



## East Meets West in an Entrepreneurial Farming Village in Japan: Endogenous Development Theories and Economic Gardening Practices

Takashi Yamamoto

In this paper, I discuss one possible link between entrepreneurship and economic growth at the municipality level. I compare “endogenous development” theories developed separately in Europe and Japan to create community-based economic growth and to maintain local resources and industries. Japanese theorists pay more attention to the contribution of entrepreneurs. I relate endogenous development theories to the “economic gardening” approach introduced in an American city, practiced in many cities inside and outside the United States, and consistent with endogenous development theories in that it encourages the growth of local business. To demonstrate the validity of the application of endogenous development theories and the economic gardening approach in Japan, I introduce a case study of rural economic development in Ogata, a Japanese farming village, that involved significant achievement by entrepreneurs. I conclude that entrepreneurship matters in local economic development, because entrepreneurs with proper support mechanisms function as effective change agents in the economy.

---

The authors of a college textbook on principles of economics explain that there are four types of production resources in an economy: physical and human capital, labor, land/natural resources, and entrepreneurship.<sup>1</sup> Economies grow more rapidly with the full exercise of entrepreneurship. Neoclassical macroeconomists, however, do not have a unified view of how entrepreneurship would grow output in an aggregate production function. Entrepreneurship may contribute to the improvement of productivity through innovation, or it may transform the industrial structure by

---

<sup>1</sup> Robert E. Hall and Marc Lieberman, *Economics: Principles and Applications*, 3rd ed. (Cincinnati, Ohio, 2005).

---

**Takashi Yamamoto** <yamamoto@aiu.ac.jp> is associate professor of economics at Akita International University, Japan.

creating markets without government intervention. Despite the diversity in theoretical views, recent surveys such as that conducted by the Global Entrepreneurship Monitor show that there is a positive correlation between entrepreneurship and economic development.<sup>2</sup> This would be applicable not only at the level of the national economy, but also at the regional or municipality level. In an environment established to encourage and develop entrepreneurship, a rural economy could grow without major increases in capital and labor.

In this paper, I discuss one of the possible links between entrepreneurship and economic growth at the municipality level. First, I compare endogenous development theories discussed by sociologists and economists in Europe and Japan, and relate these theories to the “economic gardening” approach. Economic gardening, introduced in an American city in the 1980s, has been practiced in many U.S. cities and in some other countries. Then I discuss an endogenous development case study of a Japanese farming village where innovation and promotion of entrepreneurship were emphasized. Because the effectiveness and the applicability of the programs and the promotion of entrepreneurship at a micro level have not been widely recognized in Japan, this example provides a new perspective on strategies of local business development.

### **Comparing Endogenous Development Theories**

Endogenous *development* theories, unlike the endogenous *growth* theories discussed by macroeconomists, emerged in Europe, North America, and Japan in the mid-1970s. Sociologists and economists proposed the theories in their attempts to create models for community-based economic growth that would maintain and enhance local resources and industries. They criticized previously used exogenous strategies for massive centrally planned development, which brought in resources external to communities and did not actively involve local community members in the decision-making process. In Japan, a common strategy has been to develop industrial and business parks and to provide incentives to attract business, increase employment, and develop the local economy. Attracting business to local sites remains a strong option for regional economic vitalization.<sup>3</sup> Using the language of a fable, the strategy is similar to creating a pond to attract migrant birds that lay golden eggs. Local communities could obtain the benefit of the golden eggs so long as the birds stay in the pond. This strategy becomes less effective when there are similar ponds in many places, and a detriment to the community owning the pond, because

---

<sup>2</sup> Niels Bosma and Rebecca Harding, *Global Entrepreneurship Monitor 2006 Results*, 12. Downloaded on February 28, 2007, URL: <http://www.gemconsortium.org/>.

<sup>3</sup> Hidehiro Tokumasu, “Senryaku-teki Ricchi ni yoru Chiiki Kasseika” [Regional Economic Vitalization through Strategic Business Attraction], *Keizai Sangyo Janaru* [Economy and Industry Journal] 428 (Dec. 2006): 22-25.

economic globalization makes it less costly for birds to choose other ponds that are more attractive.

Monica Diochon summarizes five factors that contributed to the policy shift from exogenous to endogenous approaches:

- governments with tight budgets searched for more cost-effective alternatives;
- economic environment became more unpredictable on the national or regional level;
- many large industrial firms underwent restructuring and change strategies, increasing both the number and the interdependence of stakeholders;
- there is a growing perception that traditional policies have not produced the expected results; and
- industrial development in some European regions exhibited territorial diffusion and a greater role for small firms, suggesting that spatial differences in institutional, social, cultural, and political factors within nations and regions interact to influence the nature and scope of economic development.<sup>4</sup>

Antonio Vázquez-Barquero provides a good review, especially of the European literature. He identifies four roots of European endogenous development theories (see Table 1 for a summary). The first is the “high theory of development,” which looks at externalities in local economies that bring increasing returns to scale. The second is a dualistic growth theory that involves capital accumulation during the growth process. The third theoretical root is dependency theory, which explains the dominated position of the peripheral economies. Endogenous development theory and dependence theory share the view that technological dependence restricts economic growth and that connection with the center would promote economic growth in the peripheral economies. The fourth root is a territorial development theory that focuses on local initiatives and local control of development process. Finally, Vázquez-Barquero concludes:

endogenous development pursues the satisfaction of local needs and demands through active participation of the local community in the development process. This development strategy not only proposes to improve the production side (agricultural, industrial, services), but also to promote social and cultural dimensions that affect the well-being of society.<sup>5</sup>

Although all endogenous development theories share the same major concepts, there are some differences between the Western and Japanese theories, the largest being in the interpretation of the source of local

---

<sup>4</sup> Monica C. Diochon, *Entrepreneurship and Community Economic Development* (Montreal, 2003), 13.

<sup>5</sup> Antonio Vázquez-Barquero, *Endogenous Development* (New York, 2002), 22.

economic development. European and American theorists argue that a set of processes determining capital accumulation creates an environment in which economic transformation and development processes occur, and

TABLE 1  
Theoretical Roots of Endogenous Development

Endogenous Development Characteristics	High Development Theory	Dualistic Growth Theory	Dependence Theory	Territorial Development Theory
<b>Development potential</b>				
Resources	X	X	X	X
Indivisibilities	X	-	-	-
<b>Capital accumulation</b>				
Application of surplus	X	X	X	-
Innovation	X	X	X	-
Flexible labor market	-	X	X	X
<b>External economies of scale</b>				
Organization of production	X	-	-	-
Networking	-	-	-	-
Urban relations	-	-	X	-
<b>Institutional context</b>				
Institutional flexibility	-	X	X	-
Organization of society	-	X	X	-
<b>Local action</b>				
Local initiatives	-	-	-	X
Local control of development	-	-	-	X

Note: X indicates convergence between the main development paradigms and the endogenous development theory.

Source: Antonio Vázquez-Barquero, *Endogenous Development* (New York, 2002), 31.

that local development policies will lead to efficient local response to the challenges of economic globalization. According to Vázquez-Barquero,

The endogenous development approach argues that economic development comes about as a result of the processes determining capital accumulation: creation and diffusion of innovation in the productive system, flexible organization of production, the generation of agglomeration and diversity economies in cities and institutional development. Moreover, it identifies a path of self-sustained development of an endogenous nature by maintaining that the processes contributing to capital accumulation

generate external and internal economies of scale, reduce production and transaction costs, and favour economies of scope.<sup>6</sup>

In contrast, Japanese theorists emphasize the importance of “key persons,” who perform as change agents in the local economy. Providing a sociological perspective, Kazuko Tsurumi introduces the concept of key persons from the work of a Japanese philosopher and applies it to endogenous development. Key persons can be understood as Schumpeterian entrepreneurs, leading the local economy and connecting it with other economies:

“Key persons” are those who would undertake suffering creativity, and think of and implement what is not likely to happen otherwise. Key persons intend to reduce “irrational” burdens which community members are not responsible for, but which fall onto them. Key persons in the process of endogenous development are actors in the local community and contribute to changes in daily life, not necessarily revolutions. . . . Key persons in endogenous development are entrepreneurs who pay attention to the social structure of the community, its traditional technology modes, the relationship between traditional and advanced technology, and concrete changes in the community.<sup>7</sup>

Observing the development of local firms in rural China, Tsurumi explains the role of and requirements for key persons in the economic development process at the community level.

The first requirement of key persons is to recreate a tradition-based production process and production technology to establish a breakthrough under current conditions. If the current production process is not based on traditional technology, key persons would devote themselves to learning imported technology. The second requirement is to take risks and make choices. Key persons have to decide when, how, and which product to produce, how much, to whom to sell. They have to bear risks. The third requirement for key persons is to reduce irrational burdens on community members. Local firms in China return a part of their profit to improve the welfare of the local community. So long as this principle is being implemented, the interregional gap between income and output will get smaller.<sup>8</sup>

---

<sup>6</sup> Ibid., 7.

<sup>7</sup> Kazuko Tsurumi, “Chugoku Nomin Kigyoka ni Mirareru Ki pasun” [Key Persons among Rural Entrepreneurs in China], *Naihatsu-teki Hattennron ni yoru Paradaimu Tenkan* [Paradigm Shift through Endogenous Development Theories] (Tokyo, 1999), 204-6 [translations by the author].

<sup>8</sup> Ibid., 227-28.

The similarities and differences between European and Japanese endogenous development theories and between those and exogenous development theories are summarized in Table 2.

### **Economic Gardening**

Although endogenous development theories remain valid, we need to include economic globalization, which is more pervasive than that it was thirty years ago. Local communities have become more sensitive to changes in the economic environment. Given this situation, we expect endogenous development theories to be dynamic, showing how local economies can cope with economic changes.

The “economic gardening” approach, which has attracted the attention of local economic development specialists, is an entrepreneurial approach for local economic development that had its origins in the United States in Littleton, Colorado, in 1989.<sup>9</sup> Its basis is conventional and practical wisdom, rather than a specific economic development model. The approach emphasizes investing in local businesses rather than the traditional approach of attracting big firms to the local community by offering incentives and tax breaks. Its aim is to let local business growth develop the economy.

The goal of the economic gardening approach is to create and develop a climate or an ecological “habitat” where entrepreneurial “plants” can grow. “Habitat” is a metaphor borrowed from ecology to describe the conditions under which entrepreneurial firms can start up, grow, get large, and eventually take their place among the major firms of an economy. The entrepreneurial habitat has in it entrepreneurs, business managers, venture capitalists, and banks; research universities; engineers, scientists, technicians and industrial designers; accountants, finance specialists,

---

<sup>9</sup> Unless otherwise attributed, I owe the explanation in this section to Steve Quello and Graham Toft, “Economic Gardening: Next Generation Applications for a Balanced Portfolio Approach to Economic Growth,” in U.S. Small Business Administration, *The Small Business Economy: A Report to the President 2006* (Washington D.C., 2006), 157-190; and the website of the City of Littleton; viewed October 16, 2006. URL: <http://www.littleton.gov/bia/economicgardening/>.

**TABLE 2**  
**Characteristics of Exogenous and Endogenous Development Approaches**

<b>Characteristics</b>	<b>Exogenous Approach</b>	<b>Endogenous Approach (European and American)</b>	<b>Endogenous Approach (Japanese)</b>
Source and nature of development impetus	Factors external to the local or regional economic and social system largely determine development, requiring mobility of capital and labor.	View critical change factors as inherent in the local or regional economic and social system.	Motivated “key persons” function as change agents. Utilization of local resources including culture and custom is important for development.
Structures	Bureaucratic top-down organizational structure as basis for production and support of economic activities.	Flexible organizational structures of local production and support	Flexible organizational structures of local production and support. Focus on networking and connection with upstream- and downstream-industries
Key values underlying initiatives	Dependency on large-scale enterprise and central government policies for initiatives and control of development	Endogenous entrepreneurship and innovation are key success factors for competitive advantage in global economy.	Endogenous entrepreneurship and innovation are key factors. Self-governance of the local community is essential.
Development strategy	Pursuit of growth through urban-based large-scale enterprise based on standardization and capital intensiveness.	Incentives for capital accumulation by local small firms. Small firms key to development, with emphasis on specialization and skill; tendency toward de-urbanization.	Reducing transaction costs for local small firms. Collaboration with firms and/or consumers in urban area.
Decision-making	Top-down decision-making initiated outside the local area by a limited number of professionals and / or others in centralized locations.	Broad-based local participation, decision-making; use, development, and control of local resources.	“Bottom-up” decision-making through local participation; use, development, and control of local resources; local ownership and leadership
Goals	Primary goal: reduction of disparity	Primary goal: growth	Primary goal: sustainable growth of local community

Developed by author based on Table 1, Monica Diochon, *Entrepreneurship and Community Economic Development* (Montreal, 2003), 20.

marketing and sales specialists; and special government policies and regulations.<sup>10</sup> The better the habitat, the faster and wider economic growth we can expect.

One link between entrepreneurship and local economic growth concerns the accumulation of “entrepreneurship capital.” David Audretsch and Max Keilbach discuss the concept of the “entrepreneurship capital” of regions in explaining regional differences in output and productivity.<sup>11</sup> Entrepreneurship capital is defined as a regional endowment with factors conducive to the creation of new businesses, and it is expected to exert a positive impact on economic output. The entrepreneurship capital involves individuals willing to take the risk of starting up a new business, a regional milieu that encourages start-up activities, the existence of formal and informal networks, a general social acceptance of entrepreneurial activity, and the activities of bankers and venture capitalists willing to share risks.

The primary focus of the economic gardening program is on providing market information to local business to increase their competitiveness and probability of success. Another pillar of the program is attention to infrastructure, to create a town where entrepreneurs want to live and people want to do business. A third emphasis is on building connections among local businesses by facilitating industry clusters and cross-marketing opportunities, and by strengthening connections between industry and the higher education sector. Both U.S. communities and those in other countries began employing similar strategies.

In the economic gardening approach, the provision of government services is not viewed as “crowding out” private business. In the 1970s, some public projects failed to provide efficient public goods, though their original intent was to correct market failure. Within an economic gardening framework, government does more than make markets work. Rather, it intends to facilitate more cooperation among local firms and organizations. Promoting incentives for cooperation makes the efficient and effective provision of public goods possible. Mark Henricks praised the concept of incentives to assist entrepreneurship in the economic gardening approach in an article in *Entrepreneur* magazine: “All told, economic gardening is a more comprehensive approach to help entrepreneurs than any economic development efforts to date.”<sup>12</sup>

What was the effect of the economic gardening program on Littleton? The short answer is that the strategy successfully increased business

---

<sup>10</sup> Edward A. Feigenbaum and David J. Brunner, “The Japanese Entrepreneur: Making the Desert Bloom,” Stanford University, 2002, Stanford Project on Regions of Innovation and Entrepreneurship.

<sup>11</sup> David B. Audretsch and Max Keilbach, “Entrepreneurship Capital: Determinants and Impact,” Discussion Papers on Entrepreneurship, Growth, and Public Policy, no. 2004-37, Max Planck Institute of Economics.

<sup>12</sup> Mark Henricks, “Rural Renewal: Can Entrepreneurs Help Boost Small-Town Economies?” *Entrepreneur* (July 2005), 15-16.

employment and tax revenues for the local government. Christine Hamilton-Pennell reported on changes in the Littleton economy since the inception of the economic gardening program in 1989. She found that:

the number of jobs created in the city has doubled, from nearly 15,000 to around 30,000. Likewise, sales tax revenues tripled during the same period of time, from \$6.8 million to \$19.6 million. This occurred during two major recessions, and with the city's population rising by only 30 percent. The city also spent no money on incentives or tax breaks to recruit businesses during that time.<sup>13</sup>

We cannot attribute all these positive changes to the economic gardening program without detailed quantitative analyses, which are not yet available. Nevertheless, Quello and Toft found that “overall evidence indicates that economic gardening has most likely been a positive force in Littleton, serving as an affirmative catalyst for economic growth and encouraging a culture that supports entrepreneurship.”<sup>14</sup>

### **The Case of Ogata Village**

Although no Japanese organization has claimed implementation of employment policies based on either endogenous development theories or the economic gardening approach, the case of Ogata Village illustrates the importance of entrepreneurship and “key persons” for economic development in rural environments. Ogata Village in Akita Prefecture has employed an approach similar to economic gardening. With its highly specialized rice production, Ogata Village has promoted a “produced locally, consumed locally” policy, developed a public-private partnership in agriculture, and initiated internship and entrepreneurial programs in cooperation with personnel service firms in Tokyo. This is an innovative approach in rural Akita, the least entrepreneurial area in a country, which is recognized as one of the least entrepreneurial economies in the world according to the Global Entrepreneurship Monitor reports.<sup>15</sup> The history of economic development in Ogata Village validates the application of endogenous development theories and the economic gardening approach in Japan.

Ogata is a village of just over 3,000 people located in Akita Prefecture, one of six administrative bodies comprising the Tohoku area, in the northeastern part of the main Japanese island of Honshu.<sup>16</sup> It was created

---

<sup>13</sup> Christine Hamilton-Pennell, “CI for Small Business: The City of Littleton’s Economic Gardening Program,” *Competitive Intelligence* 7 (Nov./Dec. 2004): 13-14.

<sup>14</sup> Quello and Toft, “Economic Gardening,” 173.

<sup>15</sup> Bosma and Harding, *Global Entrepreneurship Monitor 2006 Results*, 13.

<sup>16</sup> I owe the background information on the history of the village to Donald C. Wood, “Fragmented Solidarity: Commercial Farming and Rice Marketing in an Experimental Japanese Village,” in *Anthropological Perspectives on Economic Development and Integration (Research in Economic Anthropology)*, ed.

by reclaiming Lake Hachirogata, which was the second largest lake in Japan, containing over seventy fish species. The reclamation of Hachirogata, completed in 1977, took twenty years and cost \$852 million. It yielded 17,203 hectares of new land, named “Ogata Village” when it was officially established on July 22, 1964. The purpose of the village was to develop a model for agricultural management and a new type of agricultural society. The government recruited 580 settlers between 1966 and 1974 through a national application and interview program. Selected heads of households, who had taken examinations, first visited the village alone and spent one year training to handle the large machines and to manage the expansive fields. During this time they also got to know each other and formed communal production groups of five to ten individuals. Upon completion of their training, the men were joined by their families and they moved into their identical, concrete-block houses. Settlers took out 25-year loans on both their farmland (a contiguous 10-hectare block) and their residential property. The government-sponsored settlement of Ogata Village took place in five waves. The first wave entered the village in late 1967, the second in 1968, the third in 1969, the fourth in 1970, and the fifth and final wave of settlers took up residence in Ogata Village four years later, in November of 1974.

In 1975, the government ordered Ogata Village farmers to cut and destroy all green rice plants in their fields in excess of the government limit. Known as the “*aogari mondaï*” (“cutting of green rice problem”), this episode marked the beginning of a succession of policies on the part of the government that eventually split the fledgling community in two. It was a part of a larger plan to force farmers to produce less rice through reduction programs, known as *gentan*, that set production limits. Despite these restrictions, Akita Prefecture had the most bountiful rice harvest ever for that year, with an average of 107,576 kilograms per 1,000 square meters (1/10th of a hectare) under cultivation. Nearly all Ogata Village farmers complied with the 1975 order to cut and burn perfectly healthy rice plants. Even so, many felt that the government had cheated and severely mistreated them, particularly because they received no compensation for their losses. Entrepreneurial farmers of the village, who had been most eager to stop participating in the communal production group system, began to drift apart politically from those who felt that open resistance would not be effective.

Today, we can classify Ogata Village farmers as belonging to one of five categories regarding their rice-marketing strategies. These are those who: use the Country Elevator Corporation, a joint-stock corporation owned primarily by the Ogata Village Agricultural Cooperative; use the Akita Komachi Corporation, a joint-stock company that was founded in 1987 by

a fourth wave settler, Toru Wakui; divide their rice between the two; belong to marketing organization; and sell their rice independently. Roughly three-quarters of the village's approximately 550 farming households fall into the first three categories, while the remaining quarter falls into the final two categories.

Development of agriculture in Ogata Village is unique in many ways. First, the village was artificially planned and developed, and attracted settlers from the entire country. Thus, outsiders built the community. Second, the creation of the village was a national project. The national government initiated the reclamation and land development to create paddy fields and increase rice production, creating infrastructure such as irrigation and roads before establishing the village. The settlers had to repay the loan for infrastructure investment. Third, agriculture in Ogata Village is carried out on a much larger scale than in other municipalities. Approximately 77 percent of the labor force in the village is engaged in agriculture. Rice production comprises more than 90 percent of the agricultural output. These ratios are the highest of any Japanese municipality. Finally, the change in national agricultural policy caused local entrepreneurs to develop their own marketing approaches. Formerly, one national goal was to increase rice production to be self-sufficient. However, the Japanese government announced a reduction in rice production in 1970 after years of good harvests and declining rice prices. Some groups of farmers in Ogata Village observed these national policies, but some chose to resist and keep producing rice. Local agricultural cooperatives purchase the rice, resell it to the national union of agricultural cooperatives, which then sells it to consumers. Some farmers attempted to sell rice directly to consumers without dealing with the agricultural cooperatives. In 1995, the Japanese government deregulated pricing and production of rice, and this new situation created advantages for local entrepreneurs trying to diversify products and marketing.

Statistics show that Ogata Village is economically successful. Its gross municipality product in 2003 was 19,178 million yen (\$166,765,000), 9 million yen higher than the previous year. Increases in agricultural output contributed to growth in the gross municipality product. The municipality income per capita in Ogata Village in 2003 was 3,938,000 yen (\$34,243). This was the largest among municipalities in Akita Prefecture, and 1,595,000 yen (\$13,869) higher than the prefecture average. In another measure, the municipality income per capita at Ogata Village relative to the prefecture average is 168.2. In the twenty-first century, income per capita in Ogata Village has been the highest since 1990 and the "IT (Information Technology) bubble" during 1999 and 2000.

To understand Ogata Village's specialty, the industrial sector, we can measure the value of sector centrality, the index of population specialization of an industrial sector in each municipality. This is obtained using the following equation:

$$IPS_i = \frac{\left( \frac{Rh_i}{RH} \right)}{\left( \frac{Po_i}{PO} \right)}$$

where:

$IPS_i$  = Sector centrality (index of population specialization of an industrial sector in each municipality)

$Rh_i$  = Annual production output of each municipality

$RH$  = Annual production output of Akita Prefecture

$Po_i$  = Population of each municipality

$PO$  = Population of Akita Prefecture

The 2003 value of sector centrality index shows that Ogata Village specialized in agriculture, as well as wholesale and retail commerce. Ogata Village's sector centrality value of agriculture was 0.7598. No other municipalities in Akita had an agriculture value exceeding 0.09. The value of commerce (wholesale and retailing) in Ogata Village was 0.3119, which is larger than that of the major cities in Akita Prefecture. The second highest value of commerce was in Yokote City, at 0.2417. The index value in Akita City, Prefectural capitol, was 0.2282. Ogata Village is less specialized in the manufacturing, transportation and communication, and construction sectors, according to the value of sector centrality. These numbers reflect the industrial structure and comparative advantage of Ogata Village.

### Analysis

The creation and development of Ogata Village do not at first glance look like examples of economic gardening policies, because the village resulted from a national project with a huge capital investment. However, we can find similarities among the agricultural development in Ogata Village, endogenous development theories, and the economic gardening approach. The unique resources that the village possesses include direct marketing channels to sell rice products to consumers; a variety of agricultural products in addition to high-grade rice; and tourism facilities built by the village.

The economic development of Ogata Village would have been different if there were not entrepreneurs like Toru Wakui, president of the Akita Komachi Corporation. Wakui arrived as a settler in Ogata Village in 1970. He was one of the farmers who chose not to obey instructions from the national and prefectural governments to reduce rice production. In 1987, his company was the first in Japan to begin to sell rice through direct marketing to consumers. His intention was to build a "bridge" between producers and consumers of rice, urban and rural areas, and business

management and agriculture.<sup>17</sup> Today, Akita Komachi Corporation employs 160 people at its headquarters in Akita and at branches in Tokyo, Sapporo, Nagoya, Osaka, and Fukuoka. They sell high-grade rice and a variety of rice-related products, including health supplements made from rice. They make their products from organic rice produced by 180 associated farmers in Ogata Village.

Lee Hanson of California State University developed criteria for a local effort to introduce economic gardening to those concerned with economic development in various jurisdictions. We can use these criteria to select companies that will most likely benefit from economic gardening assistance: The owners portray a genuine interest in assistance; the company is growing; management seems to value innovation and new ideas; business is local, rather than a corporate subsidiary; there is a cluster of companies.<sup>18</sup>

The successful farmers represented by Wakui fit these criteria. The village did not target them as successful candidates, but provided an environment where entrepreneurial and innovative farmers grew. The success in Ogata Village was enhanced by the initial development of physical infrastructure and the lack of a stagnant relationship among farmers. The major reasons for success, however, were the entrepreneurs, who acted as the change agents for the local economy, and the cooperation among farmers, agricultural specialists, and the village government.

The success in Ogata Village offers a good lesson for other local economies in Akita and other prefectures, although they would face challenges. We know Japan as one of the least entrepreneurial economies in the world. Further-more, entrepreneurship is weaker in Akita than in other prefectures. Collaboration among industry, academic, and public sectors is not strong. Many local economies in Akita Prefecture are not as entrepreneurial as Ogata Village; only a small number of firms have been established despite the encouragement of deregulatory policies. When the Japanese government initiated a waiver of the minimum capital requirement for establishing a corporation in 2003 to promote start-ups, only thirty-five companies were established in Akita in 2003 and 2004, the second lowest number among all Japanese prefectures. The Tohoku Regional Bureau of Economy, Trade, and Industry commented that the reluctance to start up businesses might reflect the prudent attitude of the Akita people, who do not start something until others do.<sup>19</sup> To overcome this cautious culture and promote entrepreneurship, it is better for governments to support “intrapreneurship” so the creation of new businesses within existing firms can promote start-ups. Hitoshi Suga,

---

<sup>17</sup> Yoko Osada, “Interview with Toru Wakui,” *Tohoku no Kigyoka Tachi* [Entrepreneurs in Tohoku Region] (Sendai: Hokutosha, 1996), 108-13.

<sup>18</sup> Riaan Rossouw and Marianne van der Walt, “Economic Gardening for Development,” University of Potchefstroom, 2003.

<sup>19</sup> *Akita Sakigake* newspaper, 18 Feb. 2005.

senior member of the board of directors at several venture firms in Japan, argues that promotion of intrapreneurship and aggressive marketing would have positive impacts on local economies.<sup>20</sup>

### **Conclusion**

My purpose was to discuss one possible link between entrepreneurship and economic growth at the municipality level, through theories and cases. I described how scholars developed endogenous development theories independently in Europe and in Japan to address the creation of community-based economic growth and the maintenance of local resources and industries. Interestingly, Japanese theorists paid more attention to the contribution of entrepreneurs. I found that the economic gardening approach is consistent with endogenous development theories in encouraging the growth of local businesses. The case of rural economic development in a Japanese farming village involving entrepreneurs' prominent achievement demonstrates the validity of applying endogenous development theories and the economic gardening approach to Japan. Entrepreneurship matters in local economic development because entrepreneurs with proper support function as effective change agents in the economy.

---

<sup>20</sup> Ibid., 27 June 2005, evening edition.