Environmentally Considerate Sustainable Regional Revitalization and its Potential:

Using the Example of Tatebayashi City in Gunma Prefecture, Japan

Graduate School of Global and Regional Studies Toyo University Suzuki Nozomi Toyo University Ichikawa Akira

Introduction

This research tries to find out the future possibility of sustainable regional revitalization by utilizing the environmental resources in the region. This research addresses Tatebayashi city to clarify the real status of its regional revitalization approach, which is walkable city planning, and combining economic gardening approach.

1. Background

As background of the research, Japan faces the low birth rate and aging population issues. According to cabinet office, it is said 38.4% of Japanese population will be 65-year-old by 2065 (Cabinet Office 2022). Also, there is an increase in migration of younger generation to urban areas. Following that, there is a depopulation issue for suburban areas. However, Covid-19 pandemic gave chances for those rural areas due to the change of working style, face to face to online, and this leads to the changing attitudes toward rural migration (Teng 2022). This leads to the possibility of regional revitalization in suburban areas, which is connected to the theme of this research. Following part explains the policies for regional revitalization.

1-1. Regional Revitalization in Japan

As current situation of regional revitalization policy, Kishida cabinet has announced digital garden city-state concept (Cabinet Office 2022). This means the introducing the digital into regional revitalization, and it implies that Japanese government tries to put efforts on the revitalizing suburban areas.

1-2. Walkable City Planning

Among the regional revitalization policy announced by Japanese government, one of the main approaches is walkable city planning. This approach has a concept to create city where people want to walk (Ministry of Land, Infrastructure, Transport and Tourism 2019). The representative example is in Portland, the United States. Portland is famous for its walkable city planning with engagement of citizens. Poland, a city that promotes progressive urban development, is gaining popularity around the world as a city to move to, with its efforts toward a compact urban form and resident-led community development (Kawakatsu 2019). Suburban areas face the issue of transportation, car-based society, thus it is important to focus on the walkability in the research of regional revitalization. Also, environmentally, walkability brings savings of car use and socially, walkability encourages people to use roads and increase socially, walkability encourages people to use roads and increase chances to meet with neighbors and visitors, it strengthens the bonds among people who live there. Given the importance of greenery in walkable community development, the use of natural resources is considered to play an important role (Speck 2018). Also, there is research on walkable city planning that as more and more greenery there is, it makes people want to walk (Urban Living Environment Study Group New Urban Housing Association 2006).

This indicates the importance of introducing greenery in to approach of walkable city planning.

1-3. Economic Gardening

In the research of walkable city, economic gardening is also important approach in regional revitalization. Economic gardening refers to policies that revitalize local economies by taking advantage of the soil of the region to nurture local SMEs, viewing the local economy as a "garden" and local SMEs as "plants" (Umemura, 2019:125). On the other hand, the ideological framework of economic gardening is creative and can be said to represent an effective new direction for "endogenous" industrial policy that does not rely solely on attracting companies from outside (Umemura, 2019:129).

Problem Statement and Research Questions and Tatebayashi city

From the literature review, it can see that walkable community development is expected to have a variety of effects on community development utilizing regional especially, utilizing greenery and creation of liveliness. Also, it introduces the preceding research for each walkable city planning, utilization of environmental resources into walkable city planning, and economic gardening. However, there is still room for research on combining these approaches together, and following the real status of regional revitalization. This led to the theme of this research. Following the background and theme of this research, there are two research questions as below;

- 1.To what extent administrative measures using environmental resources have a positive effect on "sustainable regional revitalization"?
- 2. What is the role of fostering social capital among relevant actors in environmentally sustainable regional revitalization?

These questions were set to clarify the possibility of sustainable regional future revitalization in field of walkable city and utilization of environmental resources. Also, to realize the regional revitalization, collaboration or cooperation of three key actors, public actor (administrative), business actor (corporation), and private actor (citizens). This includes the importance of understanding the building of Social Capital", to see the actual status of actor's relationship, roles to realize regional revitalization. Social capital means "trust, norms, and networks in society (Inaba 2007:4), so understanding the three essentials among actors is important to clarify the possibility. Based on the research questions, this research tries to understand the relationship and roles among the three actors and future possibilities of regional revitalization.

This research addresses the subject region as Tatebayashi city because the condition of background can be applied same. As same as the situation in Japan, Tatebayashi city faces issue of low birthrate and population. The city has population of approximately 75,000, and 27 percent of them are elderly (Tatebayashi 2021:12). Also, the city put efforts in utilizing environmental resources for its regional rich revitalization. It has environmental resources such as Japanese heritage "Satonuma", rich rice and wheat area, and Tsutsujigaoka park. Most importantly, Tatebayashi city includes the walkable city planning in its regional revitalization policy since 2021 (Tatebayashi City 2021:29). As previous potential of regional revitalization, as Tatbayashi city is industrialized place, it can say that the city has an employmentgenerating environment. Reviewing these situations of Tatebayashi city, it includes the same condition as first part of literature review, thus this city was selected to subject of the research.

3. Methodology

This research addresses mainly two qualitative methodology. and quantitative research. For qualitative research it addresses bibliographic research through official Tatebayashi city's documents, literature review through newspaper articles from Jomo Shinbun, and interviews to Tatebayashi city officers, and citizen business actor. actors. For quantitative research, based on the interviews data, it create Co-occurrence network and apply co-occurrence relationship into contents.

The first methods were set to derive the actual status by following the policy. The second method is to clarify the activities by three key actors by the following the third points of view, local newspaper articles, Jomo Shinbun. Also, it is important to understand the relationship and roles among three actors by hearing the voices, this research delivered interviews to three key actors by snowball sampling. Then it tries to apply the co-occurrence relationship into contents of the interview data to see the real status of relationship, roles, and the building of social capital for possibility of regional revitalization.

4. Analysis

For bibliographic research, as development of regional revitalization policy, following the announcement of Gunma "Town Planning" Vision in 2012 (Gunma Prefecture 2012), Tatebayashi city indicates the introduction of walkable city planning in 2021 (Tatebayashi city 2021). In 2022, Tatebayashi City Action Program was announced, and it includes two priority projects. First project includes promotion of a multi-pole network-type compact city based on the site selection plan, and second project addresses promotion of walkable community development based on the policy for revitalization of the lively city center (Tatebayashi city 2022).

For newspaper reviewing, this section reviewed the three key actors' action by following the Jomo Shinbun articles which attached in the reference list. As policy started to applied since 2021, it follows 2021 to 2022. For efforts of public sector, through 2021 to 2022, there are activities related to utilization of environmental resources, city liveness and walkable. For the efforts of business actors, in 2021, product co-development with local resources was done, and in 2022, delivery class in local schools and facility construction plan to make city liveness were founded from the articles. For efforts of private actors, in 2021, there were activities for city liveness using public space such as café and theater, and actions for walkable. In 2022, there were activities for crowdfunding due to lack of financial resources, supports for startup, and actions for city liveness. For interview data analysis, this section shows the results of analyzing interview data contents and cooccurrence network attached in the appendix.

	Public Actors	Business Actors	Private Actors
Public Actors		Difficulties in building a relationship of trust	Participation of citizens is more desirable for community development and creating liveliness Government's role to create mechanisms to encourage citizens' participation
Business Actors	Few opportunities to be directly involved in the city's policies		Succeded to build a relationship of trust with citizens
Private Actors	Lack of compromise from the government	Building of trust is not zero, but few opportunitiea to collaborate/ cooperate	

(Resource: Created by authors)

5. Conclusion

So far, this research addressed theme of Environmentally considerate sustainable regional revitalization in Tatebayashi city, and tried to clarify relationship and roles among the three actors, and future possibilities of regional revitalization. From the point of fostering "Social Capital", features of relationships and roles are clarified as below;

	Policy Making	Financial Resources	Human Resources
Public Actors	Enough	Partially enough	Insufficient
Business Actors	Insufficient	Enough	Partially enough
Private Actors	Partially enough	Insufficient	Enough

(Resource: Created by the authors)

Answering the research questions, the results of analysis shows that Each actor is aware of the importance of using Environmental **Resources** in regional development, and there are Local actors who are working on city planning with an awareness of Walkability. This suggest that there is a sufficient possibility for regional revitalization with approach of walkable city and utilization of environmental resources. For the second questions, it clarifies the status of building social capital among the three actors. It shows the necessity to create public mechanisms to encourage the participation of business and local actors. Based on the point of social capital, building trust is enough and network is partially enough, However, because there was lack in understanding each of actor's interests and goals of profit from the interview data, norms of reciprocity is insufficient. In conclusion, it can say there is potential for realizing walkable city by using environmental resource, but to realize it, there is a need to build social capital. Fostering of social capital will play an important role in sustainable regional revitalization environmental resources in the future.

References

- 1) Cabinet Secretariat (2022), Digital Garden City State Concept (Draft Plan). [in Japanese] 内閣官房 (2022) 、『デジタル田園都市国家構想基本方 針 (案)。
- 2) Gunma Prefecture (2012) *Gunma Regional Developing Vision*. [in Japanese] 群馬県 (2012) 『ぐ
 んま"まちづくり"ビジョン』。
- 3) Inaba Yoji (2007), Social Capital: Solving Modern Economic and Social Issues with Ties of Trust, Seisansei Publishing. [in Japanese]稲葉陽二(2007)、『ソーシャル・キャピタル―「信頼の絆」で解く現代経済・社会の諸課題―』、生産性出版。
- 4) Jomo Shinbun (2021), "Tatebayashi City publishes second edition of "Satonuma" pamphlet to accompany walks in Tatara-numa", Jomo Shinbun, 2021 June 2, retrieved from https://www.jomo-news.co.jp/articles/-/12210 [Last Access 2022 October 16] [in Japanese] 上毛新聞 (2021)、「多々

- 良沼散歩のお供に 館林市が「里沼」パンフ第2弾発行」。
- 5) Jomo Shinbun (2021), "120 residents and others stroll around Tataranuma Swamp", Jomo Shinbun, 2021 April 5, retrieved from https://www.jomonews.co.jp/articles/-/13602 [Last Access 2022 October 16] [in Japanese] 上毛新聞 (2021)、「住民ら 120 人多々良沼散策」。
- 6) Jomo Shinbun (2021), "Tatebayashi, Meiwa: Bread made with prefectural berries developed by Tatebayashi Shoko High School students in collaboration with Lawson, Tatebayashi", Jomo Shinbun, 2021 December 8, retrieved from https://www.jomo-news.co.jp/articles/-/38783 [Last Access 2022 October 16] [in Japanese] 上毛新聞 (2021)、「県産ベリーをパンに ローソンと共同で館 商工高生が開発 館林・明和」。
- 7) Jomo Shinbun (2021), "Enjoy nature on foot 50 residents and others at Tataranuma, Tatebayashi, Ora", Jomo Shinbun, 2021 November 27, retrieved from https://www.jomonnews.co.jp/articles/33269 [Last Access 2022 October 16] [in Japanese] 上毛新聞 (2021)、「歩いて自然を堪能 多々良沼で住民ら50人 館林 邑楽」。
- 8) Jomo Shinbun (2021), "A shared space to support business startups in Tatebayashi, a place to try out opening a store. 4 people from different industries are contributing to the revitalization of the city", Jomo Shinbun, 2021 May 2, retrieved from https://www.jomo-news.co.jp/articles/-/12913 [Last Access 2022 October 16] [in Japanese] 上毛新聞 (2021)、「お店開業お試しの場に 館林に創業支援シェアスペース 異業種 4 人、活性化貢献で」。
- 9) Jomo Shinbun (2022), "Kiryu, Tatebayashi, Ashikaga 3 cities collaborate to explore revitalization through Japanese heritage, panel discussion", Jomo Shinbun, 2022 Feburary 6, retrieved from https://www.jomo-news.co.jp/articles/-/68266 [Last Access 2022 October 17] [in Japanese] 上毛新聞 (2022)、「桐生、館林、足利 3市連携 日本遺産で活性化探る 桐生でパネルディスカッション」。
- 10) Jomo Shinbun (2022), "Model courses, summits, and guide training: Tatebayashi Promotion Council to focus on tourism in "Satonuma," a Japanese Heritage site", Jomo Shinbun, 2022 May 2, retrieved from https://www.jomo-news.co.jp/articles/-/109494 [Last Access 2022 October 17] [in Japanese] 上毛新聞 (2022)、「モデルコース、サミット、ガイド育成日本遺産「里沼」観光に本腰館林・推進協議会」。
- 11) Jomo Shinbun (2022), "Calpis" delivery class at
 Tatebayashi Shichi Elementary School to learn the
 function of lactobacilli", Jomo Shinbun, 2022 Nune
 29, retrieved from https://www.jomo-news.co.jp/articles/-/136971 [Last Access 2022

- October 17 [in Japanese] 上毛新聞 (2022)、「館林 七小学校で「カルピス」出前授業 乳酸菌の働き学 ぶ」。
- 12) Jomo Shinbun (2022), "Olive cultivation using abandoned farmland to become an industry Jungle Delivery in Tatebayashi to encourage farmers to cultivate and preserve the environment", Jomo Shinbun, 2022 Feburary 3, retrieved from https://www.jomo-news.co.jp/articles/-/66581 [Last Access 2022 October 17] [in Japanese] 上毛新聞 (2022)、「耕作放棄地使いオリーブ栽培 産業に 館 株のジャングルデリバリー 農家の栽培や環境保全後 押しへ」。
- 13) Jomo Shinbun (2022), "Outdoor screenings to be held regularly... CF to raise funds for equipment (Tatebayashi City, Gunma Prefecture) ", Jomo Shinbun, 2022 August 25, retrieved from https://www.jomo-news.co.jp/articles/-/165105 [Last Access 2022 October 17] [in Japanese] 上毛新聞 (2022)、「野外上映会を定期開催 機材費募る C F で目標達成(群馬県館林市)」。
- 14) Kawakatsu, Takeshi (2019), "Learnings from the Regional Planning from Portland", *Japan Intercultural Academy of Municipalities*, Vol.105, pp.41-43. [in Japanese] 川勝健志(2019)、「ポートランドのまちづくりに学ぶ」『国際文化研修 2019 秋』 第 105 巻、41-43 頁。
- Speck Jeff (2018) Walkable City Rules: 101 Steps to Making Better Places, Island Press Washington, DC.
- 16) Tatebayashi City (2022), Gunma " City Development" Vision Tatebayashi City Action. [in Japanese] 館林市(2022)、『ぐんま"まちづくり"ビジョン 館林市アクション』。
- 17) Tatebayashi City (2021), *Tatebayashi City Town Center Lively Revitalization Policy (Walkable City Development).* [in Japanese] 館林市(2021)、『館林市まちなかにぎわい再生方針(ウォーカブルなまちづくり)』。
- 18) Teng Yuanyuan (2022), "The Impact of the Corona Disaster on the Migration Attitudes of Young People Living in Tokyo", *Quarterly Journal of Geography*, Vol73, No.4, pp.250-263. [in Japanese] 勝媛媛(2022)「コロナ禍が東京都に居住する若年層の移住意識に与える影響」、『季刊地理学』、73 巻、4号、250-263 頁。
- 19) Umemura Hitoshi (2019), New Developments in
 Local Government Industrial Policy Utilization of
 Industrial Agglomeration and Urban Development
 Techniques, Minerva Shobo.[in Japanese] 梅村仁

- (2019)、『自治体産業政策の新展開 産業集積の活用 とまちづくり的手法』ミネルヴァ書房。
- 20) Urban Living Environment Study Group New Urban Housing Association (2006), Creating a town that makes people want to walk Rediscovering the charm of the town, Kajima Publishing.[in Japanese] 社団法人新都市ハウジング協会 都市居住環境研究会 (2006) 『歩きたくなるまちづくり 街の魅力の再発見』、鹿島出版会。

Appendix

Tatebayashi city office

Figure 1-1 City Planning Division

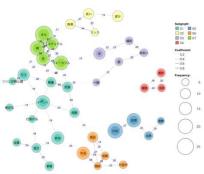


Figure 1-2 Green City Promoting Division

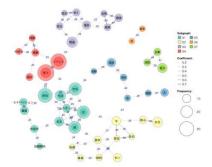
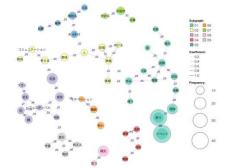
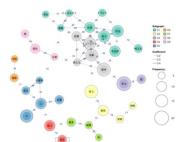


Figure- 1-3 Tsutsuji City Sightseeing Division



Business Actor Figure 2 Seifun Museum



Private Actor

Figure 3-1 SORANOMON Theater

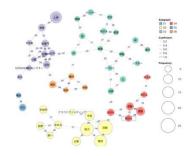
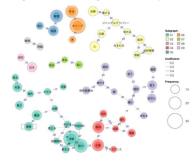


Figure 3-2 Jungle Delivery



 $Figure \ 3\hbox{--}3\ Mitsudeyamorisha$

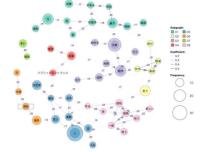


Figure 3-4 rpg

