

MOTIVATION OF LOCAL WOODEN HOUSE PURCHASE FOR REVITALIZING JAPANESE WOOD PRODUCTION

Kie Kozawa, GPSS, 47-116799

Advisor: Professor Yamamoto Hirokazu

Co-Advisor: Associate Professor Yarime Masaru

ABSTRACT

Japan is expected to improve its self-sufficiency in wood by utilizing domestic matured planted forests rather than depending on foreign forests. Securing a sufficient amount of wood import will become more difficult because of increasing demand in global wood market in the future. In contrast, Japan has enough unused and sometimes even abandoned wood resources inside the country.

For the development of the forestry sector, the demand for domestic wood should also be increased, and the best chance to do so is thought to be in the housing market. Although the largest amount of domestic wood is already used in the housing sector, it is still possible to expand its share. Specifically, this research focused on 'local wooden house (LWH)', which are built with local wood materials and by collaborating groups among related industries in a certain scale of local area. Due to the municipal support and ease to start, these groups spread into many forestry regions. However, the number of customers of LWH has not increased as rapidly as the number of the group.

Although many researchers have studied LWH, most of them focused on issues related

to the builders, such as LWH's positive effect to builders, process to succeed, aims and management of these groups. However, for further promotion of LWH, it is also necessary to address issues from the customers' viewpoint, another key player of the market.

Therefore, this research aimed to identify the characteristics of past purchasers of LWH by comparison with purchasers of other types of house (non-LWH). This objective was met by two research questions: 1. What kind of people found LWH attractive and in what aspects? 2. Why purchasers of non-LWH could not purchase a LWH? Targeted past purchasers were compared in terms of their environmental awareness, passion for house building, and intention towards house building (decisive factors in a house and a builder); previous literature implied that LWH and non-LWH purchasers should be considered to be particularly different in these points.

To be precise, this research defined the scale of local as 'inside one prefecture', because many administrative policies have been implemented on the prefectural level and thus, prefecture was thought to be a familiar scale to many LWH purchasers.

This study considered Kochi Prefecture as a study area because of its advanced LWH market and municipal support. In addition, there are branches of non-LWH builders within the prefecture, thus purchasers there can choose from various builder options.

The main data was collected by posting and web-based questionnaire survey to the

specific group of past purchasers of LWH (through cooperation of a mediating group: Group A) and any types of house (through cooperation of a web research company: Group B) in August to October 2012. Group B was divided into two subgroups: Group B-1 (non-LWH purchasers) and Group B-2 (LWH purchasers). The results of the questionnaire were analyzed with SPSS software.

In the first analyses, the results of the questionnaire were compared among three groups: Group A, Group B-1, and Group B-2. Series of statistical analyses detected the significant differences between Group A and other two groups in many aspects, but not between Group B-1 and B-2. According to the analyses, Group A had higher environmental awareness and passion for house building, and their decisive factor in a house order was 'material' (with 'good smell and texture' and positive effect for 'health'), in contrast, the other two groups' decisive factor in a house was 'price'. In all groups, environmental burden of the house was the least important. In terms of builder choice, those in Group A ordered from a builder/designer whose past works matched their image of the desired house; they did not decide based on the 'price' or the land's 'location', in contrast to the other two groups.

In the second analyses, respondents of Group B were divided into smaller groups to distinguish between those who had/had not heard of LWH and those who became/did not become interested in LWH. The analyses indicated the correlation between those who had heard of LWH and building of a wooden house and between those who became interested in

LWH and high environmental awareness.

To sum up the first analyses, there are two different types of LWH purchasers and each of them can be categorized as; *intended purchasers* (Group A), who purchased a LWH by their interests, or *by-chance purchasers* (Group B-2), who unintentionally purchased a LWH.

For intended purchasers, the largest motivation for purchasing a LWH was the ‘material’, and environmental awareness was of less importance, although they were highly aware of the environment. House purchase behavior is implied to be independent from the environmental awareness. Intended purchasers, however, might not distinguish local wood from domestic wood. The attractiveness they found in local wood can also be seen in other domestic wood. Thus, it is considered that their attachment to the local region and/or strong promotion from municipalities also encouraged them to choose a LWH instead of other domestic wooden houses.

For by-chances purchasers’, in contrast, some external factors might change their behavior, considering that they were not significantly different from non-LWH purchasers. It may be their builders/designers’ recommendation, since builders/designers determine the house material in most cases, and possibly people can purchase a LWH even without interest if their builder/designer recommended to do so.

Thus, as answer to research question 1, LWH is purchased by either:

- Those who have specific interest in ‘wood’ material.
- Those who were recommended to purchase a LWH by their builder/designer.

As answer to research question 2, the reasons for non-LWH purchase were either:

- They were not interested in ‘material’ of house.
- Environmental-oriented motivation was insufficient to change their behavior.
- They were not interested in wooden structure.

From these results, three ways are possible to increase the demand for LWH: to enlighten the attractiveness of wood as a house material, to involve more builders/designers, and to promote the wooden structure. Further studies in other regions, about the actual wood’s distribution channel and reaction to the price change are considered to be needed.

Keywords: environmental awareness, passion, intention, questionnaire

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