The Green Lantern movement, its strategy, and road-map as a bottoms-up movement for improving the food self-sufficiency ratio of Japan

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Abstract

The green lantern (GL), "MIDORI CHOUCHIN (in Japanese)" is a symbol of voluntary activity attempting to raise the food self-sufficiency ratio of Japan that has fallen to 40% or less. The GL has a sign, "A shop that aids domestic products", on its face, and is hung up over shops, restaurants, taverns, farmers' markets, etc., fronting businesses that are using domestic products positively. Shops using 50%, 60%, 70%, 80%, and 90% of domestic products in the total calories base of its commodities can display the one, two, three, four, five stared GL, respectively (Fig.2). A unique point of this movement is its indirect strategy that does neither push farmers to produce nor consumers to purchase domestic products. The movement encourages retailers, shops, and restaurants to use domestic products to attract more customers who like to consume and support them. The GL movement was borne in Hokkaido in 2005, and spread to the Kanto-area (around Tokyo) when its activists moved there in 2006. The number of shops hanging the GL has increased gradually up to about 100 for 3 years.

The GL movement was then popularized by the mass media. One of the major newspapers in the agricultural field, "The Japan Agricultural News", on January 15, 2008 reported the movement, and it was also covered in a major news show of many TV program in Japan. An explosion of concern about food security and the requirement of safe domestic food accelerated the rate of award of the GL to shops, and the numbers of shops has now jumped to about 860 (covering every prefecture in Japan) in less than 3 months. In this paper, we introduce the GL movement as a bottoms-up type marketing strategy and the web system supporting it, and give tips for the policy making for sustainable food security.

Keywords: Green lantern, "MIDORI CHOUCHIN", food self-sufficiency ratio, food security, web system, marketing

Introduction

The food self-sufficiency ratio (FSSR) of the calories base in Japan that used to be 73% in 1965 is falling down to 38% in 2007. This is considered to be because of 1) decrease of the amount of consumption of the rice at home by change of Japanese dietary style, 2) increase of amount of consumption of livestock products, oil and fats, 3) increase in dining out. The decrease of rice consumption decreased the FSSR directly, however the increase of consumption of...
Livestock products decrease the FSSR by increase of import of feed grains. In contrast, the increase of dining out is considered to cause decrease of demand of domestic food products by mismatching between supply and demand in the business-use foods. The green lantern (GL) project was started to solve this mismatching by leading the dining-out industry to choose domestic food products.

The GL is a symbol of voluntary activity attempting to raise the food self-sufficiency ratio of Japan that has fallen to 40% or less. The GL has a sign, "A shop that aids domestic products", on its face, and is hung up over shops, restaurants, taverns, farmers’ markets, etc…, fronting businesses that are using domestic products positively. The shop of GL is increasing, as shown in the following figure (Fig.1). Although the number of GL shop has reached to 1,058 shops on May 31, 859 GL shops registered by April 30 were analyzed in this research. In this paper, we introduce about its strategy and road-map as a bottoms-up movement for improving the food self-sufficiency ratio of Japan.

![Fig. 1. The GL shops increase.](image)

**The GL supporters**

The GL supporters are a key element of the GL project. They are participating the project as an individual to support certain restaurants and shops that use domestic products for more than 50% of commodities of their shops by choosing them and recommending to equip the GL. Another important point of this system is to let the owners and masters of the shops and restaurants become the supporters too to let their customers to become the GL supporters. This is similar to a mechanism of spread of infection of disease, and makes out break of the GL supporters. This mechanism worked to make the explosion of number of GL shops under some circumstances, attracting the GL movement.
Analysis of a spread of GL

A geographical spread by the registration time of the GL shops was analyzed. We have categorized the GL shops into 3 categories, category 1: initial stage (black), category 2: intermediary stage (gray) and category 3: explosion stage (white in Fig. 3 respectively). The initial stage GL shops have been registered before the popularization by the mass media, "Japan Agricultural News", on January 15, 2008, one of the major newspapers in the agricultural field, and a news show of "Fuji TV", a major TV network in Japan. The intermediary stage GL shops were registered before concentration of attention of mass media stimulated by a frozen food case. The explosion stage GL shops were registered after under the high level of attention of media from mass to local widely. In this stage, some peaks of registration were appeared after report about the GL movement and/or the GL shops by mass media.

The initial stage GL shops were located at the major urbanized areas in Japan, Tokyo, Osaka, Nagoya and Sapporo, and the initial GL supporters inhabiting area, Iwate, Ibaraki, Kanagawa, Saitama, Ishikawa, Tottori, Okayama and Nagasaki. An out of example is Fukuoka area, one of the 5 major urbanized areas in Japan. This is because the initial GL supporters were localized in the central and eastern Japan except Nagasaki prefecture and the initial stage GL shops were mainly registered by them directly. The intermediary stage GL shops are localized at the areas that are neighbor of the initial stage areas or near by them, and were covered by Fuji TV network. The explosion stage GL shops were located very widely under high density of information from many kinds of media such as mass media, local mini-communication magazine to the web logs in internet. Observation of transference of the stages is analyzed the mechanism in increasing of the GL shops was as follows.

1) Accumulation of the initial GL supporters (the initial stage)
   Extension of GL concept and accumulation of the GL shops at narrow areas around the initial GL supporters. Most of driving force of this stage is personal communication based on trust between supporters and owner of candidate of the GL shops. The owners of the shops have become the “innovators” in the GL project.

2) Popularization of the GL project in nation widely (the intermediate stage)
   Information about the GL project was broadcasted to peoples who are highly sensitive to “something-new” and “something-good” via mass media such as TV-news network and news paper nation widely. In this stage, consummers and shop owners became potential GL supporters and candidate of the GL shop owners in the case of motivation on this project was elevated enough by enough density of information from the mass media. However, in the areas that have low information density from the media, the motivation was not elevated enough.

3) Standardization of the GL concept (the explosion stage)
   Various kinds of media such as local news paper, mini-communication paper, company magazine, web-log, internet news etc... started to broadcast information about the GL project in forwarding from the mass media. In this stage, the information density in the areas that had low density in the intermediate stage was elevated high enough, and furthermore, the GL concept and the GL are starting to be recognized a standard movement and its symbol to advertise the shops that are promoting local products and farmers. This sense of standard on the GL project accelerated the increasing speed of the GL shop in the explosion stage (about 265 shops/month) reached 90 times compared to the speed in the initial to intermediate stage (about 3 shops/month).
The ways to reach the GL

Table 1 is showing the ways to reach the GL. The data were taken by the questioner to the shop owner. When the answer choose more than one from the choices, “Person”, “Television”, “Radio”, “Newspaper”, “Magazine”, “Internet”, “Unknown”, with the same rank, every choice were counted.

The personal communication as the second major way to the GL included very various ways, the GL supporters to the shop owners, the owners of the GL shops to other owners, introduction in community of commerce, customers and business connections such as the material suppliers, the shop owners licensed tax accountants, and relatives and staffs of the shop owner.

The major ways connected via television were NHK news, Asahi news network and Fuji Sankei news group, and they covered more than 30% in total. In the newspapers, the two major papers, Asahi and Yomiuri covered more than 43% of the ways via newspaper.

Table 1. Ways to reach the GL

<table>
<thead>
<tr>
<th>Ways to reach the GL</th>
<th>number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>326</td>
<td>34.6</td>
</tr>
<tr>
<td>Person</td>
<td>303</td>
<td>32.1</td>
</tr>
<tr>
<td>Newspaper</td>
<td>194</td>
<td>20.6</td>
</tr>
<tr>
<td>Internet</td>
<td>52</td>
<td>5.5</td>
</tr>
<tr>
<td>Radio</td>
<td>25</td>
<td>2.7</td>
</tr>
<tr>
<td>Magazine</td>
<td>24</td>
<td>2.5</td>
</tr>
<tr>
<td>unknown</td>
<td>19</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>943</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

(The GL shops for this analysis were 860.)
We have analyzed the ways to reach the GL in details of the explosion stage by dividing into sub-stage 0 to 8, 0: up to 100 shops, identical to the initial and intermediate stages, 1: 101 to 200 shops, 2: 201 to 300, 3: 301 to 400, 4: 401 to 500, 6: 601 to 700, 7: 701 to 800 and 8: 801 to 860, and percentage of each way was made into graph (Fig. 4.). In sub-stage 0, the most major ways to the GL was person and the popularization by the mass media was just started at the end of the sub-stage. In the late of this sub-stage, we have constructed a website (in Japanese) of the GL, “http://midori-chouchin.jp/” and started analysis of the GL movement and its impact to food market in Japan with its database (this analysis is still under way).

Throughout from sub-stage 1 to 8, the most remarkable observation is the peak of the way through the TV from sub-stage 2 to 3. This peak is exactly identical of peak in increase of the GL shops (Fig. 1.). This is supporting tendency of influence by TV news has relatively short response term compared to paper medias. After this peak, ratio of the ways to the GL became stable, and increasing speed became linear. We considered that explosion of TV news at the peak sub-stage had popularized the GL project enough nation widely, and it still maintains the information density high enough from urban areas to country side by various news sources such as local paper, magazines, web-news so on.

![Fig. 4. The circumstances according to period](image_url)

**Conclusion**

We conclude that unique points of the GL project from the view points on its strategy, tactics and system to achieve.

1) Strategy  
The aim of this project is straight forward to improvement of food self-sufficiency ratio. We have chosen improvement of mismatching between food supply and demand sides. Demand side including not only business-uses but also consumers are regularly requiring safe, high quality, good-looking, fancy and reasonable food when they do never care food supply side. They are innocent enough to require the ideal foods by forgetting necessity for thinking of food security issue. This is what happening on falling down in food self-sufficiency ration in Japan. We are inserting very simple sign, the green lantern as a symbol of domestic food supplier in front of the innocent demand side and let them start to think of importance of local food.
supplier. This simplicity and clearness of our aim is the most essential point of our strategy in the GL project.

2) Tactics
To establish sustainability of the project, we have chosen voluntary activity to promote the GL project. We had never advertised the project with mass marketing method, such as tying up with enterprises or public sector. We join the project as an individual effort, calling the GL supporter depending on our skills, abilities and activities. For example, a certain supporter provided money to buy the lantern, some other provided labor to ship the lantern to the owner of the GL shop, some others called or visited their friend who may become the supporters and candidates of the GL shops all over Japan. Some professionals are providing their skills to the project, for example, the producer of the GL is a professional lantern producer since the Edo era in Wakayama prefecture, he is producing the GL extremely reasonable price, and a creator of the GL web-site is a professional web-creator, he and his company are providing their skill and facility to maintain the web base database system for the GL project. Input of data of the GL shops are provided by nation-widely distributing the GL supporters by using broad-band internet. This was enabled with a web-base database system developed by another genius computer programmer voluntarily.

The concept of the voluntary is applied for the GL shop side, too. We are asking owners who apply to the GL project to count the ratio of local food in the commodities of their shops by themselves. We will never check up or inspect the ratio, but never certificate nor guarantee conversely. The GL supporters have no duty except choosing the GL in choosing shops having green or red lantern. This loose control on the project is making it sustainable.

3) System
As described in the section “The GL supporters”, we have chosen biotic system for growing the project. We are promoting the GL shops by promoting the GL supporters who support the shop, furthermore we are promoting the GL supporters by promoting the GL shop. When the system works continuously, a chain reaction from promotion of supporters to shops and shops to supporters will continue one after another. To start the chain reaction, element of reaction must be individual, not organization such as company because solidity of intention to achieve a social activity is rather weak in the organization than individual, so bond in the chain reaction may be uncertain. This is why we required individual status as the GL supporters. In fortunate case, the supporters were extremely powerful in social status and having tough spirit, the supporters may move society and world. The explosion phenomenon of the GL at beginning of February may be proving perspective of our system. Subsequently the project must continue spontaneously until the day of improvement in the food self-sufficiency ratio in Japan.

References

Ministry of Agriculture, Forestry and Fisheries (2007)