use | Employment form of staff                         |  |  |
|       | Opening day      | time            | (Per family)   | Unique efforts                                   |  |  |
|       |                  | 10:00~          | Free           | Including mothers during child-rearing           |  |  |
| T     | On weekdays      | 15:00           |                | Parenting support advisers once a month          |  |  |
|       |                  | 15.00           |                | consultations being carried out.                 |  |  |
|       | Tue, Wed, Fri,   | 10:00~          | 100yen         | Women who finished child care in the area        |  |  |
| S     | Sat of the 3rd   | 15:30           |                | Snack and tea time is provided for mothers       |  |  |
|       | week             | 10.50           |                | and children in morning and afternoon.           |  |  |
|       | Mon,             | 10:00~<br>16:00 | 100yen         | Well-balanced work of women qualified            |  |  |
| K     | Tue, Thu, Sat of |                 |                | Tea time is provided for mothers in afternoon.   |  |  |
| _     | the 2rd week     |                 |                | rea time is provided for mothers in alternoon.   |  |  |
| _     |                  | 10:00~          | 100yen         | Including mothers during child-rearing           |  |  |
| R     | Mon, Tue, Thu    | 15:00           |                | Snack and tea time is provided for mothers       |  |  |
|       |                  |                 |                | and children in afternoon.                       |  |  |
|       |                  | 10:00~          |                | One of the staff is working three days a week.   |  |  |
| Н     | Mon, Tue, Thu    | 15:00           | 100yen         | This facility has implemented the cultivation of |  |  |
|       |                  |                 |                | vegetables experience.                           |  |  |

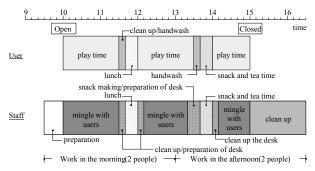


Figure 4 Basic program of one day (RA-RA-RA)

(Figure 2). In "TETO-TETO" and "RA-RA-RA", mothers during child-rearing are working, so the staffs of 30 year's old occupy 60% or more. In those facilities, it is possible to provide advice under the same situation to users.

As for the qualification of child care, the childcare worker occupies 50% among the staffs having any qualification, and more than 2 childcare workers are working in each facility (Figure 3). Also staffs who have the qualification of kindergarten teacher, nutritionist, etc., are working.

# **4-2.** Characteristics of administration and how to spend at facilities

Characteristics of administration of each facility are shown in Table 3. The opening day is three or

four days a week, and opening time is about five or six hours from 10:00. In "TETO-TETO" by NPO, charge is free, other facilities are 100 yen per family. There're 3 type's employment forms. First, females during child-rearing work in "TETO-TETO" and "RA-RA-RA". Second, females who live in the area and finish child care and work in "SHUPPOPPO". Finally, in order to perform smooth management, same staff works every opening day in "HIRA-HIRA".

As a distinctive approach, "TETO-TETO" installed in the shopping street has become a gathering place of residents in the area except for parent and child. The cultivation of vegetables is implemented in a field near the facility at "HIRA-HIRA". The other three facilities are setting snack and tea time after lunch. In case of "RA-RA-RA" and "KIRA-KIRA", dining room is utilized as a tea room.

Basic program of one day of "RA-RA-RA" is shown in Figure 4. Play time is spent freely. Lunch, snack and tea time is provided, so users also possible to use the facility except for the purpose of play. Before lunch, staffs put of toys or prepare for tables for lunch with users.

### 5. Use characteristics

### 5-1. Attribute of users

Attributes of the user is shown in Figure 5 and 6. Survey respondents were all females and the 30-39 years old people accounted for 60% of the total. In addition, as for the child age, infants two years or younger accounted about 80%. The use sphere of facilities is shown in Figure 7. User's residential places are mainly near the facility. As for the transportation vehicles, car accounts for over 80%. As for the time required from own house to the facility, less than 10 minutes occupies 60%. (Figure 8 and 9)

### 5-2. Opportunity and purpose of use

The facility's use opportunity is shown in Figure 10. In case of "KIRA-KIRA" and "RA-RA-RA, the introduction from other user occupies more than 60%, and these facilities are widely used by the effect. In "HIRA-HIRA", there are many users who looked magazine or pamphlet introducing the facility. In "SHUPPOPPO", Media such as television accounted for about 40%.

The facility's use purpose is shown in Figure 11. The main purpose of use is "ensuring children's play space and playmate" and "interaction with other parents", the reason is considered that the play place is less or friend is few. On the other hand, parenting-related information collection and mini-programs are less than 10%.

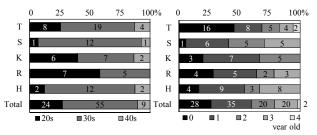
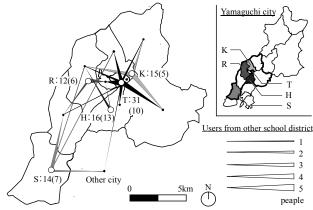


Figure 5 User's age

Figure 6 Child age



Index) Facilities name:Total users (User from within the school district facility located)

Figure 7 Use Sphere of facilities

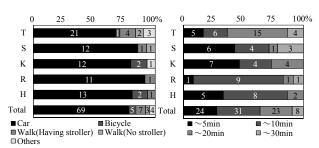
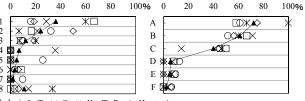


Figure 8 Transportation vehicles

Figure 9 Time required from own house to the facility



Index)  $\bigcirc$  T  $\times$  S  $\times$  K  $\square$  R  $\diamondsuit$  H

- 1. Introduction from users
- 2. Public Relations, Pamphlet
- 3. Introduction from staffs
- 4. Media(TV etc.)
- 5. Use the opportunity to visit nearby
- 6. A childcare-related course
- 7. Blog of the facility
- 8. Others

Figure 10 Facility's use opportunity

E. Course, Mini-programsF. Others

information

A. Place to play with babies

B. Mingling with other users

D. Collection of child care

C. Finding a playmate for babies

Figure 11 Facility's use purpose

Table 4 Number of staffs and users during the survey period

|            |                   | ¥ 2                |        |       |        |       |     |         |                     |                |         |       |
|------------|-------------------|--------------------|--------|-------|--------|-------|-----|---------|---------------------|----------------|---------|-------|
| In-<br>dex | In All<br>Surveys | User <sup>1)</sup> |        |       |        | Staff |     |         |                     |                |         |       |
|            |                   | Parent and Child   |        | 041   |        | Б     | uty | Off     | Child <sup>2)</sup> | Grand<br>Total |         |       |
|            |                   | Set                | Parent | Child | Others | AM    | PM  | All Day | Others              | -duty          | Child ' | Total |
| Т          | Total             | 55                 | 59     | 66    | 25     | 12    | 13  | 1       | 1                   | 15             | 26      | 218   |
| 1          | Average           | - 11               | 11.8   | 13.2  | 5      | 2.4   | 2.6 | 0.2     | 0.2                 | 3              | 5.2     | 43.6  |
| S          | Total             | 16                 | 16     | 22    | 8      | 4     | 4   | 4       | 0                   | 21             |         | 79    |
| 3          | Average           | 4                  | 4      | 5.5   | 2      | 1     | 1   | 1       | 0                   | 5.3            | /       | 19.8  |
| K          | Total             | 33                 | 34     | 34    | 7      | 4     | 4   | 4       | 0                   | 3              | /       | 90    |
| Λ.         | Average           | 8.3                | 8.5    | 8.5   | 1.8    | 1     | 1   | 1       | 0                   | 0.8            | /       | 22.5  |
|            | Total             | 29                 | 29     | 40    | 0      | 8     | 8   | 0       | 0                   | 15             | 25      | 125   |
| R          | Average           | 7.3                | 7.3    | 10    | 0      | 2     | 2   | 0       | 0                   | 3.8            | 6.3     | 31.3  |
| Н          | Total             | 35                 | 35     | 53    | 0      | 5     | 3   | 5       | 1                   | 1              | /       | 103   |
|            | Average           | 8.8                | 8.8    | 133   | 0      | 1.3   | 0.8 | 1.3     | 0.3                 | 0.3            |         | 25.8  |

Note1) Off-duty staffs and their children are counted as users in "TETO-TETO" and "RA-RA-RA". Note2) They are children of the staff working on the day.

|                      | No.  | 9  | Stay patter | n        | Set | Total          | Mean residence time |  |
|----------------------|------|----|-------------|----------|-----|----------------|---------------------|--|
|                      | INO. | AM | Lunch       | PM       | 361 | residence time |                     |  |
|                      | 1    |    |             |          | 32  | 45:20          | 1:25                |  |
| Popular              | 2    |    |             |          | 45  | 90:04          | 2:00                |  |
| гориаг               | 3    |    |             |          | 34  | 94:04          | 2:46                |  |
|                      | 4    |    |             |          | 25  | 101:49         | 4:04                |  |
|                      | 5    |    |             |          | 3   | 0:10           | 0:03                |  |
|                      | 6    |    |             | GF = F,B | 1   | 1:30           | 1:30                |  |
| Unique <sup>1)</sup> | 7    |    | F<br>B      | F,C      | 3   | 10:15          | 3:25                |  |
|                      | 8    |    |             |          | 2   | 8:18           | 4:09                |  |
|                      | 9    |    | F,B         | С        | 2   | 8:56           | 4:28                |  |

Index) F: Mother, B: Infant(0 $\sim$ 3 years old), C: Child(3 years old $\sim$ ), GF: Grandmother Note1) About unique pattern,

- 5: A short time stay(TETO-TETO)
- 6: User's grandmother come together.(KIRA-KIRA)
- 7: Mothers goes to pick up day nursery children. (SHUPPOPPO RA-RA-RA)
- 8: Users go to buy food at lunch. (TETO-TETO)
- 9: Only a preschooler comes later. (SHUPPOPPO\*RA-RA-RA)

Figure 12 Stay patterns of facilities

### 5-3 .Stay pattern

The number of staffs and users during the survey period is shown Table 4. Users are divided into parent-child and other visitors. Number of parent-child pair was different day by day. In four facilities except "SHUPPOPPO" in the rural area, there was the use more than 7 pairs on the average. Users except for parent-child were the most in "TETO-TETO" located in shopping street. There are two types of staff working form. The first is a type that the staffs change at noon, which appropriates "TETO-TETO" and "RA-RA-RA". The second is a type that a staff works during a day in addition to the first type, which appropriates "SHUPPOPPO" and "KIRA-KIRA".

The usage patterns of facilities are shown in Figure 12. The standard patterns are separated into 4 types, ① stay in the morning, ② stay in the afternoon, ③ stay from lunch time, ④ stay from open to closed. Utilization time of facilities is about 1 to 4 hours, and each facility has been used according to the user's schedule. In "TETO-TETO" located in shopping street, there are parent-childs who go to the supermarket to buy lunch.

### 6. Conclusions

Findings of this study are as follows.

- 1) Age of the staff is different in each facility. In the facilities where mothers during child-rearing are working as a staff, female of 30s accounts for 60%. In "SHUPPOPPO" and "KIRA-KIRA", staffs of 30s-70s are working.
- 2) About the one-day program, play is not regulated. Lunch time is provided all the facilities, snack and tea time are provided at three facilities. Thereby, the time zone when all users can alternate and talk is secured. And users visit facilities for lunch time and so on.
- 3) About 80% of users are mothers with infants of 1-2 years old, and facilities of more than 30% are located nearby residential areas of users. Opportunity of use is different according to facilities, introduction from users, homepages and magazine etc. The main purposes of use are "ensuring children's play space and playmate", and "introduction with other parents".
- 4) The pattern of using facilities is separated into 4 types. Utilization time of facilities is about 1 hour to 4 hours, and each facilities has been used according to the user's schedule. And users who stay from open to close time is shown, it is evaluated that the suitable place for spending a long time in the home atmosphere is secured.

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