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# Green Care in Agriculture as a New Form of Social Support

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## I Introduction

This study addresses both the practice and outcome of “green care in agriculture” as a social support program in Japan. This paper defines “green care in agriculture” as those social support activities designed for farmers in order to utilize the farm resources and to promote health enhancement and social rehabilitation of people suffering from mental and physical problems.

Existing academic research studies pertaining green care in agriculture have been carried out by Hassink and Dijk[1] and Hine et.al[2]. In this field of Japan’s agriculture research or agricultural economics research, the practice and outcome of this theme has not yet been examined. There is almost no doubt that this paper is a pioneering study.

The first step that must be taken to understand green care in agriculture in Japan is to conduct a survey on a national scale. This study is the result of a survey conducted on organic farms in 2009.

## II Methodology

### 1 Procedure

This research was planned in order to check the organic farmer with “a plural correlation preference structure” in which does not lose the personal private purpose, but contributes to social problem solution, and to verify practice and the outcomes of green care in agriculture. An investigation candidate is a farmer who has participated in the Japanese Organic Farming Association. The number of organic farmer was 584 persons. The questionnaire by the author were mailed to the investigation candidate and collected from

them to the author. The four major items of the questionnaire are a farmer’s face sheet, the concern about a green care, the practice experience, and the contents of green care in agriculture. The items of a face sheet is composed an address, farming size, crops and animals, organization form, the number of employees. The main question item of the practice contents consists of a motive of green care, years of the experience, and 4 outcomes of green care (improvement in restoration to health, affective stability, the desire to work and self-reliance), and the solidarity nature between green care farmer and the local community.

In analysis, comparison examination was performed in green care outcomes between one farmer groups who will accept if client want to act in organic farm without the prior interview and another farmer groups who will sort clients based on the prior interview.

### 2 Data collection

The data of the questionnaire was given by 584 member farmers of a specific nonprofit corporation called the Japanese Organic Farming Association’. The period of investigation was from August 1, 2009 to August 20, 2009. The data collection result was follows.

- 1) Collection results
  - (1), Number of mailed sheets 584
  - (2), Number of sheets collected 167
  - (3), Collection rate 28.6%
- 2) Number of sheets with effective replies
  - (1), Number of sheets with invalid replies 5These replies were considered invalid because the concerned individuals had given up organic farming.
- (2), Number of sheets with valid replies 162

### III Analysis of Green Care in Agriculture on Organic Farms

#### 1 Frequency distribution of green care on organic farming

An analysis was conducted by frequency distribution and a cross tabulation. The frequency distribution carried out about a geographical reply farms, farming business forms, concern and practice experience on green care, years of practical experience. The cross tabulation carried out about outcomes of green care in organic farming. These results exist as follows.

##### 1) Distribution of the replies from organic farms

Firstly, we need to describe a geographical percentage of the 162 replies from the farms. This was conducted as follows;

The number of farms that replied was distributed into 38% farms in the Kanto area, 20% in the Kinki and Chugoku-Shikoku areas, 16% in the Tokai and Hokuriku areas, 15% in the Tohoku area, 8% in the Kyushu and Okinawa areas, and 3% in the Hokkaido area.

Secondly, we need to describe the distribution percentage depending on the farming business. Most farms in the farming business are "unincorporated and private business" farms accounting for 87% of the farms that replied to the questionnaire. Then, the rate was 7% for the "incorporated and company business" farms, 3% for the "unincorporated and joint business" farms, and 1% for the "incorporated and joint business" farms. Lastly, the other farms comprised 2% of the total.

##### 2) Current concerns about green care in agriculture

The result of the number of replies regarding concern about some practices in green care in organic farming is as follows.

Firstly, the percentage showed 15% for those who replied "very interested" and 52% for those who replied "interested". Secondly, 19% replied "neither", 12% replied "not very interested", and 2% replied "not at all interested". As a result, I think we all agree that 67% of the organic farmers were interested in some amount of green care in agriculture.

##### 3) Current situation of practices of green care in agriculture

The green care in agriculture is defined as social support activities designed for farmers in order to

enable them to utilize the farm resources and to promote health enhancement and social rehabilitation of people suffering from mental and physical problems. The existence of practices of the activity was asked in the questionnaire.

The results of these replies with regard to some practical experience in green care in agriculture in organic farming were as follows.

Namely, the rate of replies was calculated with 19% (31 farms) for "practice", 77% for "no practice", and 4% for "no answer". This result shows that 31 farms had already practiced some amount of green care in agriculture.

#### 4) Years of practical experience

The results pertaining to the replies on years of practical experience in green care in organic farming were as follows.

Six farms came into the "under one-year" category. Eleven farms came into the "from one to under ten years" category. Twelve farms came under the "ten years and above" category. Two farms gave the "no answers".

#### 2 Cross tabulation about outcomes of green care in organic farming

##### 1) Cross tabulation about co-sympathy

Mayeroff[3] defines "caring" as helping in the reciprocal growth of clients and care service providers. Following the concept of Mayeroff, caring is marked by a mutual reinforcement collaboration act.

Then, how is the outcome of a mutual reinforcement collaboration act evaluated? Mayeroff did not demonstrate the outcome assessment method. There are two ways of looking at this issue of medical evaluation studies: "patient-reported outcomes" and "doctor-observed outcomes". To borrow an argument from a medical evaluation study, I need to apply the outcome assessment to green care in agriculture. It is reasonable to think that the patient-reported outcome refers to the outcome assessment by the client himself/herself and the doctor-observed outcome refers to the outcome assessment by the farmer and the parents or guardians.

However, one must expect to deal with a difficult situation wherein a green care client emphasize on the need of "farmer-observed outcomes". In this

paper, we suppose that clients find it extremely difficult to reply to the questionnaire.

In order to assess farmer-observed outcomes via a questionnaire, two concrete questions (A and B) and reply choices are set up as follows.

Question A: Have you actually felt that you helped the growth of a green care client?

Reply choice: (1) [definitely], (2) [reasonably], (3) [neither], (4) [not so much], (5) [not at all]

Question B: Have you actually felt that you had a good influence in your own growth?

Reply choice: (1) [definitely], (2) [reasonably], (3) [neither], (4) [not so much], (5) [not at all]

In addition, the following two factors are used as a sum total index of the choice of reply. [actual feelings] refers to the sum total of (1) and (2), [not actual feelings] refers to the sum total of (3), (4), and (5).

Table 1 shows the cross tabulation of the replies of twenty seven replies to Questions A and B.

The questionnaire clarifies the fact that nine green care farmers share a co-sympathetic relationship. Namely, nine green care farmers not only feel that they have actually helped the growth of clients, but also realize how much the themselves have grown in the process. As mentioned above, we need not revive the conventional community, which is accompanied by strong social exclusion, but it is important to incorporate a public mutual help relationship between the parties concerned, who both live and produce crops in the local society.

The questionnaire survey conducted by us revealed that Japanese farmers have plural correlative preference frameworks and can be a part of the formation of a co-sympathetic relationship with those people suffering from mental and physical

problems.

2) Positive co-sympathetic relationship and acceptance determining method

When a green care farmer is determined to accept visitors, our analysis reveals that there are two kinds of acceptance determining methods.

One is “farmer-based determining, i.e.: FBD”. This is a method by which the farmer interviews a visitor directly in advance, and consents to acceptance. If the farmer judges that the visitor cannot be a client on his farm, the farmer can refuse acceptance.

The other is “visitor-based determining, i.e.: VBD”. This is a method by which the visitor, who is a potential client, or a guardian, assesses the farm situation in advance, and the farmer consents to acceptance. If the visitor is pleased with the farm, the farmer will not refuse acceptance.

Here, the relationship between two acceptance determining methods and a client’s feeling of evolving in green care was verified. The result is presented in Tables 2 and 3.

#### IV Reasons for the development of green care in agriculture

There are two reasons for the development of green care in agriculture in Japan. First, the present social problem, such as long-term unemployment, withdrawal, and burn-out disable people such that they cannot cope with the usual healthy welfare system by depending on only the governmental budget. The second and most important reason is the appearance of new-age farmers with “plural correlation preference frameworks” of not losing perspective of personal purpose behind green care but also contributing to social problem solving.

The demand for green care in agriculture was drawn from facing facts of the decline of the public sphere in

**Table 1 Cross tabulation of co-sympathy**

(Unit: farm)

		Outcome index of farmer himself	
		Actual feelings	Not actual feelings
Outcome index to clients	Actual feelings	9 (co-sympathy)	3 (one sided sympathy)
	Not actual feelings	8 (one sided sympathy)	7 (no sympathy)

Note: Four farms gave the response “no answers”

Source: Results of our questionnaire survey October, 2009

**Table 2 Cross table of visitor-based determining and growth feelings**

(Unit: farm)

VBD \ Growth feelings	Actual feelings	Neither	Not actual feelings
	Yes	6	5
No	3	4	1

Data: Results of questionnaire survey October, 2009

Official approval of the independency in Table 2 is as follows.

A chi-square test statistic: 0.2816. Critical value (significance level 5%): 5.9914

Therefore, it cannot be said that there is any relevance between “visitor-based determining” and “growth feelings”

**Table 3 Cross table of farmer-based determining and growth feelings**

(Unit: farm)

FBD \ Growth feelings	Actual feelings	Neither	Not actual feelings
	Yes	11	2
No	2	3	3

Data: Results of questionnaire survey October, 2009

Official approval of the independency in Table 3 is as follows.

A chi-square test statistic: 6.2600. Critical value (significance level, 5%): 5.9914

Therefore, it can be said that there is some relevance between farmer-based determining and growth feelings”

Why is there such relevance? A client with mental and physical problems has various factors, such as family environment, sense of values, customs, and workplace environment, etc, which contribute to these problems. However, there is no question that the definite will of the client standing against his sufferings is deterministically important. The farmer can generally understand the client’ s will. This is the effect of the farmer-based determining method.

Now, improvement in the power of chi-square test remains as a matter to be discussed further.

rural communities since the last several years. These days, Japanese social reality is severe. It is impossible for people suffering from the present-day social problems, such as unemployment, NEET (Not in Employment, Education or Training), withdrawal, burn-out, to cope with this reality after formerly having depended on healthy welfare system and government finances. In the actual rural society where many elderly people live, the solution of public problems with regard social welfare becomes very difficult, but life, although strained, is continuing. The construction of a new system through mutual help and solidarity of people who live in a district community for the solution of social problems, such as replacing the conventional system by only depending on government

finances is required. How is it possible to establish a new healthy welfare system in rural society?

In this paper, I will concentrate on the possibility of farmers with social entrepreneurship, which changes rural society, like the green care farmer. However, activity characteristics of farmers with a broad preference spectrum from private profits to public concern were not usually discussed in the theoretical side of farm management research in Japan.

Since the agricultural sector contributes to the expansion of gross national products, a great portion of our farm management study has focused on an “individualistic farm business model”. The research conducted on the basis of an individualistic farm business model

has emphasized that it is important for a farmer to secure the right of private property and the freedom of choice, and to concentrate on self-economic earnings for the realization of the well-being rural society. Moreover, even if the serious social problems in social welfare, health care and environment do occurs in the community in which a farmer lives, the administrative body has claimed to undertake the duty of resolving problems so as to enable the farmer to pursue his own personal purpose.

When we look back at farm management research on the basis of an individualistic farm business model, we observe two theoretical tendencies. One theoretical tendency is a subject equilibrium model in which the farmer as a self without load pursues the balance of the income and outgoings of the individual economy (a farming unit or a farmhouse unit) in the market economy. Another theoretical tendency is a voluntary adjustment model to which the farmer as a self facing system adjusts his own decision according to the dual confrontation structure between the private farmer and the repressive community or governmental agency.

Although the decline in the public sphere in a farm-village community was a serious problem, there was no room to enter the sphere in an individualistic farm business model. Therefore, compared with the individualistic farm business model with which we are familiar, a new individualistic farm business model that is more proactive in a public sphere is required. The theoretical base that can draw a farmer nearer to the public sphere is the “plural correlation preference frameworks”

It is considered that the reasons behind the green care agriculture phenomenon are generating regional public issues on the demand side and the appearance of a new farmer with the plural correlation preference structure on the supply side.

## V Conclusion

This paper aims at the argument of the practice and outcome of “green care in agriculture” as a social support program in Japan. Green care in agriculture is defined as social support activities for farmers that enable them to utilize the farm resources and to promote the health enhancement and social rehabilitation of people sufferings from mental and physical problems.

Then, the research task of this paper is to investigate the response and its outcome in green care in agriculture in

organic farming based on questionnaire results across Japan.

The results can be summarized as follows.

Firstly, 67% of the organic farmers were interested in green care in agriculture.

Secondly, 19% of the organic farmers had already practiced green care in agriculture.

Thirdly, our survey found a positive co-sympathetic relationship between the farmer and clients within the narrow limits of the “farmer-observed outcomes”.

Fourthly, it became clear that there was a relationship between a positive co-sympathetic relationship and the farmer-based determining method.

Lastly, we can say with fair certainty that some of the Japanese farmers have plural correlative preference frameworks and a consciousness to respond to public problem solving.

A future research task is the promotion of scientific research concerning the QOL (Quality Of Life) effect of green care in agriculture on the basis of party-concerned assessment.

## Acknowledgements

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## References

- [1] Hassink, J and Van Dijk, M, ed. Farming for Health Wageningen UR Frontis Series Springer 2006.
- [2] Hine, R.P., Jo Peacock and Pretty, J. Care Farming in the UK : evidence and opportunities Report for the national care farming initiative University of Essex UK 2008.
- [3] Milton Mayeroff, J On Caring Harper Perennial a division of Harper Collins publishers U.S.A 1971.
- [4] Sasaki, Ichio. Green Care Nougyo - sizennikakawari-kusanone no-keiseisaimin- (Green Care in Agriculture— Enlightened rule and succor of the people intermediating nature at the grassroots level—); Japan 2010.

## 要旨

本研究は、日本における新たな社会的下支えプログラムとしての「グリーンケア農業」の実践とその成果について論及したものである。ここでグリーンケア農業とは、農業者が農場資源を活用して心身に痛みをもつ人びとに対して健康増進と社会復帰を助長する社会活動と定義される。

全国の有機栽培農園におけるグリーンケア農業への応答及びその成果に関する分析結果、次の3点が明らかになった。すなわち、①有機栽培農園の67%がグリーンケア農業に関心をもち、19%は既実践していた。②グリーンケアの成果として、農業者と彼らの来訪者の間の共感関係が生れていた。③来訪者に対する事前面談とその共感関係には関連性がある。

日本のグリーンケア農業の展開に関して、理由は二つ示すことができよう。第一に、失業者、引きこもりなどの社会問題は、政府予算にのみ頼る従来型の社会福祉システムでは対処できなくなってきたことである。第2にこれが最も重要な理由であるが、自己の私的目的を失わず社会問題解決に貢献する「多元的な相関選好構造」をもつ新農業者が出現していることである。

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