**Are Farmers an Endangered Species?: New and Beginning Farmers Forging New Communities of Support between Rural and Urban Consumers**

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ABSTRACT

Japan’s aging and declining farming population continues to exacerbate the decline of rural regions. As a response, there have been strong efforts from governments and local organizations to provide avenues of support for new and beginning farmers via a certification process which provides access to funding and subsidized loans. While the Ministry of Fisheries, Forests, and Agriculture (MAFF) promotes SDG Goal 2 under the premise of sustainable agriculture through Good Agricultural Practices (GAP) certification and grants for environmentally friendly farming, this does not directly extend to supporting new farmers who hold strong interest in farming sustainably. Based on semi-structured interviews with farmers and government officials in Shiga Prefecture, we observe strong trends of new entry farmer collaborations and community building such as hosting unique opportunities for urban consumers to participate in agricultural activities, engaging with their surrounding rural residents to help uplift their region’s rural revitalization efforts, and building organizations and spaces for mutual support. The spaces of connection and relationship building that this current generation of new farmers is bridging between rural and urban areas provides insights on how best to support the future of rural areas and more holistically promote sustainable agriculture. New and beginning farmers especially those who promote sustainable agriculture serve critical roles in reshaping rural communities as they build capacity for solidarity between rural and urban areas.

***Keywords:*** *new and beginning farmer, urban rural linkage, rural revitalization,*

INTRODUCTION

Japan, as one of the most urbanized developed countries, faces a critical shortage of new farmers. With approximately 75% of its population residing in cities, rural areas face abandoned farm land and an aging and shrinking population of farmers where the average age of farmers is 67 years old (MAFF 2018), one of the highest within OECD countries. Despite such decline, there are new and beginning farmers interested in sustainable food production and rural revitalization but are faced with various socio-economic and institutional barriers that make it difficult to actualize their vision. While their visions aligns with SDG Goal 2, target 2.4 which is defined as the implementation of “sustainable food production…. and resilient agricultural practices that increase productivity and production,” (SDG 2020) there are gaps among policy initiatives and current support structures to benefit new and beginning farmers. This paper focuses on how new self-employed farmers realize their visions of sustainable agriculture by understanding their motivations for entry, access to institutional support and financial resources, and connection between rural areas and urban consumers. The farmers in this study exemplify urban rural linkages through 1) their migration from urban to rural areas to begin farming and 2) their pre-existing network and marketing ability to facilitate urban-rural connections and their ability to cultivate relationships with urban consumers.

In 2017, MAFF established an initiative in 2017 to support new and beginning farmers (under the age 49) through their Next Generation Agriculture Investment Capital providing interest free loans and living stipends totalling USD $15,000 per year (MAFF 2019). This program catalysed the increase of new self-employed farmers, especially those who are under the under the age of 50 (see Table 1).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Total** | **Farm Successors** | **Newly Employed Farmers** | **New Self-employed Farmers** |
| **Year** |  | **<50yr** |  | **<50yr** |  | **<50yr** |  | **<50yr** |
| 2008 | 60,000 | 19,840 | 49,640 | 12,020 | 8,400 | 6,960 | 1,960 | 860 |
| 2010 | 54,570 | 17,970 | 44,800 | 10,910 | 8,040 | 6,120 | 1,730 | 940 |
| 2012 | 56,480 | 19,280 | 44,980 | 10,540 | 8,490 | 6,570 | 3,010 | 2,170 |
| 2014 | 57,650 | 21,860 | 46,340 | 13,240 | 7,650 | 5,960 | 3,660 | 2,650 |
| 2016 | 60,150 | 22,050 | 46,040 | 11,410 | 10,680 | 8,170 | 3,440 | 2,470 |
| 2018 | 55,810 | 19,290 | 42,750 | 9,870 | 9,820 | 7,060 | 3,240 | 2,360 |

Table 1: MAFF (2019) New Farmer Census Data

However, despite the intention to increase the number of new farmers, there is little assessment concerning what potential barriers exist for new and beginning farmers, particularly farmers who do not have an agrarian background. According to an agricultural extension center in Shiga Prefecture, many prospective farmers come with a strong desire to grow a wide variety of agricultural products using organic growing practices. However, in order to gain access to MAFF’s financial capital, new farmers are required to be certified. The certification process is largely dependent on a respective region’s agricultural policies which predominantly is aligned with conventional agricultural practices as organic agriculture in Japan makes up only 0.5% of the agricultural industry (MAFF 2018).

Japan’s agricultural sector is unique among OECD countries as it is comprised of largely small-scale and less-commercial farm households that work cooperatively and rely on values of strong uniformity to maintain and preserve rural society (Hisano et al. 2018; OECD 2009).  Rural hamlets whose community leaders hold extensive control and influence as place-based community institutions often maintain and promote a uniform mode of farming (McGreevey 2016; McGreevey et al. 2018). Likewise, Sawada (2001) points out that incumbent farmers welcome newcomers who can practice the same local farming methods and easily adapt to their social norms. Similar to many other countries, the notion of good farming rests on acceptance from incumbent farmers in the region (Burton 2004, Sutherland 2011). This research provides comparisons between new farmers who are certified and those who are not in order to assess the dynamics new and beginning farmers have in relation to their own motivations for farming, relationship with their respective rural communities, and connections to urban areas.

METHODS

We carried out semi-structured interviews from 2019 to 2020 to 13 new and beginning farmers located in various parts of Shiga Prefecture, engaged in participant observation for events related to new and beginning farmers, and conducted interviews with several agricultural extension agency officers. See Table 2 for a list of our cases. Each interview lasted between 90 minutes to 2 hours with additional farm visits and tours. Interviews were recorded and transcribed where questions were asked regarding their entry into farming, interactions with various regional agricultural associations and extension agencies, and production and market distribution processes. We define new and beginning farmer in accordance to MAFF’s eligibility to apply for the young farmer certification program. The eligibility requirements include those with less than 5 years of experience as a farm owner, under the age of 49 years old (although exceptions apply for those who hold specific knowledge and experience in agriculture related fields), has proven ownership or permission for the right to use farmland, and sales are conducted under the name of the farmer. Our sample provides evidence of both certified and non-certified farmers and focuses on farmers who come from non-farming backgrounds. By looking at this minority population, we aim to better assess the relationships made between urban and rural areas as many new entry farmers are often migrating from urban areas to rural areas (Rosenberger 2016, McGreevey 2016).

Fieldwork was conducted in Shiga Prefecture which is known for its strong agricultural production with 92% of farmland dedicated to rice but has faced an increase in production of vegetables as the demand for rice consumption has decreased.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Age/****Gender** | **Certification Status** | **Total Farm Size (area of greenhouses)** | **Farming method/****Crops** | **Distribution Streams** |
| A | Mid 40s MALE | CERTIFIED | 3.5ha | Organic non certified/30+varieties of vegetables,shiitake mushrooms | Direct sales market, Furusato Nozei (Tax Deductions) |
| B | Mid 40s FEMALE |
| C | Mid 30sMALE | CERTIFIED | 1.1ha(0.53ha) | Conventional (Reduced chemical-fertilizer and chemical-pesticide)/ Komatsuna and leaf vegetables, Melon | Consumers’Cooperative (via Rich-green)Direct Sales Market |
| D | Early 40sFEMALE | NOT CERTIFED |
| E | Late 20sFEMALE | CERTIFIED | 0.13ha(0.13ha) | Conventional/Strawberry | Farm Stand, |
| F | Mid 30sFEMALE | NOT CERTIFIED | 1.5ha | Organic non-certified/40+ varieties of vegetables | Farm Restaurant, CSA style box distribution, Restaurants, and Direct Sales Markets |
| G | Mid 30sMALE | NOT CERTIFIED |
| H | Early30sMALE | CERTIFIED | 0.53ha(0.07ha) | Conventional/Strawberry, Cabbage | Roadside station, School Lunches |
| I | Mid 30sFEMALE |
| J | Mid30sFEMALE | NOT CERTIFIED | 2.5ha | Organic non-certified/Rice, Miso,Rice flour, Koji | Online sales, direct sales, small grocers |
| K | Late30sFEMALE | NOT CERTIFIED | 1.5ha | Organic non-certified/50+ varieties of vegetable | Direct Sales Markets, Direct to Large Retailer |
| L | Early 40sFEMALE | NOT CERTIFIED | 0.2ha | Organic non-certified/Heirloom hot peppers | Online Sales, Direct to small retailers, value added products |
| M | Mid 30s FEMALE | NOT CERTIFIED | 0.7ha | Organic non-certified/30+ varieties of vegetables | Educational workshops, Cooking workshops, Direct Sales Markets |

Table 2: Index of Case Studies

RESULTS

In order to become a certified farmer, prospective farmers will contact either their municipal agricultural extension office or prefectural agricultural office to seek initial consultation. Either office will provide information on the certification process and serve as the point of contact in developing their farm plan which describes the farmers’ 5 years business plan. Prospective farmers need to establish a clear business plan that achieves a stable revenue stream within their first five years of farming. In Shiga Prefecture, the application requires that one provide evidence to meet the projected revenue forecast of at least $25,000 (USD) by the fifth year of farming. In developing their plan, applicants are encouraged to consult with various prefectural agricultural extension officers, JA employees, municipal government officers, and related organizations in their farming area of interest because the plan will be approved by a certification committee consistent of members from the above mentioned offices.

Certified Farmers

In order to be a successful farmer, one needs several assets and a stable income stream to create a viable livelihood. Assets include land, water, equipment, labour, inputs, and knowledge, as well as social networks to share information and develop potential collaborations or pooling resources (Carlisle et al. 2017). While many veteran farmers or farm successors have an established network to access and own the above assets, new farmers must work to establish these assets while learning how to be an effective farmer who can deliver stable harvests to meet their distribution demands.

 While the young farmer certification program provides financial capital and technical assistance, a little under half of the respondents in the study were certified young farmers. Almost all respondents who were certified, except for 2, grew mainly 1-3 speciality crops. Many of these farmers first began by working in larger agricultural enterprises or held prior careers in other industries before transitioning to farming (Farmer A,C,D,E,I). All stated that the certification process was relatively straight forward. For instance, Farmer E attended a local agricultural college where she first received knowledge about the certification process. The application process was easy for her as she had previously met many of the members of the certification committee through her interactions at the university. Those who obtained their certifications, often utilized the living stipend and access to loans to expand their production with the installations of greenhouses and other necessary equipment. Beyond access to financial capital, most respondents noted no particular difference in access to information or social networks as their status changed from non-certified to certified farmers.

**Non-certified Farmers**

Because each young farmer certification system criteria is largely based on a region’s master agriculture plan, regions that do not focus on organic agriculture creates an institutional barrier, making it difficult for new and beginning farmers to convince their certification committees that their farm management plans are viable as they fall outside of the prescribed master plan. All of the non-certified farmers practice sustainable growing practices. Typically low input ecological farming is more knowledge intensive (Gliessman 2016) and often relies on years of experience before reaching a state of success. However, respondents chose these growing practices as they best aligned with their motivation for farming and creating an environment for which they could share with others. Some of the respondents stated that they were met with significant doubt in regards to their desires to farm during their visits at municipal offices and therefore felt discouraged from applying. For instance, Farmer K was disqualified because her farm to lunch stand business conflicted with eligibility requirements. Farmer M did not qualify as she grew on land less than the minimum requirement. Others did not wish to apply as they had personal reasons for not wanting to apply, such as not wanting to rely on the government funds. While these farmers did not go through the certification process, they did utilize other resources from the prefecture and municipal offices for technical assistance, seminars, and training courses made available such as women farmer focused farm management curriculum.

Collaborations supporting new entry farmers

While the agricultural extension offices and municipal level agricultural administrative offices provide some technical assistance, farmer to farmer collaborations are self-organized. Collaborations can help expand a farmers’ economic resources via collective branding and shared communication with urban consumers. In Shiga, there are two organizations that facilitate new farmer collaborations, Rich Green and Shiga Women 100 Project. Rich Green, a business established in 2016, aggregates produce and distributes directly to four regional consumer cooperatives. Since 2019, they have 17-member farmers growing 17 varieties of vegetables. While they operate as a private company, the stockholders are the farmer members and operates as a de-facto farmers association where all members participate in regular meetings and cooperatively purchase farming materials and conduct skills-based trainings. 9 of its 17 members are new entry farmers and 11 of its members are under 50 years old. Their ability to aggregate their production provides stability to meet the supply demand coming from consumer cooperatives where most members reside in urban areas. Shiga Women 100 Project is a women farmers’ organization established in 2018 and operates as an organization to support women farm owners. Led and operated by women farmers, their vision is to provide mutual aid via shared marketing and product and event collaborations. With over 20 members they market their agricultural products under the shared banner of Shiga Women 100 Project as a way to strengthen one another’s market presence. Such networks not only allow for the exchange of information but build additional financial capacity to promote one another’s farming operations.

DISCUSSION

Moving beyond socially entrenched norms

Although the young farmer certification program is designed to incentivize future farmers, its current structure is dominated by the perspectives of incumbent agricultural leaders who occupy the seats of the certification committee and where their views are often limited to maintaining the status quo (Hara et al. 2017). These incumbent leaders’ strict adherence to upholding uniformity often fuels the very problem associated with rural decline where many younger generations seek escape from pressures of conformity and mundanity. The tension that exists between new and beginning farmers seeking freedom to practice their desired style of agriculture and incumbent rural leaders who wish to maintain the status quo will continue to pose a threat for incoming prospective farmers.

 Based on our case study, non-certified farmers and farmers who hold more unconventional growing styles such as sustainable or organic growing practices face difficulty in accessing financial capital because there is very little room for experimentation or approaches for innovation within a region’s master plan. Despite MAFF’s declaration of support of sustainable agriculture under their initiative to support environmentally friendly growing practices (MAFF 2018), there is a strong lack of direction in implementing the SDG goal 2.4 of sustainable agriculture in relation to new and beginning farmers who would be potential practitioners of this SDG target. As each region holds its own autonomy in carrying out its agricultural policies, support for sustainable food production does not translate across regional scale or impact new and beginning farmer support infrastructure. Therefore, new and beginning farmers’ ability to realize their visions is confined to their own ability to self-finance or seek outside financial resources, despite the existing support infrastructure allocated for new farmers. As the number of certified new and beginning farmers continues to decline nationally, a different orientation for problem solving is becoming visibly necessary.

Connecting with Urban Consumers and Benefits of Collaboration in face of COVID-19

Regardless of certification status, all farmers in this study show strong dedication towards strengthening their rural areas and building with urban areas. They are actively engaged in their rural communities via community beautification projects, volunteering for community firefighting units, hosting educational events on the farm to bring local children and families to learn about agriculture, visiting surrounding high schools to discuss farming as a potential career, and establishing farm stands that serve as symbols of pride for their community. As the next generation of farmers in their respective regions, there is a great sense of responsibility and call to action in ensuring that there is a sustainable future for their community. In addition, these farmers have greater capacity and ability to build connections between urban and rural areas due to access to technology, social networks obtained from their time living and working in urban areas, and willingness to engage in building horizontal connections with other farmers and people outside of their locality.

These direct connections and relationships with urban and rural consumers also provides the infrastructure for communication which proves useful in times of crisis, like the current COVID-19 pandemic where Japan faced a brief period of lockdown where many restaurants, schools, and offices were closed to curtail the spread of the novel corona virus. Farmer H who was growing 30a of cabbage destined for school lunch was forced to throw away his entire crop as he had no ability to pivot. Although Farmer H had crop insurance to cover the financial loss, there was very little time or capacity to redistribute the harvest. On the other hand, Farmer F and G who run a farm restaurant used the lockdown as an opportunity to pivot and practice flexibility and launched a direct vegetable box scheme and delivered a box of produce to interested consumers. Using social media and their own established network, they quickly distributed many boxes of lettuce greens and spring/summer vegetables.

In addition, benefits that come from the relationships shared between producer and consumers can spur the potential for new social innovation. For new farmers, they are often able to leverage their prior connections in urban areas to develop their own social capital to build bridges between urban consumers and rural areas. With a strong community base, crises like the current pandemic do not have to create winners or losers because support systems can practice flexibility and resilience.

CONCLUSION

This paper assesses how new self-employed farmers navigate the start of their farming careers. Since 2012, MAFF has made significant efforts to attract new farmers by offering a generous living stipend upwards up to 7 years. However, financial support is not enough particularly for new farmers with farming plans that do not adhere to region’s agricultural plan and those who practice sustainable agriculture. In such instances, many new farmers must build their own systems of support and leverage their own social capital to secure stable income streams. The collaborations that occur among new and beginning farmers and their ability to connect with urban populations provides more flexibility and autonomy and build a better platform of support for sustainable agriculture. Crises like COVID-19 show that new farmers that have already established relationships with consumers are better able to withstand changes in the market and survive situations like lockdowns. In order to close the gap between the goal of sustainable agriculture and its current support mechanism for certification and financial subsidies, there needs to be more tailored support to ensure that new and beginning farmers who pursue sustainable agriculture have access to proper technical assistance and infrastructure to ensure that sustainable food production and distribution can be achieved. The current state of organic agriculture in Japan leans towards high end specialized markets and does not have the distribution infrastructure to enable greater access for the general public.

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