

Commodification of rural spaces owing to the development of organic farming in the Kootenay Region, British Columbia, Canada

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This paper aims to depict the commodification of rural spaces in a form that embodies the values and lifestyles of an entire region. Based on our field survey, we have a better understanding of the form and characteristics of rural commodification in the Kootenay Region of British Columbia, Canada. The demand for locally grown, fresh, high-quality, safe, and reliable vegetables, fruits, livestock products, etc., has led to the development of organic farming in this region. In other words, the commodification of rural spaces by way of adding value to agricultural products via organic farming and responding to local needs is a unique feature of this region. The Kootenay Co-op, farmers' markets, and Community Supported Agriculture (CSA) programs have played important roles in this development. In this region, which has a small population and a small agricultural market, it is difficult to import food products from outside due to high transportation costs. This, in turn, has encouraged the growth of safe and reliable food production for the local market. An important factor in the development of organic farming here is the pacifism and environment-oriented cultural traditions represented by the Doukhobors, Quakers, opponents of the Vietnam War, and the influx of retired people and tourists, which led to the development of a free, friendly, healthy, and sustainable community in the region.

Keywords: commodification of rural spaces, organic farming, co-op, Community Supported Agriculture (CSA), Kootenay Region

I Introduction

Since the late 1980s, multi-functionality of rural areas has become extremely important for the rural development of developed countries. For example, beyond its primary function of food production, rural areas now provide places for leisure, relaxing and housing for healing, and living spaces for urban residents, helping them experience the cultural and educational values of villages and recognize the importance of environmental conservation. This trend of “commodification of

rural spaces” involves promoting the consumption of various resources in rural spaces (Cloke, 1993; Halfacree, 1993; Woods, 2011). This commodification involves “the investment of real estate by tourism and outsiders, the trade of agricultural products and rural crafts, and the marketing of agricultural resources to which the image of rural areas is given” (Woods, 2005:174). We have been examining the structural changes and characteristics of rural areas in Japan since 2007 based on the concept of commodification of rural spaces (Tabayashi, 2013, 2015). We felt that including for-

eign case studies could help demonstrate a more diverse and extensive commodification and to better understand the rural character of developed countries. Therefore, we began our survey of rural areas in British Columbia, Canada.

The commodification of rural spaces in Japan refers, basically, to the utilization of the multiple functions of rural areas for their survival and the development of agriculture and rural areas. Many of those functions provide important means of profit for farmers and communities to survive or develop further. In other words, the commodification emphasizes the economic aspects of rural areas. This is basically the case in British Columbia, where we find another form of rural commodification, focusing on social and cultural aspects. It is a form that embodies values that are firmly rooted in the lifestyles and local cultures that are widely diffused by residents throughout the region. This can be a meaningful research topic from the perspective of geography, because it reflects the basic characteristics of a region, and thus is an objective for this case study.

According to Statistics Canada, the 2016 Census of Agriculture provides a portrait of Canada's agricultural industry and its regional differences as follows¹⁾. Canada's agricultural areas can be broadly divided into the Great Plains, featuring large-scale extensive farms that produce grain and feed crops over hundreds of hectares, and other small- and medium-scale farming areas. In southern Ontario, southern Quebec, southwestern British Columbia, and the Atlantic provinces, medium-scale farms of mixed farming, including dairy farming, beef cattle and hog raising, and poultry farming, are popular. There are also various types of intensive

small-scale farms of less than 30 ha that produce vegetables, fruits, and other crops. Large-scale crop or livestock farming and medium-scale mixed farming are promoting further expansion, mechanization, and rationalization of farm operations. Alternatively, small-scale farms are trying to introduce new operational forms, such as selling agricultural products directly through direct sales shops and farmers' markets; processing agricultural products by themselves; and earning profits by utilizing rural resources such as the natural environment, landscape, society, and culture. Thus, for small-scale farms, the commodification of rural spaces has become an important survival and developmental strategy, and it is particularly popular in British Columbia (Tabayashi, 2018). According to the 2016 Census of Agriculture, the proportion of farms which conduct direct sales to consumers was 32.3% in British Columbia, compared to 12.7% in Canada as a whole; this percentage was the second highest after Newfoundland's 34.2%²⁾.

Although there are various forms of commodification of rural spaces, we classified it into the following four types based on our case studies in Japan (Tabayashi, 2013). These types could also apply to Canada (Tabayashi, 2019). The first type is the supply of agricultural products such as grains, vegetables, fruits, and livestock products. In the era of productivism that lasted until the 1980s, the supply of large amounts of cheap and stable agricultural products was emphasized, but since the 1990s the demand for high-quality and diverse agricultural products that are safe and reliable has increased. The most striking example is the growing supply of new agricultural products focused on consumers' lifestyles, and health, beauty, and

fashion needs (Perkins, 2006). The second type relates to the provision of rural residences for urban people. The number of people who reside in rural areas and commute to work in cities, work at home while residing in rural areas, permanently shift to rural areas after retirement, or take vacations at villas and resort hotels in rural areas, is rapidly increasing. The third type is rural recreation and tourism – for example, walks and hikes in rural areas near cities, shopping at agricultural direct shops, the use of you pick gardens and farms, etc. Additionally, there are farmers' restaurants, farms where one can experience farm activities on the outskirts of metropolitan areas, Kleingartens, and farm stays. In remote rural areas, one can become involved in various activities such as landscape appreciation, enjoying hot springs, sightseeing, skiing, swimming, cycling, mountain climbing, and trekking. The fourth type consists of activities, which one performs to reflect on one's own life, to improve one's quality of life by preserving and managing rural landscapes and environments, and by understanding the society and culture of rural areas. Naturally, the four types of commodification are not independent of each other, but are closely related, and it is often difficult to separate them.

With these different types of commodification in mind, we advanced our research in British Columbia. We evaluated studies on leisure activities and the environments and landscapes of rural areas through community gardens in the suburbs of Vancouver (Kikuchi, 2019); regional promotion by tourism and recreation utilizing direct sales of agricultural products in the Lower Fraser Valley (Nihei, et al., 2016; Tabayashi, et al., 2016); the slow food movement, and the expansion of rural

residences for urban people on Vancouver Island (Kaneko, et al., 2016); and regional development through wine tourism on southern Vancouver Island and in the Okanagan Region (Kikuchi, et al., 2016; Yagasaki, 2016). The development of the commodification of rural spaces in each area and the character of regional development were analyzed. Many of these studies were conducted in British Columbia under favorable conditions such as a warm climate, places with distinctive and abundant agricultural production, and with attractive environments and landscapes. These areas attract many consumers from large and small cities located nearby. In other words, the areas were blessed with favorable conditions for their commodification.

In the case of Japan, the following case studies have already been conducted: the commodification of rural spaces through the supply of rice, vegetables, mushrooms, health foods, etc. (Miyachi, 2001; Nihei, 2010; Nishino, 2010); the development of urban farming based on direct sales of agricultural products and on the farm experiences directly connected to consumers (Iizuka, et al., 2019; Kikuchi, 2010; Takatori, 2000); the development of rural areas through tourism and recreation using rural resources (Hayashi, 2010; Iguchi, et al., 2008; Tabayashi, 2010; Tabayashi and Oishi, 2014); development through the spread of rural residences for urban people (Iguchi, 2013); and development through evaluating and utilizing the landscape, environment, and culture (Fujinaga, 2013; Matsui, 2010; Takayanagi, 2010). The common points in these studies were the survival strategies of specific farmers, the industrial sector and communities, or the consistent promotion policies of some rural

and tourist areas. Even in Canada, in the regions blessed with the above-mentioned conditions for the commodification of rural spaces, the form and character of commodification is basically a means of developing agriculture and rural areas.

On the other hand, in Canada, there is a different kind of commodification of rural spaces that utilizes the established values, lifestyles, and residents' ideals that permeate a wide area. Specifically, it is the commodification of rural spaces to add value by supplying safe and reliable agricultural products to meet people's demands. This represents the values of most of the present population in Canada as a whole (Smith and Mackinnon, 2007), not only in British Columbia. This kind of rural commodification is prominent especially in the central, northern, and eastern parts of British Columbia, which are located far from large metropolitan areas with sparse populations, limited natural resources, and low involvement in commercial agriculture. Based on our review of previous research, the objective of this study is to clarify the type and characteristics, implementation and background of the commodification of rural spaces in such unfavorable areas. Therefore, we decided to analyze the Kootenay Region as our case study, which is located in a remote mountainous area in British Columbia, with a small population and little agricultural production.

In addition to the interview surveys on our research topic at the Innovation and Adaptation Service Branch of the Ministry of Agriculture, British Columbia; at the Tourism Branch of the Ministry of Jobs, Tourism and Skills Training, British Columbia; at the Central Kootenay Food Policy Council; and at the Regional District of East

Kootenay, analyses of previous literature and government publications showed that the production and supply of organic agricultural products were the most important feature of the commodification of rural spaces in the Kootenay Region. Therefore, we decided to conduct a field survey focusing on organic farms from June 9 to 16, 2017. During the survey, we requested the director of the Kootenay Co-op, the planners of the Regional District of East Kootenay, and the managers of Creston and Cranbrook Farmers' Markets to introduce us the representative organic farms in the region. Our field observations and interviews mainly focused on these farms.

II Overview of the Kootenay Region

The Kootenay Region, located in the southeastern corner of British Columbia, has an area of 58,000 km² (1.8 times that of Kanto) and a population of 151,000³⁾. The Rocky Mountains on the eastern Alberta border are 70 to 100 km wide, with a peak height of 1,800 to 3,562 m. Parallel to the west of the Rocky Mountains is the Rocky Mountain Trench with its 180 - 275 m altitude, 3 - 16 km width, and 1,600 km length extending up to Alaska. To the west is the Columbia System, extending 260 km east to west and 400 km north to south. From east to west, the ranges are the Purcell Mountains (from 2,460 to 2,941 m in elevation), the Selkirk Mountains (from 2,290 to 3,390 m in elevation), and the Monashee Mountains (from 1,540 to 2,941 m in elevation) lined up in parallel (Warkentin, 2000). The Columbia River and its tributaries flow between each mountain range. The mountains were eroded by glaciers during the Ice Age, and sharp-edged peaks and ridges create

attractive scenery. In this region, there are a lot of mountainous areas and slopes, and the farmland is spread across narrow lowlands such as valleys along the Columbia River, its tributary Kootenay River, and the Rocky Mountain Trench (Fig. 1).

The economy of the region has relied on resource development and its exports from the beginning of European exploration in the nineteenth century to the present day. Gold, silver, coal, lead, and zinc were discovered, and these were the driving force for development. Forestry is another resource industry, and sawmills were built in various places. In the 1960s, the provincial govern-

ment embarked on a hydroelectric megaproject, and huge dams were created in Duncan, Castlegar, and Mica Creek in the 1960s and 1970s, and in Revelstoke in 1985, and electric power was exported to the United States. Mining and forestry have been in a recession in recent years. The closure of Kimberley's Sullivan Mine in 2000, the reduction in production at the Trail smelter, and fluctuating coal prices have led to a decline in employment for mine workers. In forestry, demand for softwood lumber, paper, and pulp is decreasing. On the other hand, in recent years, tourism has diversified and developed, due to many hot springs

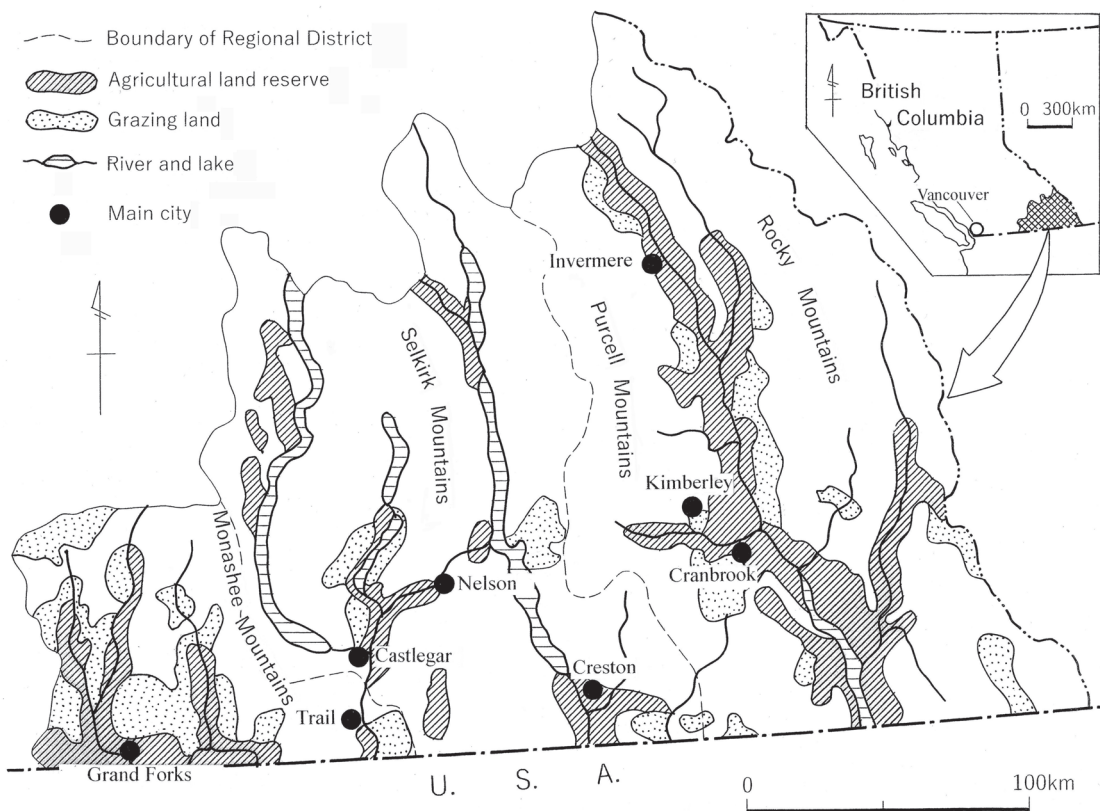


Fig. 1 Distribution of farmland and cities in the Kootenay Region, British Columbia

(Prepared from Farley, 1979 and Warkentin, 2000)

and lakes, skiing and hiking in the region, plus opportunities for sightseeing. Tourists are increasing due to investments in tourist resorts such as ski facilities, golf courses, and casinos (McGillivray, 2011).

Agriculture also expanded as mining and forestry development progressed. The grazing of beef cattle and hay production have been central to agriculture since the beginning of European settlement, along with vegetable and fruit farming, the cultivation of Christmas trees, hog and poultry farming, and beekeeping in the lowlands along the Columbia River and its tributary Kootenay River, and in the Rocky Mountain Trench. According to the 2016 Agricultural Census, the farmland area

in the Kootenay Region amounts to 127,129 ha, with 1,157 farms. This accounts for 4.9% of the total farmland area in British Columbia and 6.6% of the total number of farms in the province as a whole, but both figures have been declining since 2001 (Table 1). The average size of a farm is 109.9 ha, slightly smaller than the provincial average, and the gross income per farm is extremely low, at around \$ 78,547, about one third of the provincial average. About 60 % of the farmland area is grazing land, with crop land accounting for 18.4 %; furthermore, nearly 80 % of crop land is dedicated to hay production. Farms that feed beef cattle and other livestock and farms that produce hay account for the majority, but they are on the decline. The

Table 1 Agricultural trends in the Kootenay Region

Region	Census of Agriculture Data	1996	2001	2006	2011	2016
Kootenays Population : 151,403 Land area : 5,771,955 ha	Total Farmland Area (ha)	151,677	183,457	178,260	148,246	127,129
	Number of Farms	1,428	1,380	1,349	1,273	1,157
	Average Farm Size (ha)	106.2	132.9	132.1	116.5	109.9
	Average Farm Receipts (\$)	27,440	42,899	51,162	55,852	78,547
	Natural Land for Pasture or Grazing (ha)	76,740	100,597	107,255	82,587	75,029
	Land in Crops (ha)	29,233	30,758	28,145	26,574	23,411
	Hay (ha)	22,651	24,214	22,385	21,198	18,520
	Field Crops (ha)	4,334	4,650	3,689	3,656	2,597
	Fruits, Berries and Nuts (ha)	491	383	398	356	420
	Vegetables (ha)	165	151	167	196	192
	Christmas Tree	7,250	4,213	2,202	1,321	841
	Cattle and Calves (head)	50,382	47,374	41,799	32,764	30,820
	British Columbia Population : 4,648,055 Land area : 92,250,301 ha	Total Farmland Area (ha)	2,529,060	2,587,118	2,835,458	2,611,383
Number of Farms		21,748	20,190	19,844	19,759	17,528
Average Farm Size (ha)		116.3	128.1	127.8	132.1	148
Average Farm Receipts (\$)		84,569	114,299	133,641	148,586	212,766
Natural Land for Pasture or Grazing (ha)		1,172,591	1,207,553	1,499,563	1,385,359	1,433,202
Land in Crops (ha)		565,738	617,545	586,238	599,674	580,820
Hay (ha)		347,972	400,991	391,595	384,315	348,631
Field Crops (ha)		188,203	183,512	161,844	178,453	195,676
Fruits, Berries and Nuts (ha)		17,611	18,803	19,130	24,494	25,365
Vegetables (ha)		7,117	7,277	6,957	6,591	6,478
Cattle and Calves (head)		814,103	814,949	800,855	620,638	659,441

(Prepared from Census of Agriculture)

number of cattle and calves in 1996 was 50,382, but by 2016 it had decreased to 30,820. Also, Christmas trees have long been produced as a special product of this region, but the 7,250 ha used for this in 1996 had dropped to 2,202 ha by 2006 and to 814 ha by 2016. The area of pasture and field crops continues to decrease. However, the cultivation area of fruits, berries, and vegetables is relatively stable. Broadly speaking, relatively large-scale livestock farming centered on beef cattle raising and hay cultivation is located in the mountainous and hilly areas, and beef cattle are shipped throughout Alberta and British Columbia. In the lowlands, there are small farms that supply vegetables, berries, and fruits to the local area.

Fig. 2 shows a beef cattle ranch with an area of 560 ha located 6 km east of Windermere in the eastern part of the region, and provincial land of the same area around the ranch that is leased for grazing. About 15 to 20 head of beef cattle are shipped to the local markets annually, and 120 head to other areas in Alberta. Two brothers run the ranch, with one permanent laborer, two students in



Fig. 2 Large-scale beef cattle ranch in the East Kootenay

(Taken by Tabayashi, June 2017)

May – August, and the owners' three college-aged children helping in the summer. Fig. 3 depicts an agricultural landscape in the Creston Valley, which is located in the central part of the Kootenay Region and is blessed with fertile farmland. There can be found a mixture of relatively large, extensive farms growing grass and small, intensive farms growing fruit trees and vegetables. In this way, two contrasting farming practices characterize the region.

III Cases of organic farming

1. Organic vegetable farms

1) G Farm (Small-scale vegetable cultivation)

G farm, located about 10 km north of Castlegar in the southwestern Kootenay Region, is a vegetable farm started by the 34-year-old operator and his 31-year-old wife on a 1.5-ha-wide plot in 2015. The farmland extends from Highway 3A, which runs north to south, to the right bank of the Kootenay River, in a narrow area about 500 m east to west and about 30 m north to south (Fig. 4). The lease fee is \$ 500 a year. Originally, it was the land where Doukhobors settled, and there are



Fig. 3 Rural landscape of the Creston Valley

(Taken by Tabayashi, June 2017)

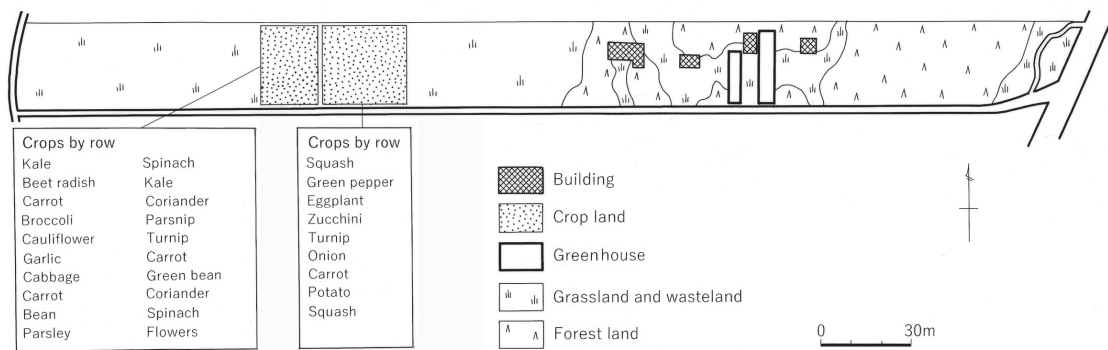


Fig. 4 Land use of G Farm near Castlegar

(Prepared from field survey in June 2017)

still some families of Doukhobors who continue subsistence farming nearby. The eastern half of the farmland is a forested area in which there are two greenhouses that are 10.5 m and 5 m wide and 36 m and 24 m deep, respectively; a landlord's residence; an operator's residence; and two barns. Vegetables are grown on farmland of 15 a in the western half, and the rest is left as grassland. Various vegetables are grown in each plot (Fig. 5), and more than 40 kinds of organic vegetables such as carrots, broccoli, cauliflower, garlic, cabbage, spinach, turnips, onions, potatoes, cucumbers, and tomatoes are grown. The cultivation period is from April to October. Besides this, 80 chickens roam around the greenhouses and produce eggs. The operator purchases chicken manure from a poultry farm near Nelson and alfalfa from Dawson Creek, and add minerals to them to make compost.

The operator is from Ireland and immigrated to Canada via Sweden. His wife came from a nearby neighborhood. They started organic farming because of the high demand for locally produced agricultural products. Since the previous operator, who still owns the land, had been engaged



Fig. 5 Organic cultivation of vegetables on G Farm near Castlegar

(Taken by Tabayashi, June 2017)

in organic farming for 12 years, the operator and his wife were able to obtain the Kootenay Organic Growers Society Certification for organic products in 2016. At this farm, vegetables are provided directly to consumers via the Community Supported Agriculture (CSA) system. A box of various vegetables is supplied to consumers once a week for 20 weeks from the beginning of June to the end of October, and consumers have to pay for the 20 weeks by the end of May. This allows the farm operator to secure working capital and earn a

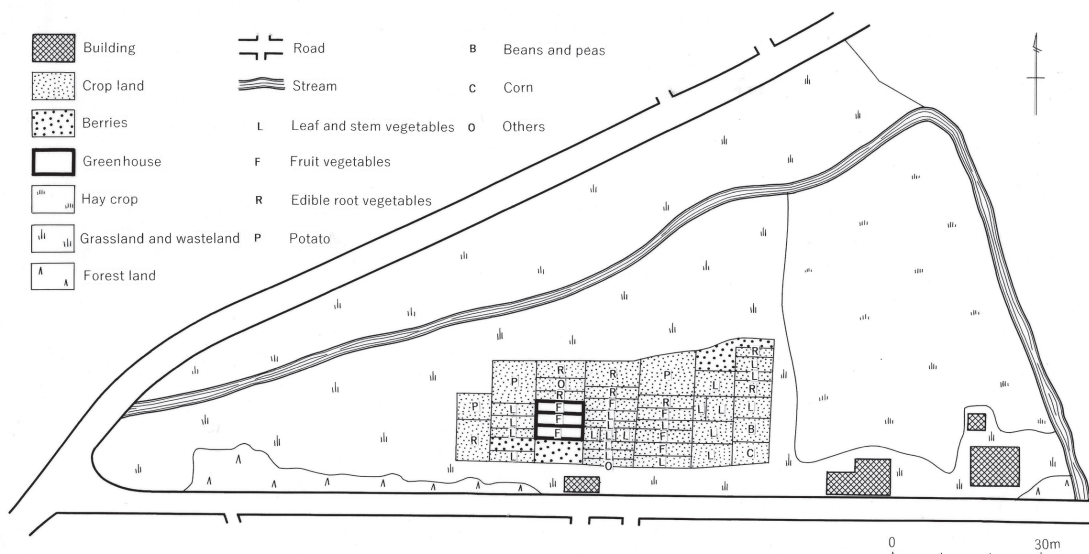


Fig. 6 Land use of R Farm in Slokan Valley

(Prepared from field survey in June 2017)

stable income. The number of customers was 22 in 2016 and it increased to 40 in 2017. In addition to sales through CSA, the farmers sell their products at farmers' markets in Castlegar, Rossland, and Nelson, and also ship to the Kootenay Co-op and Save on Food. Since agricultural production has also been on track, they expect to expand their crop land and increase the number of consumers via CSA.

2) R Farm (Small-scale vegetable and berry cultivation)

R farm, located in Slokan Valley, about 20 km northwest of Nelson, cultivates grass for composting on 1.2 ha out of its 4 ha of leased land (Fig. 6). It grows about 70 types of organic vegetables and berries in a 60 a field (Fig. 7). There are three simple greenhouses. The cultivation period is from May to October. The operator and his wife are satisfied with their lifestyle which involves produc-



Fig. 7 Organic cultivation of vegetables on R Farm in Slokan Valley

(Taken by Tabayashi, June 2017)

ing safe and secure food via organic farming under rich trees and in beautiful landscapes and mild climates. The labor force includes the operator couple, in their late 30s, and two trainees in their 20s.

Minerals are added to chicken manure and

alfalfa meal to make compost. This farm also supplies vegetables and berries to 14 consumers via CSA. Agricultural products are supplied for 20 weeks from late May to early October. The consumer pays a minimum of \$ 600 for 20 weeks, and the total amount needs to be paid by April 1, when the planting for the year begins. The producers supply various vegetables worth \$ 30 at a time to the consumers. The consumers order vegetables via e-mail 48 hours in advance, at a minimum of \$ 30 a time. If it is more, they will pay for the surplus. Consumers are supposed to go to the farm or meet the farmers at the farmers' market in Nelson to pick up their box of vegetables. The farm also sells vegetables and berries at Nelson's Farmers' Market, and the Kootenay Co-op, as well as at the farm. They also accept trainees, who receive \$ 800 per month, plus food and housing.

Both the operator and his wife are from Nelson, where the operator was a carpenter and his wife a librarian. They were very interested in agriculture and took over a previous organic vegetable farm in 2011, which originally started in the early twentieth century and produced livestock and feed crops, and it had a small orchard. In 2006, the farm was changed to an organic vegetable farm, but was then transferred to new owners in 2008. The farmland then went unused until 2010. The current operator and his wife rented it for \$ 2,400 a year and resumed organic vegetable cultivation. In 2013, they obtain an organic certification from the Kootenay Organic Growers Society.

3) F Farm (Vegetable and berry cultivation and bakery)

F farm, located in Fort Steele which is 15 km northeast of Cranbrook in the eastern part of the

Kootenay Region, also organically cultivates about 35 varieties of vegetables and berries on about 1 ha of land (out of a total 2.8 ha of farmland). The operators also keep bees and bake homemade bread and pies that are mainly sold directly to consumers on the farm (Fig. 8). In addition, F farm does farm tours of 600 to 800 elementary school children and kindergarten children a year. In 1979, the current female operator bought this farm, which was part of a beef cattle grazing operation, where broiler chickens had been bred until 1992. Broilers were mainly supplied locally, but she decided to specialize in growing vegetables and berries because the profitability of broilers decreased. Since her husband worked for the Ministry of Agriculture of British Columbia until 2004, she has been the main operator of this farm until now. She started producing bread around 2005 and began beekeeping at the same time. There are five annual employees including Mexicans. This farm has been famous for many years as a direct marketing site for agricultural products and has many customers because it is located in Fort Steele, a heritage town established during the gold rush in this region.



Fig. 8 Bakery of F Farm in Fort Steele

(Taken by Tabayashi, June 2017)

However, the operators are thinking of retiring in the near future.

4) W Farm (Vegetable and flower tree cultivation, garden center and cafe)

W farm, located near the entrance to the Windermere in the northeastern Kootenay Region, was started by the parents of the present operator in 1983, and flower trees and organic vegetables are cultivated by the female operator and her husband. The area of farmland is about 2 ha, and there are 13 greenhouses for flower trees and seedlings (Fig. 9). In 2014, a cafe serving drinks and light meals was opened in the garden center by her sister and her husband. The flowers and vegetables produced are sold onsite at the garden center and also at nearby farmers' markets (Fig. 10).

This farm also uses CSA. The CSA service

provided by this farm involves consumers paying \$ 500 for a box containing 8 to 10 kinds of vegetable, available for 15 times from June to September, or \$ 275 for a half-sized box with 4 to 6 kinds of vegetable. They have to pay the total amount in advance by May 1st. Besides this, there is a work share where consumers can receive the same supply if they work on the farm for four hours a week from the middle of May to the middle of September. In addition, there are 35 beekeeping boxes and 25 laying hens. The farm annually employs five people for the cultivation of the flowering trees, four people in the garden center, three people in the cafe, and temporarily hires seven college students from March to October to take care of the vegetable fields.

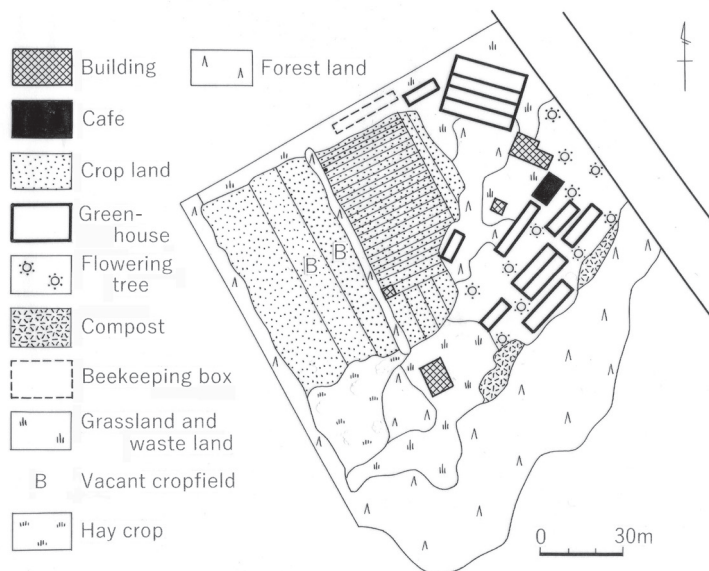


Fig. 9 Land use of W Farm in Windermere

(Prepared from field survey in June 2017)



Fig.10 Garden center of W Farm in Windermere
(Taken by Tabayashi, June 2017)



Fig.11 Cheese factory of K Farm in Creston
(Taken by Tabayashi, June 2017)

2. Organic livestock farms

1) K Farm (Organic dairy farming)

K farm, in the south of the Creston Valley, located in the central part of the Kootenay Region, organically grows Italian ryegrass, clover, alfalfa, and other grasses on about 40 ha out of the total of 200 ha of farmland, and feeds about 100 milking cows. Most are Holstein, but the farm also raises Swedish Red, Jersey, and Normandy cows. They are grazed from April to October, but in winter they receive home-grown hay, silage and grains in their barns. The operator and his wife took over the dairy farm from their parents in 1989, but in 2005 switched from ordinary dairy farming to organic dairy farming and began processing and selling cheese (Fig. 11). At present, they run the farm with their two sons and one daughter. In addition to selling fresh milk, cheese, and butter at the on-site shop, the farm sells its products throughout the Kootenay Region through the Kootenay Co-op, retail stores, general supermarkets, and the Internet.

2) C Ranch (Sheep, beef cattle, hogs, and poultry on natural meadows)

C ranch, located in the eastern part of the Kootenay Region (20 km east of Cranbrook) , was moved to the area in 2012 after being launched in 2008 in the north of Kamloops by a couple of operators in their early 40s. The operator is from a dairy farm near Winnipeg and his wife is from a beef-breeding farm in Kamloops. The agricultural labor force consists of only these two people. In total, 200 sheep, 11 beef cattle, 130 hogs, and 2,000 chickens are raised on 65 ha of rangeland. High-quality livestock products are produced using grass and feed without chemical fertilizers and pesticides, fresh water, and ways of rearing that do not create stress (Fig. 12). Meats processed in Cranbrook are sold at nearby farmers' markets in Invermere, Cranbrook, and Fernie; the Kootenay Co-op; and are shipped directly to restaurants in the Kootenay Region.



Fig. 12 Sheep grazing at C Ranch in Fort Steele
(Taken by Tabayashi, June 2017)

3. Commodification of rural spaces in the Kootenay Region

Agriculture in the Kootenay Region includes large-scale and extensive beef cattle ranching or hay production in the mountains and hilly areas, and small-scale vegetable and fruit farming and a variety of livestock farming in narrow valleys. Many farmers of the latter are engaged in part-time work. Commercial vegetable and fruit farming are practiced only in a limited area, such as the Creston Valley and the Rocky Mountain Trench. Besides that, the production of Christmas trees was also active in this area. However, since the 1990s, such farming practices have generally declined and new ones have emerged. There is a small and intensive organic farming operation premised on direct marketing. The commodification of rural spaces in the form of adding value to agricultural products directly by organic farming can be said to be a feature of this area. Organic farming often replaces conventional farming when the younger generation starts farming or children take over farms from their parents. The common

point of their management is the emphasis on local production and keeping the consumers in mind at all times.

The important actors supporting organic farming and direct marketing in this region are the Kootenay Co-op, farmers' markets, and CSA, which will now be discussed. In addition, the development of direct marketing and organic agriculture was closely related to the cultural tradition, location, and natural environment of this region.

IV Regional foundations of the development of organic farming

1. Direct marketing

1) The Kootenay Co-op

One of the actors supporting the development of organic agriculture in the Kootenay Region is the Kootenay Country Store Co-op, commonly known as the Kootenay Co-op. It is one of the largest cooperatives in North America, with about 14,000 members. It aims to achieve sustainable social development through the supply of high-quality, safe, and reliable food and household goods. The new 1,860 m² store that opened in December 2016 at the east end of the downtown core of Nelson is the largest cooperative store in Canada, and it has a community space and a canteen in addition to sales areas for vegetables, fruits, grains, dairy products, meats, and household items. In total, 175 employees and about 130 local farms and processors supply agricultural products and household goods.

According to the website of the co-op⁴⁾, its vision is to establish “thriving communities with resilient food systems, where all the people have access to affordable food that is healthy for our bodies, our

communities, and the Earth.” It tries to provide local, sustainable, and organic products at reasonable prices. The core values of the Kootenay Co-op are as follows: (1) an emphasis on local and regional growers, processors, and producers who use sustainable methods; (2) seeking organic products as much as possible; (3) providing fair compensation and a meaningful, just work experience for all employees; (4) revitalizing local communities through education on food, health, the environment, and social justice; (5) philanthropism; and (6) striving to equally balance social justice, environmental stewardship, and financial responsibility.

The Kootenay Co-op was a joint purchase organization for food originating as the Vallican-Winlaw Food Co-operative, organized in the Slocan Valley, about 20 km north of Nelson, in 1975. Volunteers used a closed school to sell groceries purchased jointly to members. It adopted its current name in 1980, and in 1985, it bought a natural food store in the center of Nelson and moved there. It developed rapidly from 1988 onward, moved to its current location at the end of Baker Street in 1991, and gradually expanded the site and shops. In 2013, under the policy of the provincial government, the True Local Brand was launched to support about 100 local agricultural and processed food suppliers. A related development company launched in 2013 and started construction of a new store and apartment complex, which was completed in December 2016. The second to fourth floors of the complex are made up of 54 apartment units centered on a 2DK floor plan⁵⁾ (Fig. 13).

The Kootenay Co-op has been promoting the food supply of local farms and natural food suppliers with the aim of providing members with

healthy and affordable food since its inception. However, the local area alone could not supply everything and often relied on the Lower Mainland and other areas. However, the Co-op launched the True Local Program in 2013 to create a healthy local economy, provide food that will benefit the local population, and provide only local products to preserve a healthy environment. The trigger was the definition of “local” announced by the Canadian Food Inspection Agency. According to the definition, “local” applies to what was produced within the province or within 50 km of provincial borders, so this definition includes things from places up to more than 1,000 km away. On the other hand, the Kootenay Co-op decided that local products must be produced within 100 miles (160 km). Also, it fostered local farms and producers in a variety of ways. These included searching for, assisting, honoring, and fostering new, true local suppliers, advertising local suppliers free of charge, giving free education to current and future true local suppliers, ensuring in-store systems to support local suppliers, and expanding the local market⁶⁾.



Fig. 13 Store and apartment complex of the Kootenay Co-op

(Taken by Tabayashi, June 2107)

According to our interviews in 2017, 138 local producers (31 of agricultural products, 54 of miscellaneous goods, 21 of health products, 23 of processed foods, and 9 of meat) were supplying agricultural and various other products. The distribution range of the producers from Grand Forks and Midway in the west, to Invermere and Fernie in the east, and from Nakusp in the north, to the US border in the south, which covers a radius of approximately 160 km. This means that the co-op is running a so-called 100-mile diet (Smith and Mackinnon, 2007).

2) Farmers' markets

Farmers' markets are held once a week, mainly from May to October, on Saturdays, Sundays, or Wednesdays, to sell locally produced or processed food, crafts, clothing, etc., including organic agricultural products. When the long, cold winter ends and the milder season begins, many local people come to the farmers' markets for both food and recreation. Farmers' markets are not only places for consumers to shop but also to meet friends; recognize local agriculture, industry, and culture; and to get information from producers directly. These producers understand the consumers' preferences. In particular, from the end of June to August, when various agricultural products are set to be harvested, is the peak of the farmers' markets in the Kootenay Region.

Fig. 14 depicts a farmers' market on the second Saturday of June 2017 in Cranbrook. There were 24 vendor tents on a green space in the northern part of downtown. One was for the market manager and another was for a live performance. Among the remaining 22 tents, 4 were for producers of agricultural products such as strawberries,

vegetables, and flowers; 1 was for a producer of pork; 5 were for producers of processed foods such as bread, jam, and juice; and 2 were for cosmetics, soap, and ornaments. There were 10 craft vendors, selling e.g. clothing and accessories. As it was too early in the full-scale harvest period for agricultural products, many vendors were selling things other than agricultural products (Fig. 15).

The Cranbrook Farmers' Market started in 2009 and has been growing year by year. The market is held every Saturday throughout the year. The Spring Market is held from the fourth week of May to the second week of June at a green space in the northern downtown area from 10 am to 1 pm, the Summer Market from the fourth week of June to the fifth week of August from 9 am to 1 pm on the street along Central Park, and the Fall Market from the second week of September to the second week of October from 10 am to 1 pm in the same place as the Summer Market. The indoor market is held in the gymnasium adjacent to the Spring Market's green space from the third week of October to the fourth week of April. The Summer Market is the



Fig. 14 Cranbrook Farmers' Market on June 10, 2017

(Taken by Tabayashi, June 2017)

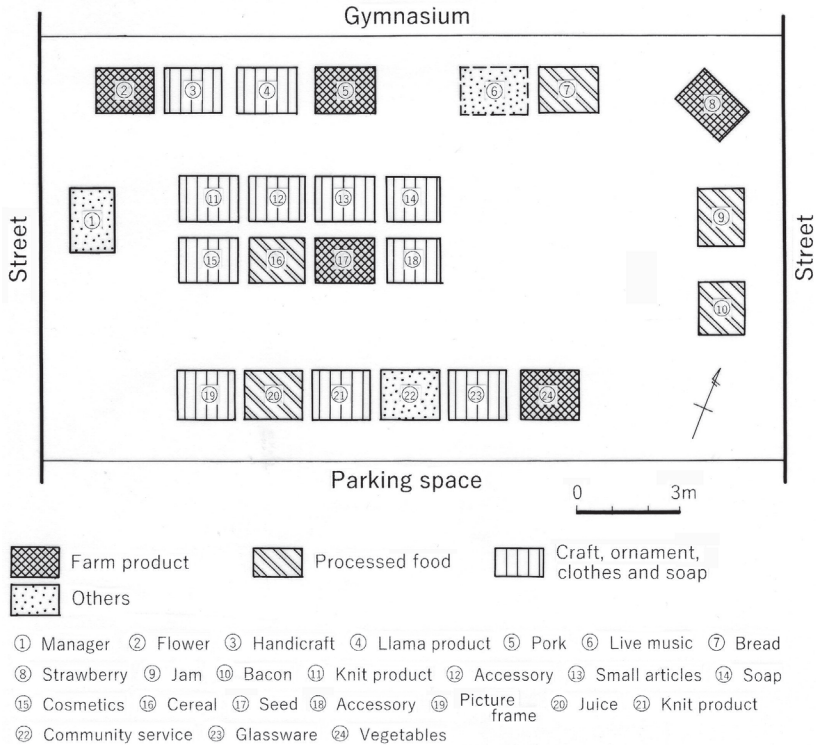


Fig. 15 Vendors of the Cranbrook Farmers' Market on June 10, 2017

(Prepared from field survey)

busiest.

Those who wish to open stalls must apply to the Vender Selection Committee of the Cranbrook Farmers' Market Board of Directors in advance. In general, at the Summer and Fall Markets, 60 % of the vendors sell farm produce and processed food, and the remaining 40 % sell crafts, cosmetics, and clothing. Since the number of vendor spaces is approximately 30 for the Spring Market and 50 for the Summer and Fall Markets, some applicants are on a waiting list. Vendors are limited to local producers, specifically those from within 300 km of the farmers' market. In particular, it is desirable for producers of agricultural products to live within

100 km. In addition to the registration fee of \$ 42, the cost of opening a stall is \$ 42 for 1 time, \$ 140 for 5 times, \$ 255 for 10 times, and \$ 360 for 15 times. According to the website of the Cranbrook Farmers' Market⁷⁾, there were 77 Summer Market registrants in 2019, including 19 for agricultural produce, 11 for processed foods, 5 for cooked foods, 3 for alcohol and 5 for cosmetics and soaps. There were 34 craft product suppliers.

Fig. 16 shows the Farmers' Market on the second Saturday of June in Creston. It was held at the square next to the Chamber of Commerce located at the entrance of the northern part of downtown. The Chamber of Commerce had a tourist informa-

tion center and wall panels and other exhibits explaining the city's history. There were 43 vendors on this day, but because the harvest time for vegetables and fruits had not yet arrived, there were few vendors selling farm products; rather, most stores were selling processed foods, crafts, clothes, etc. By product, there were eight vendors selling bread and cookies, seven selling crafts and accessories, six selling agricultural products, four selling chinaware, three selling juices and jams, three selling wines, three selling drinks, three selling meals, and six selling other products. The Creston Valley Farmers' Market is run by a non-profit organization called the Creston Valley Food Action Coalition, and the outdoor farmers' markets mentioned above are held from 9 am to 1 am from the first Saturday of May to the second Saturday of October. The indoor farmers' markets are held in the Downtown Community Complex Room from 10 am to 1 pm from the third Saturday of October to the third Saturday of December. After that, it will be held once a month from January to April.

The vast majority of vendors at the Creston



Fig.16 Creston Valley Farmers' Market on June 10, 2017

(Taken by Tabayashi, June 2017)

Valley Farmers' Markets are residents from within 10 km of the center of Creston, but some come from Riondel, about 70 km to the north, and Yahk, about 20km to the east. This range also includes the residences of major consumers and a population of about 14,000. According to the website⁸⁾, there were 137 registered vendors in 2018, and in the case of the outdoor markets, the number of actual vendors was a maximum of 62, a minimum of 10, and on average 43. For the indoor markets, the number was a maximum of 39, a minimum of 17, and on average 26. In general, one quarter of all people dealing with agricultural products and processed foods attended on a regular basis, with one quarter attending one or two times and the rest a few times.

This farmers' market originated in 2003 when volunteer producers started it in the center of town, when there were fewer than 10 vendors. It was run by a volunteer group in 2005 and then by the local Rotary club in 2007, with vendors numbering around 12 – 16. At the present location, the Food Action Coalition has been operating it since 2009, and the number of vendors has reached 40. Stall owners are required to register in advance and apply for a store opening date. In addition to paying an annual fee of \$ 25, they have to pay \$ 18 - 25 per time, depending on the total number of times they attend.

Many of the farmers' markets are held in centers with a population of more than 1,500, and in 2017, 20 markets in the Kootenay Region had joined the British Columbia Farmers' Market Association. Among the various products sold, agricultural products such as vegetables and fruits, berries, flowers, meat and eggs, and milk and cheese are

the most important to the farmers' markets. The peak season is from June to September, when crops are thriving, and consumers who have been struggling through the hard winter can look forward to a good season of both shopping for food and enjoying the other amenities of available at farmers' markets.

By selling directly to consumers producers can earn more profits than if they passed through a normal distribution system, can further confirm the needs of consumers, and can directly explain their production commitments. Markets are an important sales channel for producers, and many producers have stalls at multiple nearby markets. Through the interactions between producers and consumers at the farmers' markets, consumers often expand their buying to other channels, including ordinary retail stores and e-mail orders. Consumers can obtain fresh, safe, and secure food products by purchasing products directly from producers. It is also a place to learn about the local agriculture and industry, and become interested in the area. Farmers' markets have music performances and shops offering snacks and drinks, so they are often regarded as places of rest on Saturdays and Sundays.

Many farmers' markets are operated by non-profit organizations organized by local communities, governments, consumers, producers, etc., and are granted permission to open stores by meeting criteria such as residence and type and quality of goods sold. Producers participate by paying the prescribed fee. A farmers' market is a place where producers and consumers are directly connected, and it is also a place where the revitalization of the community is brought about. As seen in the

Kootenay region, many markets were newly established after 2000, and the number of participants in the British Columbia Farmers' Market Association was 65 in 2009, but grew to 125 in 2015 and 145 in 2017.

3) Community Supported Agriculture

Another means of supporting organic farming and direct marketing is the program called CSA. It is a farming system involving partnerships between producers and consumers that originally began in Japan in the 1960s. After that, it did not develop significantly in Japan, but the idea was transmitted to Switzerland and Germany, and then dramatically expanded in the United States and Canada from the 1980s onward⁹⁾. This means that a consumer who contacts to a producer or producer group takes a product that is harvested in a certain period of time from a particular producer or producer group. This feature means that the production and consumption of agricultural products is limited in the area, and the consumer prepays one year before the planting starts. This reduces consumer complains if the year is poor, and the consumer shares the risk with the producer. There are two delivery methods for agricultural products: the consumers pick them up from the farm, or the consumers go to places called picking points.

Among the benefits of CSA are (1) producers can supply consumers with fast, fresh, and seasonal produce regularly with low distribution costs; (2) consumers can receive safe and varied produce; (3) the program can raise the common awareness and pride of the local community and support small family farms in the area; (4) producers can communicate ideas related to production to consumers and can directly listen to consumers' opinions; (5)

consumers can learn how agricultural products are produced and can hear how to eat new produce (through this, it is possible to promote exchanges between urban and rural areas); (6) because the intermediate distribution costs are small, all of the money paid by the consumer can be paid to the producer, and the producer can secure the funds before planting so they can concentrate on agriculture; and (7) in the case of market shipments, agricultural products that are considered out of specification can be delivered to consumers without waste, so waste is reduced¹⁰.

Based on the interviews on G Farm mentioned above, we will now explain the concrete CSA mechanism as used in 2017. The subjects of this CSA were people from Nelson to the Slocan Valley and Castlegar. Once a week, consumers could receive a veggie box packed with various organic vegetables from G Farm and a newsletter with recipes and information on the farm's current conditions (Fig. 17). In 2017 the picking points and picking times of the veggie boxes from early June to October were from 9:30 am to 11:00 am at the Nelson Farmers' Market or from 10:00 am to 12:00 pm at the Castlegar Farmers' Market. Consumers could come to the farm from 4 pm to 6:30 pm on Sunday. The contents of the veggie boxes included 7 to 12 kinds of vegetable, with the contents changing over time. The vegetables included carrots, beets, potatoes, lettuces, cucumbers, cabbages, green peppers, tomatoes, hot peppers, and kohlrabi. The costs for 20 boxes were \$ 640 for the full box, \$ 440 for the half box, and \$ 340 for the single box; the price needed to be paid full by May 31.



Fig.17 Veggie box distributed by G Farm near Castlegar

(Taken by Tabayashi, June 2017)

2. Environments and cultural traditions in the Kootenay Region

1) Location and natural environments

The market size, location and natural environment will be examined first as important regional bases that support the development of organic farming in the Kootenay Region. The area of the Kootenay Region accounts for 6.3% of British Columbia, but the population as of 2016 was only 151,403, or 3.3% of the provincial population. Urban centers with populations of more than 10,000 include Cranbrook (29,047) and Nelson (10,572), followed by Castlegar (8,039), Trail (7,709), Creston (5,351), Grand Forks (4,049), and Rossland (3,729). For this reason, the size of the market for agricultural products is extremely small. However, the region's population, which was 142,110 in 2006, increased slowly to 149,661 in 2011 and 151,403 in 2016. According to the 2016 Census of Agriculture, the total farmland was 148,246 ha, which was 3.9% of the provincial total. The number of farms was 1,273, a relatively large number, accounting for 6.4% of the provincial total. However, total farm

income was \$ 71,099,592, which was only 2.4% of the provincial total, and productivity was low.

The Kootenay Region is located in the south-eastern corner of British Columbia and borders Alberta, Canada, and Washington, Idaho, and Montana in the USA. It is 845 km from Vancouver to Cranbrook, 657 km to Nelson, and 628 km to Trail. From Calgary, it is 403 km to Cranbrook, 624 km to Nelson, and 634 km to Trail. The Kootenay Region is far from any major cities in Canada and the USA. Although the connection with Alberta is relatively strong, the overall isolation is high. Because of this, transportation costs are high, which is an obstacle to the development of commercial agriculture in this area. Conversely, the transport of agricultural products from outside the region is also expensive, and this is a factor that enables local producers to secure a certain market (McGillivray, 2011).

As for the natural environment, as mentioned above, the four mountain ranges Rockies, Purcells, Selkirks and Monashees cross the region from northwest to southeast, and the Columbia River, its tributaries and lakes can be found between the mountain ranges. Narrow plains extend along the rivers and lakes. The plains are the main agricultural and residential areas, but they are separated from each other because of the mountainous terrain, so they tend to be isolated. It is scenic and has attracted villa residents and tourists in recent years. The annual rainfall is as low as 300 to 750 mm, since the coastal mountains block water vapor from the Pacific Ocean. Therefore, there are many fine days, a large amount of solar radiation, and a long growth period. The lowlands are relatively warm, with the average temperature in January

being from 0 to 5 ° C and in July from 18 to 20 ° C (Farley, 1979). The most popular post-retirement residence in Canada is on the southern part of Vancouver Island, which is warm and dry, but due to overcrowding and soaring land prices, the migration of aged people to the Okanagan Valley and the Kootenay Region has increased recently.

2) History and cultural traditions

Next, we will examine the development and cultural background of the region. The development of this region is divided into six stages: (1) indigenous people's residency, (2) exploration by Europeans, (3) mine development, (4) railway construction and settlement, (5) forestry development, and (6) reorganization and diversity (Breen, 2012; Stevenson, et al., 2011).

Indigenous peoples arrived in the Kootenay Region about 10,000 years ago, and many groups, including the tribes of Dakelne, Shuswap, Okanagan, and Kootenay, now reside throughout the region. Their existence was supported by diverse local resources, and they lived by gathering and hunting. From the early 1800s, Europeans began searching for fur in this region and companies such as the Hudson Bay Company and the Northwest Company grew in power. The Kootenay Region is rich in mineral resources, so mining towns grew there by the end of the 1890s, searching for minerals such as lead, zinc, silver, copper, and gold. However, most of these towns are now abandoned. The lead and zinc smelters in Trail and the East Kootenay coal mines are among the few still active. Along with mine development, railway construction was promoted from the late 1880s to early 1900s, settlements were formed, and agriculture flourished.

The immigration of Doukhobors from the 1910s to the 1920s, Quakers from the 1950s to the 1960s, and opponents of the Vietnam War from the 1960s to the early 1970s created a distinctive culture in the region (Rodgers and Ingram, 2014; Makarova, 2013). The Doukhobors are a Spiritual Christian religious group of seventeenth century Russian – Ukrainian origin, with a strong tendency toward mysticism, pacifism, and anarchism. They became vegetarians to avoid killing animals because of their denial of violence and murder. They also refuse to associate with alcohol and tobacco¹¹⁾. As they advocated pacifism and a communal social life, they were repeatedly subjected to forced migration within Russia during the nineteenth century and were finally decreed to serve in the military and convert to the Russian Orthodox Church by Czar Nicolas II (Rodgers and Ingram, 2014). With assistance from Leo Tolstoy and British and American Quakers, and the promise of land and freedom from military service in Canada, about 7,500 of them migrated to the present province of Saskatchewan, Canada, in 1899. Then, because of issues of land ownership and being forced into an allegiance with the British Empire, about 6,000 of them again moved to the western part of the Kootenay Region from 1908 to 1912 and settled on large parcels of privately purchased land. Nearly 80 communal villages were constructed and were characterized by a collective, agricultural life¹²⁾. Although most of the Doukhobors no longer live communally, they continue to be active pacifists and aspire to preserve their traditional values. They were excellent farmers and contributed greatly to clear land and develop agricultural production in the Kootenay Region¹³⁾. They played an

important role in developing small-scale farming in the region growing vegetables, berries, and fruits.

Quakers are a Christian denomination created in England in the middle of the seventeenth century that spread to the United States, South America, and Africa. Peace and gender equality, a simple life, and integrity are the central concepts of the Quaker faith. Despite a long history of marginalization and persecution because of their commitment to spiritual equality, pacifism, and social witness, they continued to pursue peace and practice non-violence. They were involved in the anti-slavery movement during the eighteenth and nineteenth centuries and made efforts to oppose wars (Rodgers and Ingram, 2014). Quakers first moved from California to the Kootenay Region in the early 1950s, because they were against US foreign policy in the Cold War era. Here, they bought and cultivated farmlands for self-sufficiency. In the late 1950s, their communities developed as the settlers built homes, community centers, and schools.

In the 1960s, young, middle-class, well-educated Americans who were against the Vietnam War arrived in the Kootenay Region. This migration was not due to the region's economic opportunities - rather it was due to the region's remoteness, its stagnant economy, and its small population. Under these conditions, the American migrants could rebuild their lives in ways that better matched their worldview. They sought a good, simple rural life rather than a life where success was based on economic prosperity and material wealth. They received support from the Doukhobors and Quakers for settling in the region. The shared values of pacifism, resistance to war, community-building, and self-sufficiency that have diffused widely in

this region have been formed by Doukhobors, Quakers, and the young American migrants of the Vietnam War era (Rogers and Ingram, 2014).

In the late-twentieth century, recreation and amenity industries developed in the region on the back of a mining and forestry recession. The main outdoor activities in the region are mountain climbing in the national and provincial parks, hiking, enjoying the scenic beauty, and visiting hot springs. Furthermore, economic development by the Columbia Basin Trust in 1995 played a major role in regional development, and in recent years, there has been an increase in the number of retired people and resort property residents.

Common to all people have been beliefs in pacifism and environmentalism, which strongly influenced the local diet. It is thought that the characteristic cultural traditions related to food have formed through these historical processes.

V Conclusions

While the existing research on the commodification of rural spaces has dealt with farm management strategies and regional development aimed at improving profits by utilizing various rural resources in both Japan and Canada, this paper depicts a different kind of commodification of rural spaces progressing in a form that embodies the values and lifestyle of an entire region. We analyzed the form and characteristics of rural commodification and identified the regional factors that supported it. This paper examined the characteristics of the commodification of rural spaces in the Kootenay Region, mainly based on our field survey of select farms.

There was a growing demand for fresh, high-

quality, safe, and reliable produce from the region, which led to the development of organic farming. In other words, the commodification of rural spaces for adding value to agricultural products via organic farming and responding to local needs was a feature of the Kootenay Region. Important roles were played by the Kootenay Co-op, farmers' markets, and CSA. This region had a small population and a small agricultural market. The high cost of transporting food products from other regions led to the expansion and development of safe and reliable food production for the local market. Other relevant factors for this local growth of agriculture included the cultural traditions represented by Doukhobors, Quakers, and opponents of the Vietnam War; the recent influx of retired people with new values; and the recent increase in tourism. Common to them were the beliefs in pacifism and environmental conservation, war resistance, community-building, and self-sufficiency, which became an important factor in the development of organic farming.

The commodification of rural spaces in the Kootenay Region was characterized by the supply of agricultural products produced by organic farming, and a society that consisted of people with distinctive cultural traditions. The commodification of rural spaces in the form of residency in an isolated, peaceful, relatively warm, and scenic rural area may be another characteristic of this region. Many people who began organic farming were migrants from cities in other regions. The number of retired in-migrants has increased in recent years, as have residents of resort properties and hotels. There was also an increase in the number of tourists who came to ski in winter and pursued mountain

climbing, trekking, and hiking in summer; this was also a form of commodification of rural spaces. According to Ishida (2018:60), “Nelson, one of the centers of the Kootenay Region, has been a new world reached by people who seek the way of life of the ideal. They make their own work, consider the community, cherish healthy food, and all have the pleasure of moving their bodies in nature.” In recent years, the term “*Denen Kaiki* (rural return)” has come to be used frequently in Japan, and there is a growing belief that not only the movement of people from villages to cities but also the return of people from cities to villages should be emphasized. People are able to enjoy the attractions of both cities and villages, leading to a situation of urban-rural symbiosis (Omori, et al., 2017). It can be understood that such an urban-rural symbiotic system was constructed through the development of the Kootenay Region and its social and cultural characteristics.

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Notes

- 1) <https://www150.statcan.gc.ca/eng/ca216> [last accessed July 17, 2019]
- 2) <https://www150.statcan.gc.ca/pub/11-627-n/image/11-627-201715-eng.jpg> [last accessed August 9, 2018]
- 3) Although the range of the Kootenay Region has various definitions, this paper combines the Regional District of East Kootenay with the Regional District of Central Kootenay and the Regional District of Kootenay Boundary. It is a Census Agricultural Region.
- 4) <https://kootenay.coop/all-about-us/our-mission-principles/> [last accessed July 17, 2019]
- 5) <https://kootenay.coop/all-about-us/our-history/> [last accessed July 17, 2019]
- 6) <https://kootenay.coop/all-about-us/in-the-community/we-love-local-food/systems-and-you/> [last accessed July 17, 2019]
- 7) <https://www.cranbrookfarmersmarket.com/copy-of-our-vendors> [last accessed July 18, 2019]
- 8) <http://crestonvalleyfarmersmarket.ca/site/about-us/> [last accessed July 18, 2019]
- 9) <http://r-table.info/2014/07/585/> [last accessed August 9, 2018]
- 10) http://www.sasayama.or.jp/opinion/S_23.htm [last accessed July 13, 2019]
- 11) <http://www.usccdoukhobors.org/cuisine/vegetarianism.htm> [last accessed September 11, 2017]
- 12) <http://www.usccdoukhobors.org/about.htm> [last accessed September 11, 2017]
- 13) <https://www.thecanadianencyclopedia.ca/en/article/doukhobors/> [last accessed February 6, 2018]

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