Reflections on the Development of Taiwan's Coastal Settlements: Seen from the Perspective of Japan's Regional Revitalization 2.0

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ABSTRACT

Japan has dedicated itself to revitalizing local development to resolve economic slumps for more than 25 years, and to implementing regional revitalization aimed at activating local economies and driving local development with new momentum from the investment of public resources, as well as to further resolving issues of depopulation, an aging society, and imbalance between urban and rural areas in Japan. Taiwan also has started to implement regional revitalization policies, and we also expect to apply the capacities, resources, and experience accumulated from community development since 1994, to develop a robust foundation for Taiwan's regional revitalization. Facing the challenges in Japan of development of regional revitalization, the Nomura Research Institute (NRI) proposed Regional Revitalization 2.0 to address the national crisis triggered by long-time metropolitan-regional interdependency. The NRI proposed two regional economic revitalization concepts: a "regional economic hub" and an "extensive metropolitan region", hoping to revert the magnetic effect and achieve the goal of a population of over 100 million in 2060 as well as ongoing economic growth. In contrast, we should further understand the steps and approaches to implement Taiwan's Regional Revitalization 1.0. Therefore, the study attempted to plan the development step of coastal settlements that accord with Taiwan's features, and then, based on our research project on the interdisciplinary research of ocean culture and regional development model (IROCRD), we obtained the status of Taiwan' coastal settlements, made reference to the Japanese model, as well as applied the concept of learning by doing to induce three steps. In practice, this study further proposed three tasks to connect "the three steps" and emphasized the engagement of stakeholders in the three tasks to build consensus on cooperation. Consequently, we attempted to reach consensus, integrate, and fully use regional resources accumulated over the years to progressively shape the individual self-supporting and cooperation model via the process of implementing regional revitalization.

Keywords: coastal settlements, regional revitalization, sustainability, approaches.

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1 INTRODUCTION

Regional revitalization has become a mainstream doctrine in Taiwan. The Executive Yuan designated 2019 as the first year of Taiwan's Regional Revitalization and as a national-level security policy to address population loss, the low birth rate, an aging society, and imbalance between urban and rural development. The National Development Council (NDC) (National Development Council, 2018a) is responsible for overall planning, coordinating, and integrating the regional revitalization-related resources of various ministries to carry out regional revitalization. The Executive Yuan approved the "National Strategic Plan for Regional Revitalization" presented by the NDC in 2019 to achieve the vision of "balanced development throughout Taiwan" (National Development Council, 2021). The NDC proposed five strategies (also called "five arrows") for promoting regional revitalization, including enterprise investments in hometowns, applications of new technologies, local brand establishment, integration of ministry resources, and social participation in regional revitalization. The implementation and promotion of regional revitalization requires involvement from various departments and participation from the central and local governments and local communities and civic organizations (Chiang, 2021). Therefore, the plan of regional revitalization expects to maintain a population of over 20 million and balanced development in Taiwan via intra-island migration (National Development Council, 2018b).

In order to drive local economic development, Japan's government has promoted a subsidization strategy to drive local tourism and economic development since 1988. Japan proposed relevant policies to promote local economic development, such as Hometown Creation Business in 1988, and Regional Regeneration in 2005 (Wu, 2018). Since Shinzo Abe was formally elected as prime minister in 2012, the Abe administration had to face the challenge of a chronic economic slump (Prime Minister's Office, 2014). At the same time, the Abe administration also had to face the issues of a declining birth rate and an aging population. In 2014, the Abe administration formulated the "Act on Overcoming Population Decline and Vitalizing Local Economies in Japan" and the "Local Revitalization Act" as the legal basis for overcoming the issues of diminishing populations and revitalizing regions across the government ministries and agencies (Ministry of Land, Infrastructure, Transport and Tourism, 2014). The Abe administration also established the "Headquarters for Overcoming Population Decline and Vitalizing Local Economies in Japan" to promote regional revitalization policies. Moreover, Abe announced the new strategy of "three arrows": aggressive monetary policy, fiscal consolidation, and growth strategy to improve the Japanese economy and ameliorate the aging problem (Shieh, 2018; Yoshino and Taghizadeh-Hesary, 2014). Among these, the growth strategy arrow is an important strategy to promote regional revitalization.

Through reviewing the history of Japan's regional revitalization, we see that it has dedicated itself to revitalizing local development to resolve economic slumps for the past 25 years. The trend of depopulation has manifested since the beginning of the millennium, and the population has decreased by almost one million over the past 7 years (Matsuura, 2020). Furthermore, the Japan Policy Council released a report on Municipalities at Risk of Vanishing, proposing that Japan was facing a risk of vanishing due to the population shift from rural to urban areas (Matsuura, 2020). Following that, Japan's government has constantly tried to resolve the local economic and depopulation issues, and there were still debates over the efficacy of the Abe administration's massive economic reforms (Lichtblau, 2020). Therefore, regardless of whether the Japanese regional revitalization policy was a success or not, Japan's government has invested much effort and huge resources to face the issue of local revitalization. In contrast, Taiwan's government also has paid attention to regional revitalization since 1994 and has proposed many policies, such as local featured industries, the Rural Revitalization Project, and the Hakka Culture Development Project. Nowadays, Taiwan is faced with the problems of depopulation, an aging society, a low birth rate, and imbalance between urban and rural areas; integrating governmental resources and local experience to propose useful strategies to improve local economies is thus crucial.



According to the experience of Japan, the legislation of regional revitalization is the key point for promoting regional revitalization. The Abe administration established the "Act on Overcoming Population Decline and Vitalizing Local Economies in Japan" to prevent regional population decline, to address the overcentralization of population in its capital region—Tokyo, and to vitalize local resources and endowment. In contrast, the Executive Yuan in Taiwan proposed the "Act for Regional Revitalization (draft)" to the Legislative Yuan on December 6, 2019, to provide a legal basis for implementing regional revitalization. Moreover, the "Act for Regional Revitalization (draft)" is a milestone, and it is hoped that it will pass as soon as possible.

Japan has faced a negative cycle that combines a low birth rate, an aging population, and imbalance between urban and rural development, and has attempted to propose effective improvement plans to prevent deterioration of local economies, and even to overcome the huge problem presented by having less than 100 million people by 2060 (Chen and Shih, 2021). Therefore, Chief Research Fellow Fumihiko Kamio and Senior Staff Kazuhiro Matsubayashi of the Nomura Research Institute (NRI) have proposed Regional Revitalization 2.0 to take early intervention in inherent risks and revitalize regional prosperity. In this respect, it may be asked, "Is Taiwan's Regional Revitalization 1.0 ready to practice?"

2 JAPAN'S EXPERIMENT OF REGIONAL REVITALIZATION

Over the past decades, Japan has attracted regional talent to create national economic development through the urban development of metropolitan areas like Tokyo and Osaka. The central government then financed local governments by means of subsidization or funding. Tokyo's population reached 12 million in 2001, and surpassed 13 million in 2010 (Research Institute for Urban and Environmental Development, 2019). Through metropolitan-regional interdependency, Japan has continued to accumulate development capacity in its capital region. However, regional talent and resources rushed to the urban areas following their growth and expansion, causing an ongoing decline in the outer regions, thus impacting the growth force of urban areas (Prime Minister's Office, 2014). In addition to a retrospective on the traditional metropolitan-regional interdependency under Regional Revitalization 2.0, the Japanese government even suggested that this interdependency is the key factor causing population decline and the low birthrate. The metropolitan coordinating region formed by the Greater Tokyo, Greater Osaka, and Greater Nagoya regions has long enjoyed key resources, including excellent talent, supplies, finance, information, and intellectual property, and from those resources to increase their added value. However, during long-time resource concentration of the metropolitan coordinating region, the capacity of the regions has continuously and rapidly weakened. Hiroya Masuda (2019) even proposed the "Local Extinction" theory to point out the devastating disintegration of metropolitan areas and rural areas as a result of regional extinction.

To address the national crisis triggered by long-time metropolitan-regional interdependency, the NRI has proposed two regional economic revitalization strategies: a "regional economic hub" and an "extensive metropolitan region". Both of the strategies have referred to the development of advanced countries like the UK and Germany (Masuda, 2019) and hope to reverse the magnetic effect of the metropolitan coordinating region through two strategies and achieve the goal of a population of over 100 million by 2060, as well as ongoing economic growth. The "extensive metropolitan region" was based on the international business practices that clustered people, materials, property, information, and intellectual property. While developing international economic activities, the cluster formed a supporting system for local production and job opportunities. Then, the greater metropolitan coordinating region naturally transformed into a stage for global collaboration.

How can new value-added regional clusters for high productivity be created? Japan has absorbed the experiences of London and Singapore. London was characterized by an initiative that can actively expand to the external market and an attraction that can lure global talent and resources. Singapore formed an integrated

organization by combining the central and local governments with private enterprises through strong incorporation of economic measures with execution that proactively implements related policies that attract a global workforce and resources to the city, thereby promoting the metabolism of overall industry in the metropolitan area.

The "regional economic hub" is another strategy to reverse the metropolitan magnet effect. The "regional economic hub" enables straightening out an environment for business expansion; specifically, it enables a region to possess offers better than those of the metropolitan coordinating region and prevent talent and economic activities from flowing out of the region and even attract the return of talent and economic activities. Simply speaking, the regional economic hub aims to transform a region into a hub for connecting with the world. Japan has made reference to a key prerequisite in the German experience: create "a circle of high value-added job opportunities" for talent, enterprises, and organizations (network connections) in the region to show their existence more significantly through internationally renowned enterprises, universities, and research institutions outside of the metropolitan coordinating region (Masuda, 2019). Hence, finding a number of locations capable of independent economic operation is the key to success for Japan's "regional economic hub" strategy.

According to the above, the most essential task for the two strategies of "local economic hub" and "extensive metropolitan area" is the formation of a "local economic hub". The success of the local economic hub strategy will enable the transformation of "metropolitan-regional interdependency" into a "self-supporting and cooperation model" (SSCM) to mitigate and even reverse the magnet effect of the metropolitan coordinating region. However, it takes a long time to build a regional economic hub, because talent cultivation and support for enterprise attraction requires the ceaseless efforts of individual decisions and actions. Looking back to Taiwan, one can see that local features are emphasized in regional development to create new business opportunities with local features, whether it is local entrepreneurship or the entry of large enterprises, such as local smallholders or King Car Group's hometown contribution in Yilan. However, there seems to be obstacles in overall development. As the strength of overall development floundered in both cases, a development strategy is required with a medium- and long-term vision and stock (regional assets) and circulatory (circulation and cooperation) perspectives in order to transform a region into a local economic hub. In practice, the Singaporean experience is worthy of emulation. Integrated development strategies, including talent sources and resource availability, can be proposed by re-incorporating the features and potential of the local economy through crosssector integration. The international competitiveness of regions should be demonstrated in greater detail, and the necessity and feasibility should be considered and investigated by region and stage.

3 SIMILARITIES AND DIFFERENCES BETWEEN JAPAN AND TAIWAN

The SSCM was one of the main objectives of NRI's "Regional Revitalization 2.0"; therefore, the NRI proposed three steps and seven treatments to progressively describe achievement of the SSCM and realize the regeneration of a regional economic hub. NRI has mentioned that the first step is finding all crucial roles in each regional area; specifically, local features should be used as the backbone, and then the most appropriate lineup should be arranged to create new approaches and outcomes. The second step is to draw up strategies and scripts of regional economic hub revitalization; namely, to draw up strength and futuristic blueprints and practices to revitalize regional development. The last step is to enhance the skill of every key role; namely, the stakeholders playing irreplaceable roles for one another. We wanted to ensure that the regional stakeholders provided irreplaceable and unique products and services in the regional economic hub, as well as the



competitiveness of the regional area. Moreover, the critical objective of the step is to exhaustively use local resources.

The three major steps were devoted to regeneration of the regional economic hub, but needed the approaches to work in practice; therefore, the NRI proposed further seven treatments to discuss the approaches in detail and to make each step connect and cohere. There are two treatments of the step for seeking potential capacity, including treatment 1: Recall all large enterprises and 2: Increase global niche top (GNT) companies. Regarding treatment 1, the NRI suggested large enterprises should return to their hometowns to give back profits for revitalization. The government attracted large enterprises through policy support and collaboration with economic groups, while the regions must cluster unique industries to form sustainable industrial clusters. As for treatment 2, it advocates looking for and retaining GNT companies, which can form a regional economic hub. The GNT companies can be manufacturers that the market pursues or retailers that find new customers. Increasing the number of GNT companies requires the continuous support of the industry, academia, government, and finance. The second step, "to draw up strategies and scripts of regional economic hub revitalization," can be regarded as "implementation guidelines", and for that step was proposed treatment 3: concretization of the regeneration plan. Through the cooperation of the "Regional Population Vision" and the "Comprehensive Strategy of Local Version", local residents and related groups must become involved, and a story-based medium- and long-term plan must be drawn up. Finally, the plan-do-check-act (PDCA) cycle is applied to re-evaluate the effectiveness of the implementation revitalization.

For the last step: "Field engagement", four treatments are proposed, including treatment 4: Screen and accumulate incubation resources for differentiation, treatment 5: Seek added value, treatment 6: Target specific sectors for improvement, and treatment 7: Make greater efforts in profit-making. There is no sequence for these steps or points. After all key roles are ready, one can start with treatment 3 in order to achieve the goal of providing "irreplaceable, unique" products and services to regenerate the regional economic hub. Regional sustainability is a key to "Regional Revitalization 2.0". Attracting a progressive population return could drive regional industrial and economic development to implement sustainable regional development. Therefore, the growth and expansion of the metropolitan coordinating region are secured with the robust structure and power of regions to achieve sustainable social development.

Regarding the above three steps and seven treatments, the steps are the key foundations and goals of stages, while the treatments are the adaptive approaches and methods. Adaptive approaches or methods should be adopted to achieve individual goals of stages based on geopolitical or customary differences. Adaptive approaches or methods also inspire industrial development in different parts of Taiwan. In accordance with the National Academy of Marine Research (NAMR) research project "the interdisciplinary research of ocean culture and regional development model (IROCRD)", we have attempted to progress with the coastal settlements survey. We have found that, based on the cultural, social, and natural environment, Taiwan's coastal settlements have developed their own ocean culture and regional industries, such as distant-water fisheries in Kaohsiung, aquaculture in Tainan, sulfuric fire fishing in New Taipei City, and religious sculpture in Lukang, Changhua. However, we also have found that all traditional industries are declining due to industrialization and globalization.

Therefore, we have attempted to plan the development step of coastal settlements that accords with Taiwan's features. Then, based on our IROCRD research project, we obtained the status of Taiwan' coastal settlements, and made reference to the Japanese model, as well as applied the concept of learning by doing to induce three steps. The first step is to induce local ocean culture in the region, and then extend into a unique ocean-culture-based industry as a potential industry. The ocean-culture-based industry not only continues traditional industry but also enhances competitiveness. The second is to draw up the methodology of

implementation, i.e., to establish the guide of implementation. Instead of using abstract academic theories, this is a process to pragmatically gather information of various practical experiences to conclude feasible methods and steps of implementation. This step is the most challenging step; the key to the development of local teams is not to create star teams, but to build local consensus. The last step is an engagement and practical step. For this step, we consider improving the industry's capacity through the concept of learning by doing and field engagement to accommodate to the rapidly changing environment in order to produce a better response. It is hoped that building a method of local sustainable development can be attempted in the future.

4 SUGGESTED STRATEGIES FOR TAIWAN'S REGIONAL REVITALIZATION

Although the "regional economic hub" and the "extensive metropolitan region" are the two important strategies to promote Japan's Regional Revitalization 2.0, Taiwan must still consider its experiences and local features to propose suitable strategies and approaches. In addition, Taiwan just started to promote a comprehensive regional revitalization at this time. The difference between Taiwan and Japan lies in the foothold of development status and national conditions, such as urban-rural structure; therefore, we should refer to Japan's revitalization experiences rather than replicate Japan's ideas.

The concept of the "regional economic hub" is worth learning from Taiwan; in other words, it is important to make regional areas implement "SSCM". The implementation of "SSCM" should have involvement from the central government, local government, industry, academia, research institutes, nongovernmental organizations (NGO), and finance support system. Each sector should play a different role, such as academia and research engaging in planning, the government coordinating implementation, regional industrial organizations and groups implementing related projects, and the financial system aiding financial flow of regional revitalization. In term of operation, in addition to the three major steps proposed by this study as well as based on "learning by doing", we also further proposed three tasks: stock-taking, re-organization, and talent, which were involved in "the three steps"; in other words, each step includes three tasks (we also call them the "three elements"). The tasks were from the IROCRD research project that included a field survey, and emphasized the engagement of stakeholders in the three tasks to build consensus on cooperation. The overall implementation framework is shown in Figure 1.

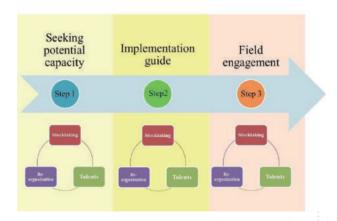


Figure 1. Conceptual framework for implementing regional revitalization in Taiwan.



This study proposes three steps to implement regional development, and further to promote regional sustainable development. We attempted to apply the three steps to promote regional revitalization continuously, and the three tasks played roles as drivers of the three steps. In terms of (1) Stocktaking: we should understand and master the important elements of local development in order to manage local resources. The National Development Council proposed the "recording local elements" (local DNA) policy that was a milestone in starting our regional revitalization activities, which should be uninterruptedly continued to discover local features to master local resources and assets, and further predict development direction in the future. (2) Reorganization: the relationship between metropolitan and regional areas should be re-organized and then oriented toward establishing individual SSCMs. This task emphasized local sustainable development and sharing and allocation of resources from metropolitan areas. The metropolitan and regional areas adjust the business models of each other and establish a local development model of mutual assistance. (3) Talent: talent has always been a weak point of local development; therefore, it's important to actively invests in the cultivation of the next generation of talent. Furthermore, since the first year of regional revitalization, people who have worked hard in each area have gradually gathered together, especially the youth. The cultivation of talent is not only the introduction of people, but more importantly, the sense of identity and mission of the place, and the formation of the local industrial ecosystem. That is the key to retaining youth in their hometowns.

Consequently, it is important to establish an enforceable mechanism and operable approaches, as well as step-by-step development of Taiwan's regional revitalization. Through the implementation of the three tasks, Taiwan should continuously collect local resource data and incorporate it into the database established by the NDC. Moreover, the central government and research institutes should consider giving weight to long-term regional development research. Through long-term investigation and surveying, we can grasp sufficient amounts of regional resources to analyze the regional development direction in the future.

5 CONCLUSION

Regional revitalization has started in Taiwan with high expectations from different regions. All walks of life expect that regional revitalization can lead to better understanding and better knowledge of a region in a more pragmatic and realistic approach and that it can help reimagine the future development of a region based on its features and willingness of residents. As to the overall implementation, rolling implementation can assist a region in improving its "profit-making capacity" and engage in "regional resource management" to minimize financial expenses, break class-based relationships, and encourage mutual cooperation among industry, government, academia, finance, and labor. In addition, the completeness of related support measures and the emergency response ability to subsequent impacts should be reviewed pragmatically and converted into appropriate assessment indicators, instead of being tangled up in the cycle of qualitative and quantitative key performance indicators (KPI). Consequently, it is also hoped that regional revitalization can help form consensus, integrate, and fully use regional resources accumulated over the years to progressively shape individual SSCMs and resolve the national development crises of depopulation, population outflow from rural areas, the low birth rate, and an aging population.

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