

**Research, Analysis and Network Development to  
Sustain Businesses of Rural Women Entrepreneurs:  
from North Kyushu to Asia**

**Kayo OKABE**

*Adjunct Lecture, Hosei University*

and

**Mayumi DAN**

*Adjunct Lecture, Keisen University*

**Abstract**

Through four interviews in north Kyushu area, we obtained basic data to investigate what assistance is required for women entrepreneurs in agriculture. We then implemented a questionnaire survey on a nationwide basis to 423 entrepreneurs and used the data for statistical analysis. From empirical analysis consisting of principal component analysis, cluster analysis and correlation analysis, we concluded that rural women entrepreneurs withhold the features of social entrepreneurs.

Then we classified the support required and investigated the actual means of obtaining useful information. By programming with Google Maps JavaScript API V3, we developed a homepage to network potential entrepreneurs in each area, no matter whether they are located across administrative boundaries, to learn and encourage one another.

As these rural women entrepreneurs are more interested in social contribution rather than economic return, they will become a new role model of social entrepreneurs by earning sufficient funds and by sustaining their businesses.

*Key words:* Rural, Women, Social entrepreneur, Agriculture, Network

**1. Introduction**

According to the Employment Status Survey of the Ministry of Internal Affairs and Communications, the total number of new women entrepreneurship is on a clear decline since 1982. However, when we look at the number of women entrepreneur start-ups in

agriculture, it has more than doubled from 4,040 of 1997 to 9,757 of 2010 (Figure 1). On the other hand, behind this increase in start-ups, there are more women entrepreneurs who close their operation than the same of men, indicating the difficulties of continuing their business. This study focuses on these women entrepreneurs in agriculture who are on a rising trend, to find out the key factors behind the increase, so that we may utilize the knowledge to encourage newcomers and build a network of entrepreneurs both new and old, to help each other sustain businesses.

The primary aims of our research study are, firstly to analyze the actual activities of women entrepreneurs in agriculture, secondly to examine what is required to sustain healthy businesses of these agricultural start-ups, thirdly to develop a homepage so that these entrepreneurs can easily learn and assist each other, and fourthly to widen the sphere of this network from north Kyushu to all Japan, and on to Asia.

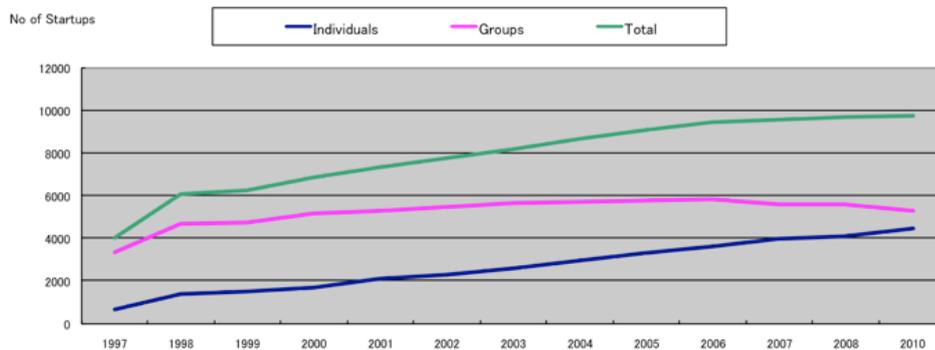


Figure 1. Number of women entrepreneur start-ups in agriculture

## 2. Analysis of Rural Women Entrepreneurs through Interviews and Questionnaire

### (1) Interview Survey

In order to find the critical tasks of women entrepreneurs in agriculture, we visited the following four entrepreneurs in north Kyushu area (Figure 2) and interviewed them in July 2011:

- (1) Ms T.I., Advisor of Anzunosato Ichi Users Association, in retail sale of agricultural products, and management of restaurant
- (2) Ms S.O., Chairperson of More House, mutual association in agriculture, producing Bunashimeji mushrooms and asparagus
- (3) Ms F.M., CEO of Bistro Kururun, restaurant specializing in local food products

- (4) Ms T.S., CEO of Budobatake, in retail sale of vegetables, flowers and delicatessen

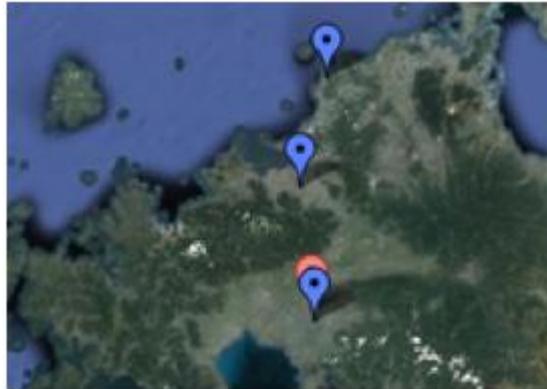


Figure 2. Locations of the four interviewees in north Kyushu

From the interview survey, we found out that although there are different tasks according to each business area, common factors of difficulty for the entrepreneurs to continue business can be classified into the following aspects of management:

- A. Funding of business:
  - (1) cash flow management, (2) accounting, (3) ways to obtain subsidies,
  - (4) tax management,
- B. Personnel:
  - (5) staff recruitment, (6) staff training, (7) obtaining necessary qualifications,
- C. Sales promotion:
  - (8) advertising, (9) ways to attract customers, (10) development of sales routes, (11) gaining new contractors, (12) finding out consumers' tastes,
- D. Management administration:
  - (13) forecasting adequate sales volume, (14) utilizing computers, and (15) family relationship.

## *(2) Questionnaire Survey*

From the findings of the interviews, we made a questionnaire<sup>1</sup> to investigate the actual conditions of rural women entrepreneurs and their difficulties of sustaining businesses. The following five major questions were introduced as the second step of the research:

- Q1. Business (operation, time of start-up, number of staff, compensation, sales, marketing methods)

- Q2. At start of business (what pushed you to start, funding, management knowhow)
- Q3. Aim and tasks of business (important factors, difficulties, necessary assistance)
- Q4. Future business target (what to do next, requirements for new business)
- Q5. About yourself (age, family, working status and time, whether business aim is attained)

The main question for the statistical analysis is Q3, particularly on “What do you think is important for your business, and how important is it?” asking about 14 items from A to N, to answer in four grades of importance: A. freshness of product, B. low price, C. communication with customers, D. low chemicals/additives, E. local product, F. selling to local customers, G. administrative guidance, H. smiling staff, I. smiling family, J. activating local area, K. rate of return, L. technical improvement, M. activating agriculture, and N. return to investors.

In the questionnaire, we also asked the respondents to write freely on ‘what sort of assistance they felt they need’ in order to investigate what actually is required to continue business. In order to conduct the questionnaire on a nationwide basis, we used the data from Rural Women Empowerment and Life Improvement Association (WELI) (2006) “All Japan Map of 400 Selected Female Entrepreneurships in Agriculture, Forestry and Fishery (*Nosangyoson Josei Kigyo 400 sen Zenkoku Mappu*)”. In this map, 423 women entrepreneurs are introduced, from the challenge program for equal gender participation of the Ministry of Agriculture, Forestry and Fishery. Of the total, 245 operations (57.9%) are in ‘processing and sales’ division.

Response rate of the questionnaire we conducted in November 2011 was 36.9% with 156 replies, which is a satisfactory level to conduct the following statistical analysis<sup>2</sup> and obtain adequate results.

### (3) Basic Statistics of the Questionnaire

There are total of 28 questions in the questionnaire, from which we will review the major statistical outputs. Firstly, the average age of the respondents is 67.7 years, most of them married, with previous occupational experiences as in Table 1.

Table 1. What was your previous occupation?

	Number of responses	Percentage (%)
<b>Farmer</b>	<b>42</b>	<b>27</b>
<b>Wife of farmer</b>	<b>58</b>	<b>37</b>
Employee of company or government office	36	23
Teacher	5	3
Employee of Organization	9	6

Secondly, when we look at the number of staff at start-up, operations with 1 person has the highest number, and those with 1 to 5 persons amount to 63, which is 38 per cent of the total. On the other hand, operation with more than 20 persons shares 25 per cent. However, when we take the number of persons at the time of questionnaire, operations with 1 to 5 persons shares 22 per cent, and 6 to 10 persons shares 24 per cent, making the share of small operations with less than 10 persons 46 per cent. This result matches the recent trend of the national data. And operations with over 20 persons at the time of questionnaire decreases to 14 per cent.

Thirdly, sales volume of the respondents is shown in Figure 3 below.

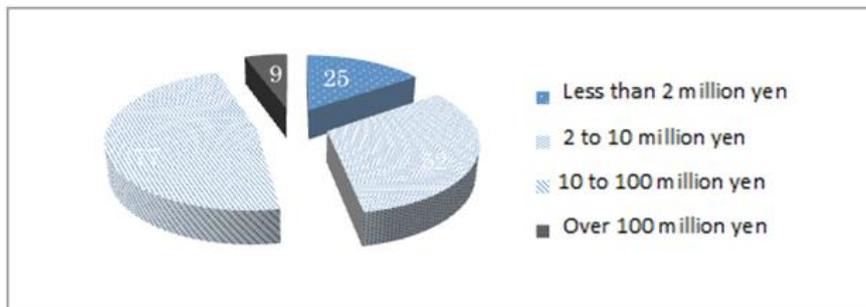


Figure 3. Annual Sales Volume

Basic statistics of the respondents are concluded as follows:

- (1) Average age is in the latter half of 60s.
- (2) Most of the respondents are married.
- (3) Majority have background connected to farming without professional experience of business, government office work or teaching.
- (4) Many start as one-person operation and majority has staff of 5 to 10 persons, at the time of questionnaire.
- (5) Around 60 per cent of the respondents funded the initial capital with own money and money of group, rather than loans from financial institutions.
- (6) Nearly half of the respondents have sales volume between 10 million to 100 million yen.
- (7) Approximately 80 per cent replied they have 'mostly attained their initial goal'.

#### (4) *Statistical analysis of questionnaire answers*

With the overall picture of the women entrepreneurs described above, we will analyze the following three respects:

- (1) Indicate overall characteristics of rural women entrepreneurs from statistics.
- (2) Classify these women entrepreneurs to find out similarities.

- (3) Investigate correlation between sales volume and sense of business aim accomplishment.

(a) Overall Characteristics of Rural Women Entrepreneurs

Here, we analyze eight particular items questioned in Q3.1 on ‘important factors in business’ as follows: B. low price, C. communication with customers, D. low chemicals/additives, G. administrative support, H. smiling staff, I. smiling family, K. rate of return, and N. return to investors. These eight factors are statistically analyzed by principal component analysis with variance-covariance matrix, Varimax rotation. In the principal component analysis, the eight factors are described by linear equations as follows:

$$\text{Component 1} = C_1 \times \text{low price} + C_2 \times \text{communication with customers} + C_3 \times \text{low chemicals/additives} + C_4 \times \text{administrative guidance} + C_5 \times \text{smiling staff} + C_6 \times \text{smiling family} + C_7 \times \text{rate of return} + C_8 \times \text{return to investors}$$

where  $C_1, C_2, \dots, C_n$  are coefficients.

Output of SPSS, is shown in Table 2 and Table 3. As we apply the data of Table 2, component 1 is expressed as below:

$$\text{Component 1} = 0.039 \times \text{low price} + 0.969 \times \text{communication with customers} + 0.064 \times \text{low chemicals/additives} + 0.024 \times \text{administrative guidance} + 0.159 \times \text{smiling staff} + 0.185 \times \text{smiling family} + 0.101 \times \text{rate of return} + 0.024 \times \text{return to investors}$$

Likewise, with the data of Table 2, we obtain component 2 as follows:

$$\text{Component 2} = 0.035 \times \text{low price} + 0.141 \times \text{communication with customers} + 0.001 \times \text{low chemicals/additives} + 0.006 \times \text{administrative guidance} + 0.916 \times \text{smiling staff} + 0.363 \times \text{smiling family} + 0.091 \times \text{rate of return} + 0.101 \times \text{return to investors}$$

Table 2. Result of SPSS Analysis I

	Components							
	1	2	3	4	5	6	7	8
B	.039	-.035	.043	.108	.980	.093	.124	-.001
C	.969	.141	.100	.025	.041	.060	.022	.152
D	.064	.001	.016	.015	.090	.993	.015	.032
G	.024	.006	.107	.980	.108	.016	.121	.017
H	.159	.916	.104	.006	-.043	-.001	.105	.005
I	.185	.363	.059	.021	.000	.043	.157	.897
K	.101	.091	.966	.112	.044	.017	.174	.052
N	.024	.101	.105	.133	.137	.016	.949	.137

The value of coefficient indicates how much the factor contributes to the result. Therefore, in the equation of component 1, coefficient “C “ shows the greatest value of 0.969, which means the most contributing factor, is ‘communication with customers’. Similarly, when we look into the contributing factors, it is in the order of ‘smiling staff’, ‘rate of return’, ‘administrative guidance’, ‘low price’, ‘low chemicals/additives’, ‘return to investors’, and ‘smiling family’, as marked with red squares in Table 2.

Table 3. Result of SPSS Analysis II

Components e%	Eigenvalue	Variance%	Accumulated variance%
1	1.355	35.907	35.907
2	.675	17.896	53.803
3	.602	15.951	69.754
4	.384	10.169	79.923
5	.310	8.205	88.127
6	.257	6.804	94.931
7	.130	3.433	98.364
8	.062	1.636	100.000

We now look into the results shown in Table 3. The first row indicates that Eigenvalue of component 1 is 1.355 and has explanatory power of 35.907 per cent. In the fourth column, accumulated variance percentage of each component is indicated. And we see that from component 1 to component 4, 79.923 per cent of the total can be explained. Therefore, we can conclude the overall characteristics of rural women entrepreneurs as follows:

- (1) In conducting business, the most important factor is ‘communication with customers’, and then ‘smiling staff’, ‘rate of return’, ‘administrative guidance’ in the order of importance.
- (2) These four factors explain approximately 80 per cent of the total.

The above result of the statistical analysis comes in terms with the interview research. However, it is worth noting that ‘communication with customers’ and ‘smiling staff’ come before ‘rate of return’.

*(b) Grouping rural women entrepreneurs*

In the second statistical analysis, we use the same eight factors as variables in the cluster analysis, to define similarities and group rural women entrepreneurs. The eight factors are B. low price, C. communication with customers, D. low chemicals/additives, G. administrative guidance, H. smiling staff, I. smiling family, K. rate of return, and N. return to investors.

The results of the cluster analysis are shown in the dendrogram of Figure 4. Respondents are largely classified into two groups. In the first stage, grouping is centred with 'smiling staff' and 'smiling family'. In the second stage, 'communication with customers' is topped on to the basic group. Then in the third stage, 'low chemicals/additives' joins the group, to form a large group of Cluster 1. The other group consists of 'rate of return', 'return to investors', 'administrative guidance', and 'low price' to form Cluster 2.

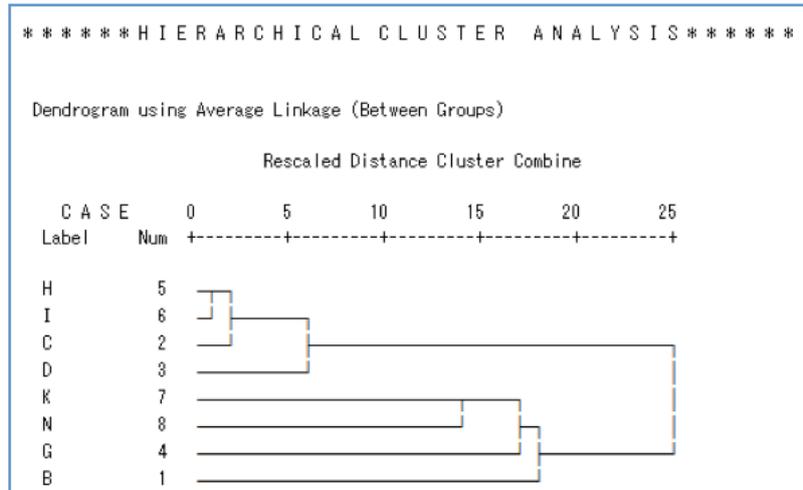


Figure 4. Dendrogram

These two clusters are shown in the graph in Figure 5 below. Cluster 1 is indicated by the circle with blue dots, containing 113 cases, and Cluster 2 is shown by the bigger circle with green dots on the left, with 24 cases. By the number of cases, Cluster 1 and Cluster 2 have a ratio of approximately five to one, meaning that 82 per cent of the respondents are classified in the first group with 'smiling staff', 'smiling family', 'communication with customers', and 'low chemicals/additives'.

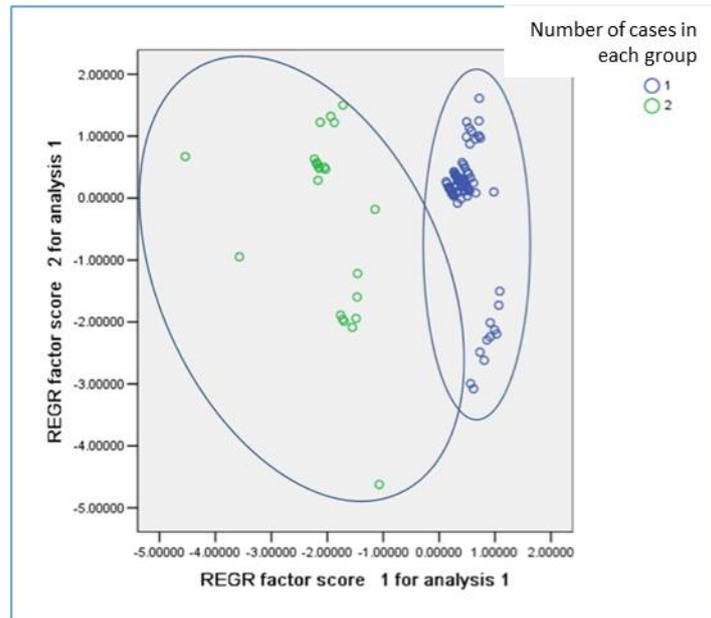


Figure 5. Cluster analysis

(c) *Correlation of sales volume and satisfaction*

Those who responded ‘no’ to Q5.8 asking ‘Do you think your initial aim at start of business is mostly accomplished?’ was less than five per cent of the total. And replies to Q1.7 ‘What is your sales volume of the past year?’ are shown in Figure 3. In the third statistical analysis, we investigated whether there is a correlation between the four levels of sales volume and satisfaction of business aim, by a correlation analysis.

We examined the Kendall Coefficient and the Spearman Coefficient, as in Table 4, which resulted in low levels of coefficients, indicating there is no significant correlation. As a consequence, we can say that the respondents do not consider the sales volume as a material to judge whether they have attained the initial business aim.

Table 4. Correlation coefficient

Kendall	Correlation coefficients	1.000	-0.133
	Significance level(two sided)		0.071
	N	163	157
	Correlation coefficients	-0.133	1.000
	Significance level(two sided)	0.071	
Spearman	Correlation coefficients	1.000	-0.145
	Significance level(two sided)		0.071
	N	163	157
	Correlation coefficients	-0.145	1.000
	Significance level(two sided)	0.071	
	N	157	158

(d) *Conclusion of the statistical analysis*

From the above three statistical analyzes, we conclude as follows:

- (1) In pursuing business, the most important factor is 'communication with customers' together with 'smiling staff', 'rate of return', and 'administrative guidance', in the order of importance. In other words, 'communication with customers' and 'smiling staff' have more value than 'rate of return' for the respondents.
- (2) The above four important factors have explanatory power of nearly 80 per cent.
- (3) The respondents are clustered into two large groups, Group 1 indicating strong correlation with 'smiling staff', 'smiling family', 'communication with customers', and 'low chemicals/additives'. Group 2 although with a weaker tie, associated with 'rate of return', 'return to investors', 'administrative guidance' and 'low price'.
- (4) More than 80 per cent of the respondents are classified into Group 1.
- (5) There is no statistically significant correlation between sales volume and satisfaction of initial business aim.

The results of the statistical analysis revealed that the characteristics of the rural women entrepreneurs have the same features of 'Social Entrepreneurs', often taken up recently, and pointed out by Tsuru (2007) and Nakamichi (2011). However, their views had only been expressed, without any empirical evidence. In this sense, our research analysis which started from interviews to four entrepreneurs in north Kyushu area, by pure coincidence, came to the same conclusion indicated by Tsuru (2007) and Nakamichi (2011). Our study investigated the features of rural women entrepreneurs through empirical analysis and demonstrated that they have the characteristics of social entrepreneurs, which brings social contribution before rate of return.

### **3. Development of Homepage for Rural Entrepreneurs**

(1) *Concept of homepage*

The following Figure 6 shows the response to the major question in the questionnaire Q3.3 'What did you find difficult in pursuing your business? (multiple answers)'.

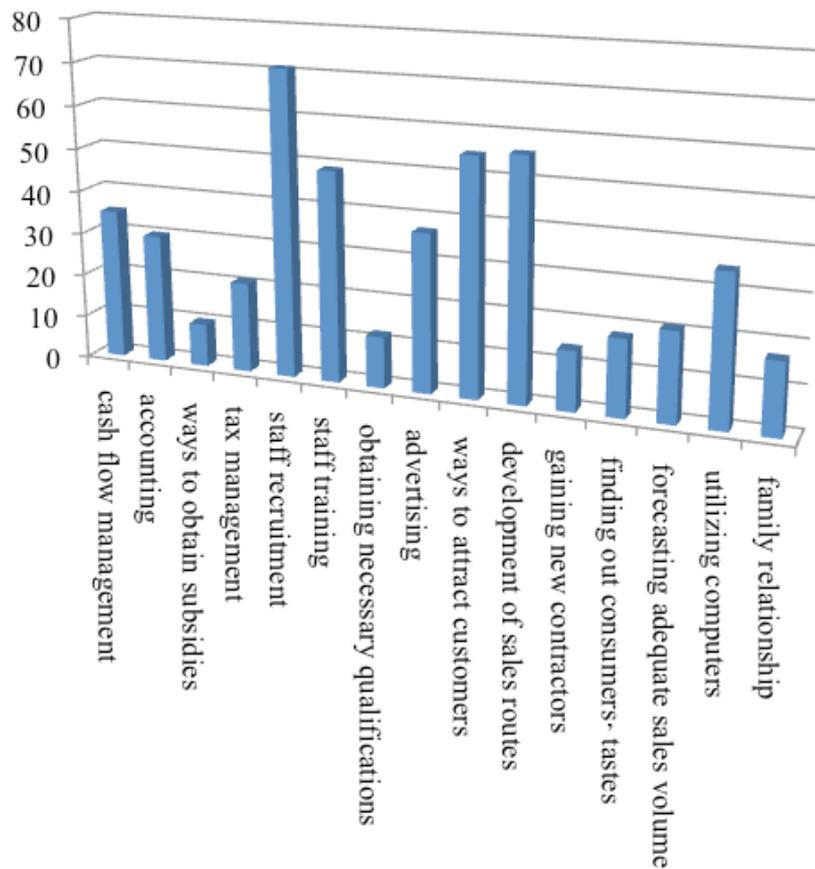


Figure 6. Difficulties in pursuing business

Responses to Q3.4 ‘What sort of assistance do you need? Please write freely.’ were classified into following subjects in order to find out some solutions:

- (1) Guidance, education and training
- (2) Management knowhow
- (3) Network of people
- (4) Attracting customers and marketing
- (5) Developing new products
- (6) Introducing materials and machinery for processing
- (7) Finding successors, employing new staff
- (8) Obtaining subsidies and loans

Government support to agriculture has been implemented from various routes via municipalities, and particularly since the 1990s, local governments have introduced many projects under the flag for a gender-equal society. However, these public support measures tend to go to established operations and it is often difficult for the small businesses of women entrepreneurs to obtain assistance. For the women who take responsibilities of house work and child care, as well as elderly care on top of

agricultural work, it is a high hurdle to climb to obtain necessary information from local leaders, to go to seminars and to look for those colleagues who may have the similar objectives. In a leaders' seminar held in Tokyo, there were many young female farmers who claimed "We can only come to these seminars because they are official meetings held by the government." "I can't find the time to make friends in farming." "I always want to participate but it's difficult to come for domestic responsibilities."

To solve these difficulties that came up in the responses to the questionnaire, we constructed a homepage to help these potential entrepreneurs with easy access to the required information. Nowadays, we can obtain various information through the Internet, but there are so many websites that it is often time consuming and difficult to reach the most useful information. If there is a tool to look up the required information from 'what I need' it will enable the rural entrepreneurs to obtain the exact information they need in a very short time.

Together with required information, fellow partners to pursue business together would be important to continue business. Sawano (2012) indicates that entrepreneurships are formed from Improvement of Living Groups<sup>3</sup>, women's division of Japan Agricultural Cooperative groups<sup>4</sup>, or individual network of friends. When it is difficult to find partners through these routes, it may be useful to find people in the same area with the same sort of objectives, through the homepage.

It is particularly meaningful to look at the area around the searcher, across local administrative boarders and municipal units. Those support from municipal units and agricultural cooperatives are often difficult for the women entrepreneurs to obtain and it may actually be quite practical to find partners across established municipal boarders.

## *(2) Contents of homepage*

Based on the findings described in the above 3.1, we built 'Homepage for Rural Entrepreneurs' with the following design concepts:

- (A) To enable searchers to look up from 'what they need' and reach major information easily.
- (B) To find fellow partners in the neighboring area.
- (C) To look up those established entrepreneurs nationwide in all Japan.

The top page is shown in Figure 7 where we can find three bars for linked pages. The first one <1> are hot texts link to 'Links to get supporting information'; the second <2> is a hot text links to 'Here we are! In your neighborhood'; and the third link <3> is a hot spot links to 'Learn from established entrepreneurs! On the Google map of all Japan'.

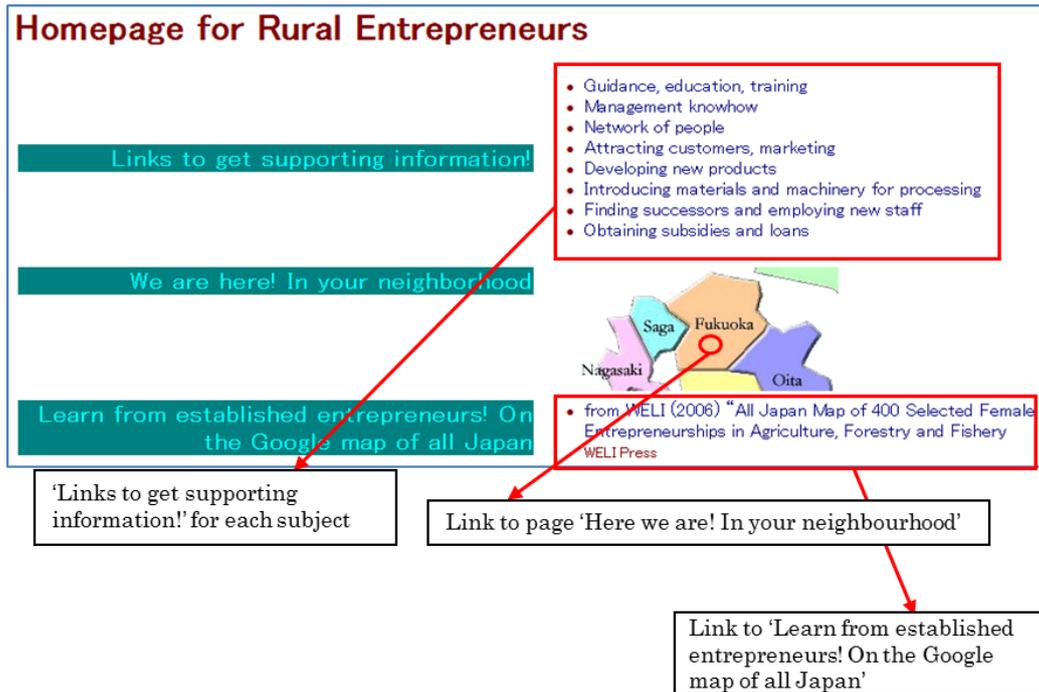


Figure 7. Top page

<1> The first link page is 'Links to get supporting information!' shown in Figure 8.

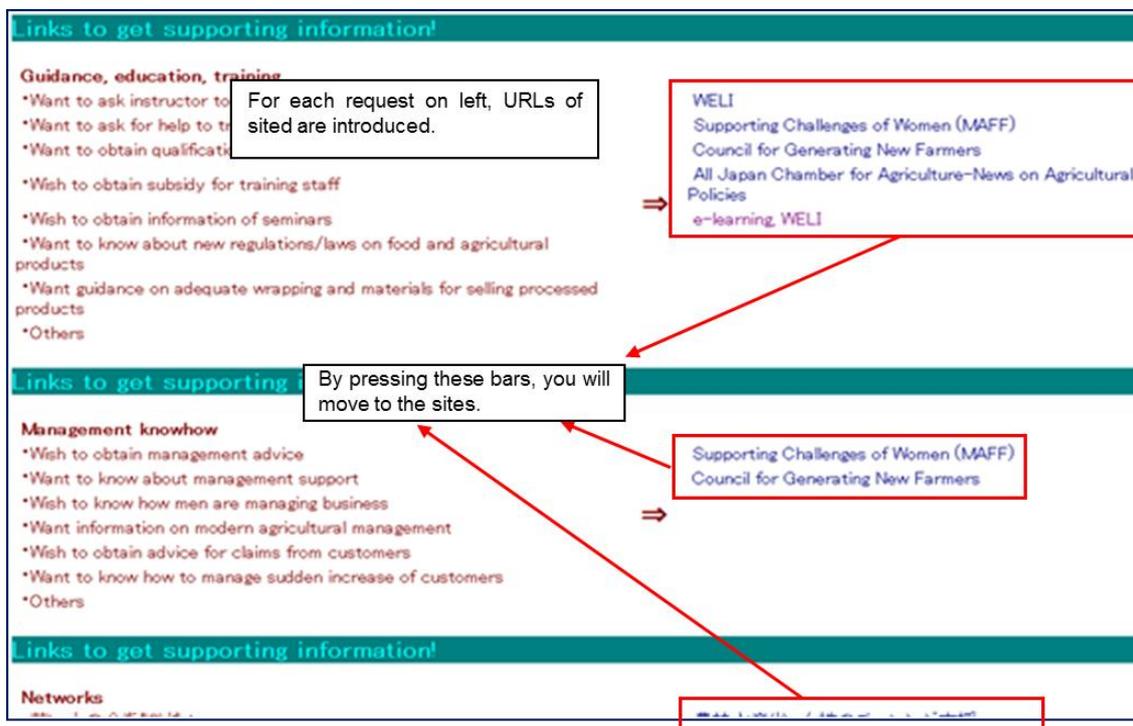


Figure 8. 'Links to get supporting information!'

In the top page, when you click one of the eight categories of supporting information marked with a big red square (Figure 7), you will move on to Figure 8

where you find more detailed requirements on the left, and the URL of useful websites to obtain the required information.

<2> **The second link is to page 'Here we are! In your neighborhood'.**

When you click a point on the map of north Kyushu, in the top page of Figure 7, you move to the second page, which is programmed to find those established entrepreneurs around your area, using the Google Maps JavaScript API V3. By plotting your place on the map, neighboring entrepreneurs and major facilities are indicated. It is programmed to show an area of 30 square kilometres surrounding your place. By using this page, you will be able to find fellow entrepreneurs with similar objectives or friends to ask for advice, in the neighborhood, regardless of administrative boundaries.

First, you look for your exact location on the map and click at the spot. Then a marker (green house with flag) appears on the map (Figure 10). Second, you click the green marker. Established entrepreneurs, major facilities and institutions in the 30 square kilometres of the location will appear (Figure11).

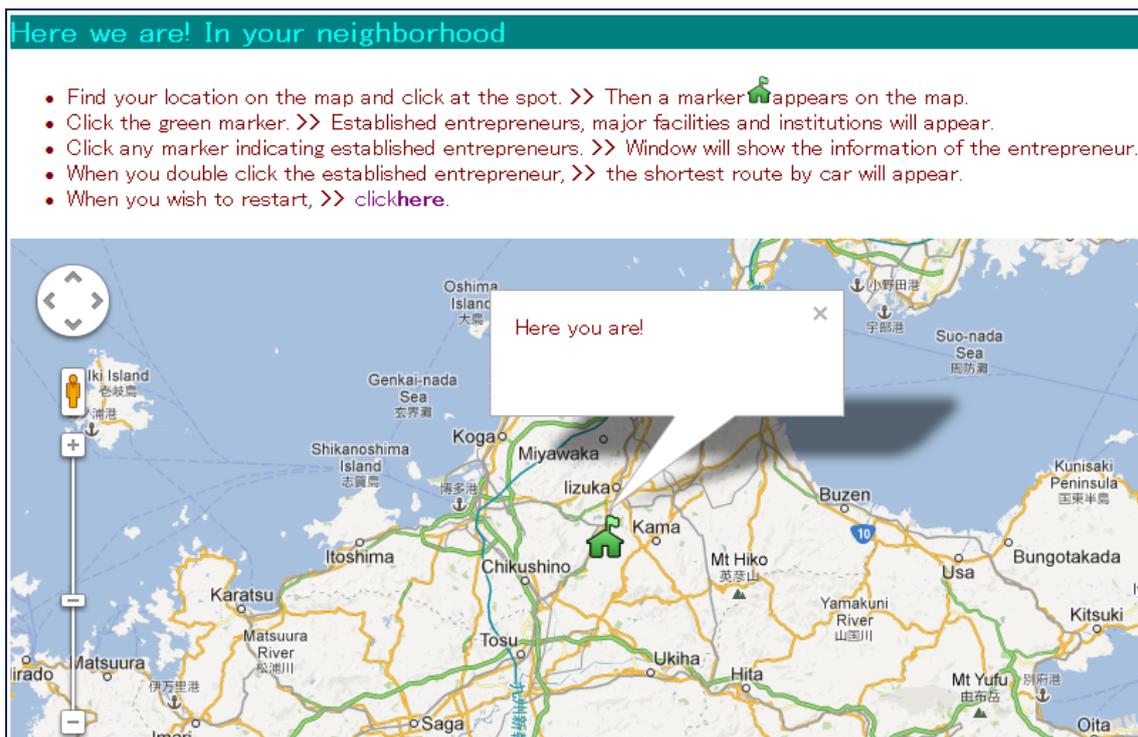


Figure 9. Your location



```

<meta http-equiv="Content-Type" content="text/html; charset=Shift-JIS" />
<meta name="viewport" content="initial-scale=1.0, user-scalable=no" />
<script type="text/javascript" src="http://maps.google.com/maps/api/js?sensor=false">
</script>
<script type="text/javascript">
function initialize() {
  var latlng = new google.maps.LatLng(33.214276,130.439644);
  var myOptions = {
    zoom: 13,
    center: latlng,
    mapTypeId: google.maps.MapTypeId.ROADMAP
  };
  var map = new google.maps.Map(document.getElementById("map_canvas"), myOptions);

  var latlng01 = new google.maps.LatLng(33.218836,130.437284);
  var latlng02 = new google.maps.LatLng(33.221826,130.437927);
  var latlng03 = new google.maps.LatLng(33.213414,130.437241);
  var latlng04 = new google.maps.LatLng(33.210506,130.439751);
  var latlng05 = new google.maps.LatLng(33.209011,130.432627);

```

Figure 12. First part of the source code

```

////////////////////////////////////
// *** クリックした現在地にマーカーを追加 *** //
////////////////////////////////////
// クリックイベントリスナーの追加
google.maps.event.addListener(map, 'click', function(event) {
  onMapClicked(event.latLng);
});
// オンマップクリック関数
function onMapClicked(ev){
  // マーカークラスのインスタンスを作成
  var marker = new google.maps.Marker( {
    position: ev,
    map: map,
    icon: 'image/rangerstation.png'
  });
  // ユーザーのクリック位置
  var clickLatLng=ev;
  var ido=ev.lat();
  var keido=ev.lng();

  // 情報ウィンドウの設定
  var infowind= new google.maps.InfoWindow({content: "こちら現在地です。" });
  // mouseoverイベントとmouseoutイベントの発生を知るための登録
  google.maps.event.addListener(marker, 'mouseover', function() {
    infowind.open(map,marker);
  });
  google.maps.event.addListener(marker, 'mouseout', function(){
    infowind.close(map,marker);
  });
  // ユーザーのマーカー上のクリックで、他施設の表示
  google.maps.event.addListener(marker, 'click', function(){
    if ( (latlng01.lat() < (ido + 0.14)) && (latlng01.lat() > (ido - 0.14)) ) {
      if ( (latlng01.lng() < (keido + 0.125)) && (latlng01.lng() > (keido - 0.125)) ) {
        marker01.setVisible(true);
      }
    }
  });
}

```

Figure13. Major operating part of source code

<3> The third link is to page ‘Learn from established entrepreneurs! On the Google map of all Japan’.

For the entrepreneurs who are starting business and who wish to develop their business further, the experiences of the established entrepreneurs will be of great help. In this page, we have located all the rural women entrepreneurs who participated in the



#### **4. Conclusion**

Major outcomes of this research are as follows:

- (1) By conducting interview survey to four established rural women entrepreneurs in north Kyushu area, we obtained some basic data to investigate what assistance is required for the female entrepreneurs in agriculture.
- (2) We developed and implemented a questionnaire survey on a nationwide basis to 423 potential respondents and collected 156 responses, which made the response rate 36.9 per cent, and used the data for statistical analysis.
- (3) We clarified the overall picture of rural women entrepreneurs, from empirical analysis consisting of three statistical methods. With the results obtained from the principal component analysis, the cluster analysis and the correlation analysis, we concluded that rural women entrepreneurs withhold the features of social entrepreneurs. There are many researches on rural women entrepreneurs however this study has empirically clarified that rural women entrepreneurs have the features of social entrepreneurs.
- (4) We classified the support required by the rural entrepreneurs and investigated the actual means of obtaining useful information.
- (5) Homepage to support entrepreneurs in agriculture was created with practical information for the receivers to actually utilize. By programming with Google Maps JavaScript API V3, a homepage to network those potential entrepreneurs in each area was developed, no matter whether they cross administrative boundaries.

In this way based on the statistical analysis of the data gained from the Interviews and the Questionnaire it was possible to create the Homepage for rural women entrepreneurs. If this tool can be utilized through the Internet to enable rural entrepreneurs with similar objectives to learn from each other and encourage one another, this will be most rewarding outcome for the researchers.

Furthermore as these rural women entrepreneurs are more interested in the social contribution of their work, particularly in revitalizing the region and educating children about food, they will become a new role model of social entrepreneurs when they are able to earn sufficient funds to sustain their businesses. This type of social business will be important not only in the industrialized countries but also in the developing countries that require international assistance in the rural areas.

## Notes

- <sup>1</sup> Actual questionnaire sheet can be found in KFAW Working Paper 2012-2 (KFAW 2012).
- <sup>2</sup> Response rate of questionnaires by post has dropped to around 10 per cent recently.
- <sup>3</sup> To review the status of women in rural areas, local authorities encouraged the women in agricultural cooperatives to improve their way of living by forming groups to help and learn from each other.
- <sup>4</sup> Agricultural cooperatives have practically ruled the local agriculture from finance, cultivating guidance to purchase of fertilizers, and even electrical appliances or insurances of each household.

## Bibliography

- Fujii, Wasa (2011). *Noson Josei no Shakaigaku, Chiiki Zukuri no Danjo Kyodo Sankaku* [Sociology of Rural Women: Gender Equality in Rural Development]. Showado.
- Hatta, Tatsuo, and Makoto, Takada (2010). *Japanese Agriculture, Forestry and Fishery; Strategic Vision for a Developing Industry*. Nihon Keizai Shinbun Shuppansha.
- Homma, Masayoshi (2010). *Gendai Nihon Nogyo no Seisaku Katei* [Political Process of Modern Japanese Agriculture]. Keio Gijuku Daigaku Shuppan.
- Ichida, Tomoko (2011). *Noka Josei no "Nogyo Banare" ni Hadome Kakaruka* [Can We Stop the Trend of Women Farmers 'Away from Agriculture? AFC Forum, December 2011.
- Katoh, Chieko, et al (2003). *SPSS de Yasashiku Manabu Anketo Shori* [Questionnaire Processing with SPSS]. Tokyo Tosho.
- Katsumata, Masashi (2010). *Google Maps API Puroguramingu Nyumon* [Introduction to Google Maps API Programming], ASCII Publishing.
- Kawate, Takuya (2006). *Gendai no Kazoku Keiei Kyotei* [Family Management Agreement]. Tsukuba Shoboh.
- Ministry of Agriculture, Forestry and Fishery (MAFF), Department of Women. *Noson Josei Kigyosu (Todofuken Betsu)* [Number of Rural Women Entrepreneurships (by Prefectures)]. edition of each year.
- \_\_\_\_\_. *Noson Josei niyoru Kigyo Katsudo Jittai Chosa Kekka no Gaiyo* [Summary of Survey Results on Activities of Rural Women Entrepreneurs]. edition of each year.
- Ministry of Internal Affairs and Communications (2008). *Employment Status Survey*.
- Nakamichi, Hitomi (2011). *Noson wo Genki ni Suru Kagi wa Josei no Shakaiteki Kigyo* [Key to Empower Rural Villages is Social Entrepreneurship of Women]. AFC Forum, December 2011.
- Nishiyama, Mima (2009). *Noson Josei Kigyo no Totatsuten to Sosharu Bijinesu eno Tenka* [Arrival Point of Rural Women Entrepreneurs and Development to Social Business]. In *Nogyo to Keizai* [Agriculture and Economics]. December, 2011.
- Ohsawa, Machiko (2006). *Waaku Raifu Baransu Shakaie* [Toward a Work Life Balance Society]. Iwanami Shoten.
- Sawano, Kumi (2012). *Shakai Kigyo wo Mezasu Noson Joseitachi – Chiiki no Ninaite toshiteno Noson Josei Kigyo* [Rural Women to Establish Social Enterprises; Rural Women Entrepreneurs as Local Actors]. Tsukuba Shoboh.

- Shinozaki, Masami (2011). *Nosanson Josei: Nogyo Josei* [Rural Women: Women in Agriculture]. *JAWW* (December 2011) *NGO Report*.
- Shodo, Toshiro (2010). *Shakai ni Yakudatsu' wo Shigoto ni suru Hitobito – Shakaikigyoka toiu Ikikata* [People with 'Useful for Society' Business, A Way of Social Entrepreneur]. Yosensha.
- Tsuru, Rieko (2007). *Noka Josei no Shakaigaku – No no Genki wa Onna kara* [Sociology of Rural Women: Power of Agriculture from Women]. Komonzu.
- Rural Women Empowerment and Life Improvement Association (WELI) (2006). *Nosangyoson Josei Kigyō 400 sen Zenkoku Mappu* [All Japan Map of 400 Selected Rural Women Entrepreneurs].
- WELI ed. (2010). *Hime Nomin ni naru* [Princess becomes Farmer]. Nobunkyo.