

Establishment of Regional Culture For Preventing Depopulating Laborers -----case of Yaeyama Islands in Japan

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ABSTRACT-----In common perception, economic development is supposed to proceed with the transformation of the main sector of the economy from agriculture to industry, then to services. The principal role of rural areas is, therefore, to provide cities with food, while excess labor gradually migrates from rural to urban areas. But during the last decades, in many countries, there is a tendency that superabundant laborers in rural areas immigrate to cities. Depopulation and senility of the rural areas are causing gradual serious social problem, because the lack of labor power and inefficiency, thus insufficient social infrastructure degrade productivity and living standard in those areas. How to develop the rural areas to stop the moving step of laborers is a meaningful research issue for many countries.

In this paper, some cases in Yaeyama islands in Japan are studied by focusing some unique activities on establishing their regional culture which attracts outside people to move back to the rural regions. Even though Yaeyama Islands have its geographical disadvantages, they developed their own life style and culture based on the respect for native nature, under the endeavor of not only the original residents but also lots of immigrations with shared mission, which is called “Star sky manifesto”. This resulted attracting outside people including younger generation and preventing depopulation in local areas. Their successful experience could be a clue for many other rural laggard regions.

KEYWORDS: regional culture, community

1. INTRODUCTION

During decades of globalization and modernization, population, employment and economic capacity keep concentrating in and around large urban centers. As Ohmae (2001) described, the world, economically and in management terms, has become a network of prosperous city-regions. This trend spells the demise of periphery locations, especially the islands with the inherent geographic disadvantage. They will find themselves exporting people, brains, investment and other forms of capital to attractive metropolitan zones or their immediate suburbs. Employment opportunities will fall; actual entrepreneurs will

move away; young and educated people will relocate, often never to return but to visit relatives and friends. A decreasing population reduces the political clout of the islands which the availability of national investment to public infrastructure (as in roads, health care, education) also declines. This dynamic appears irreversible (Baldacchino, 2006). Are therefore islands meant to suffer, sooner or later, a hemorrhage of human and other economic resources?

Hence how to remain the human resource is one of the emergent issues for the islands community.

In this paper, we examined in deeply the development of Yaeyama Islands in Japan. In

addition to small size, Yaeyama Islands also exhibit a combination of four other characteristics that may affect their economic performance: insularity, remoteness, being archipelagos and being highly mountainous entities.

Even with the congenital handicap, Yaeyama Islands retain their own human resource; moreover attract the outside people including younger generation. On the surface, their revitalization is originated from the development plan of government, the instruction of the basic infrastructure, the promotion of tourism industry and their charming natural resources. This paper attempts to seek for the undersurface reasons and produce empirical evidence for the development of the peripheral areas. We assumed that the culture which is embedded in the joint community may be one of the deep reasons. In Yaeyama islands, the regional culture is based on the respect for natural resource and native traditions.

This paper consists of 5 sections. In Section 2 we review several related papers concerning the determinants of the economic performance of small islands; in section 3 the basic information and some successful cases in Yaeyama Islands are presented. In section 4, we analyze the determinants of the economy performance, the construction of the culture factors and common vision of the island. Our concluding remarks are to be found in Section 5.

2 LITERATURE REVIEW

As Armstrong and Read pointed out, these are not insurmountable in spite of some serious challenges facing small areas. In fact, the economic performance of many small areas has been strong whether in terms of their growth rates or income levels (Milner and Westaway, 1993; Armstrong and Read, 1995; Milner and Weyman-Jones, 2003). Streeten, Armstrong and Read analyzed deeply the

principal economic challenges facing small states in their research. For the islands, which are remote from the main market, the main traditional challenges for them are the domestic small scale market, the limited and undiversified resource, monoculture plants, over-dependence on one or two export products with little control over price, and the need to import virtually everything for domestic consumption and vulnerability to external economic, political, environmental and climatic forces (e.g. typhoon) and other factors (e.g. terrorisms) that can have massive impacts on their economies (Briguglio, 1995; Briguglio and Galea, 2003).

However, there are some small states (islands) succeeded despite these challenges. Armstrong and Read put forward four reasons to explain the successful states. They are also suitable for the islands cases. The first is that small areas have had no option but to embrace *openness* and export-led growth. This simultaneously reduces the impact of the economies of scale constraint, and forces firms to be internationally competitive. Given their labour supply constraints, growth in small areas is likely to be founded upon niche markets and human capital-intensive activities, such as tourism and financial services (Armstrong and Read, 1995, 2000, 2002a; Armstrong *et al.*, 1998). Second, successful small areas appear to have made effective use of a limited policy portfolio. Because most economic policies such as trade protectionism, exchange rate manipulation, fiscal and monetary policies are ineffective, many small states choose to have their exchange rate linked with a hard currency, and have been able to negotiate preferential relations with the major trade blocs and the global economic powers (Kazuku, 1994; Armstrong *et al.*, 1998, 2002b). Third, many small states have been able to exploit their *cultural distinctiveness* and strong *social capital* (Putnam, 1993; Baldacchino, 2003), although nepotism and clientilism are also ever-present

dangers. Finally, some small areas have been lucky enough to inherit valuable natural resources (e.g. fish, oil) and others (Armstrong *et al.*, 1998; Armstrong and Read, 2000, 2001, 2002a). Kakazu (1994) also pointed out that small islands have special characteristics relating to their economies, natural resources and social-cultures. Small island economies are less diversified and more specialized than other economies in that they are mostly based initially on natural resource-based activities (particularly primary sectors such as agriculture and fisheries) and later on tertiary sectors (such as tourism).

Of course, many small areas are still in hot water, including some islands of Japan which exhibit high out-migration, over-dependence on aid and the kind of excessive reliance on ties to the Tokyo government. Factually, high loss of labor is the severe challenges facing the Pacific islands. It results in the desolation of some villages and shrink of the domestic market. The left old, young, and weak have to live on the remittance flows from their family members who work outside.

Although till recently many scholars have provided valuable insights regarding the relationships between regional economic growths, new business development and labor flows. And a number of scholars have provided useful starting points to the analysis of the way in which regional community may affect the process of economic development. We aim to argue the direct and indirect influence of the community culture on preserving the laborers.

3. CASES INTRODUCTION

We have studied Yaeyama Islands since July 2007 by field survey. Abundant of local residents including the immigrants were interviewed informally or formally. Open-ended questionnaire

surveys were conducted with tourists, government officials and entrepreneurs. A large variety of archival materials and information have been obtained from the bulletins of the government and local almanac. It is believed that such effort may help the researchers to attain the sincere ideology to the island development.

3.1 Background to the Yaeyama Islands

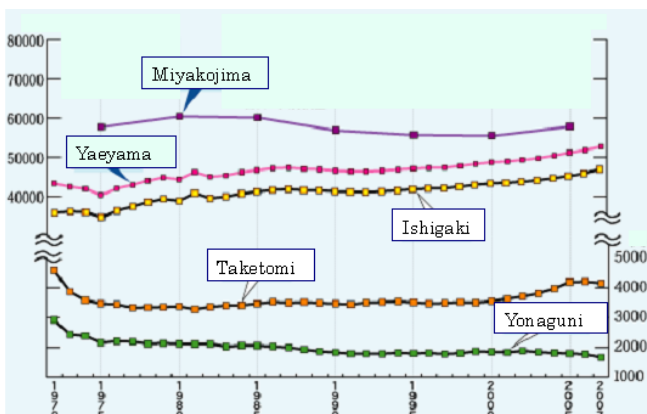
In this section, we present a brief background to Yaeyama Islands. As an archipelago in Okinawa Prefecture, Yaeyama is the remotest part of Japan from the main islands and contains both the most southern (Hateruma) and most western (Yonaguni) inhabited islands of Japan. It is far closer to Taiwan than to Okinawa Island (see Fig 3.1). The Yaeyama islands, with a total area of 228.91 km², consist of 10 inhabited islands and 20 uninhabited islands. The 10 inhabited islands are: Hatoma, Hateruma, Ishigaki, Kohama, Kuro, Terama, Taketomi, Yonaguni, Yubu. 80% population concentrates on Ishigakijima, which is the centre of Yaeyama, also the second-largest island of the Yaeyama Islands. Yaeyama, like the rest of Okinawa, takes cultural influences from both Japan and China due to its location between

Fig. 3.1 Map of Japan and Yaeyama Islands



China and mainland Japan. While many other islands are suffering from depopulation and economy stagnation, the population of immigrant from the mainland to Yaeyama has increases rapidly since 2003, about 3,000 immigrants transfer their residents' cards, the total number of the immigrations reaches 5,000 (April, 2005). The population transition of Yaeyama, Ishigakijima, Taketomi, and Yonaguni is presented in Figure 3.2. Moreover, the prosperity of the local industries can be observed during our investigation and interview with the local entrepreneurs and immigrations, not only the developing tourism industry but also revitalization of the traditional industries.

Fig 3.2 Population transition of Yaeyama



Yaeyama Daily Newspaper(2007-05-15 10:24:11)

http://www.y-mainichi.co.jp/?action_article_show=true&article_id=8120

3.2 Nature and culture preservation

The natural resource and culture are the vitals for the island development, not only as the resource platform for tourism industry, but also the advantageous points for the agriculture industry.

Maybe because of its insularity, and small size, islanders have an innate ability to work collaboratively. On the one hand, the shared resource, culture and mission connected all the islanders to form a community. On the other hand, they are endeavored to consolidate this community to keep the social cohesion. In such situation, the community

which is based on the joint-mission to preserve the natural resource and traditional culture is the center of the residents' activities. Some cases for culture and natural preservation are presented as follows:

3.2.1 Starry Sky Manifesto of Ishigakijima.

Ishigaki is the second-largest island of the Yaeyama Island group. As the only city on the islands, it functions as the business and transport center of the archipelago. Ishigaki Airport is the largest airport in the Yaeyamas and Japan's largest third-class airport. Ishigaki was originally founded in 1908 as Yaeyama Village, an amalgamation of the Ishigaki, Ōhama, and Miyara magiri. In 1914 it was renamed to Ishigaki Village, and grew to become Ishigaki Town in 1926. It became a city on July 10th, 1947. Its population decreased from 41,315 (1965) gradually to 35,000 (1975). However, there is an increment tendency in recent years. Outflow of labor force was decreased because of the amelioration of the infrastructure and also the remarkable expansion of the tourism industry. As of 2007, the city has a population of 47,804 (October 2007) in the 228.91 km² total area. The detail data of the three industries employees and its transition can be read in the Table 3.1.

Table 3.1 Number of employees in three industries

	1995 (Ratio %)		2000 (Ratio %)		2005 (Ratio %)	
First industry	2,627	13.6	2,408	12.2	2,405	11.2
Second industry	4,137	21.4	3,852	19.4	3,371	15.7
Third industry	12,580	65.0	13,232	66.8	15,132	70.7
others	3	0.0	313	1.6	502	2.4
Total	19,347	100	19,805	100	21,410	100

http://www.y-mainichi.co.jp/?action_article_show=true&article_id=8120

The residents here presented the Starry Sky Manifesto in 2006. In the manifesto, it is mentioned that among the 88 constellations, 84 can be observed in Ishigaki. The cross star twinkles like the jewel. They islanders value the wonderful starry sky and want to transmit this starry sky culture to their children who bear the future of the island generation by generation, also appeal all the islanders and tourists to protect the natural and culture resources.

3.2.2 Community establishment and consolidation in Taketomi Island.

Taketomi has a population of approximately 360 (as of 2006) and an area of 5.42 km². It is known for its traditional houses, stone walls, and sandy streets, making it popular with tourists. Popular tourist activities include relaxing at the beach, snorkeling, taking an ox-cart ride through the village, and simply walking or biking around the island while enjoying the quaintness of the village and the natural scenery. Here there are some social regulations. Such like every family should join cleaning the street in the morning together, during the biggest festival, everyone is asked to attend the festival, and those who can not obey to the customs have to move away from this area. Also various rules are in place to prevent the more aesthetically-displeasing aspects of modern construction from ruining the beauty of the island, such as replacing concrete walls with hand-packed stone. The island is also famous for its beautiful beaches and "star-sand" (*hoshizuna*); remains of tiny sea animals. In order to avoid the extinct of star-sand, some rules are emerged to stop catching star-sand in the beach.

3.2.3 No smoking in the construction spot.

Maeki Construction Company was established by the current president Mr. Maeki whose predecessor was chief carpenter in the island. The president returned to the island after learned concrete technology for

half and five years. The company's business includes wooden architecture (5%) and concrete construction, with 12 employees whose average age is around 40 years old. This company esteems the tradition construction, the eco-construction, and the wooden architecture, etc. there is a peculiar rule that, smoking is forbidden on site for construction because maybe the wood or other natural material may be allergic to the smoke, the flavor of the tobacco maybe retain in the wood and ruin the original flavor.

3.2.4 To avoid over-number tourists.

Tourism remains a key development strategy for 21st century Yaeyama islands. The number of tourists to Yaeyama keeps increasing year by year, In 1972, 30,000 tourists consumed around 730 million yen, while in 2006, the number of the tourists increased to 770,000, 20 times as in 1972, and the consumption for sightseeing increased to 76 times, amounted to 54.9 billion yen while the revenue of agriculture in 2006 was only 12 billion yen. However, agriculture did not decrease compared with 1972, on the contrary, it was two times as the amount in 1972. In addition, the cruise ship from Taiwang restarted the service this year, Ishigakijima camp of professional baseball team Chiba Lotte also be launched next spring, the Ishigakijima will be incorporated into the national park with Iriomotejima in 2013. All these fair wind will accelerate the tourism industry of Yaeyama, the target 1million tourists will come true in the near future. The prosperity of the tourism industry caused anxiety and deeper thinking of the local people. On the one hand, people still remembered the "tourism stagnant winter" when U.S. terrorism event happened. The economy that relies on the tourism industry seems to be fragile to the fluctuation of the outside environment, on the other hand, tourism, as presently structured, calls for 1,000 liters (264 gallons) of water a day to satisfy the

life-style requirements of each tourist, the installation of desalination plants might offer one possible solution, but the trial plant which has begun to operate on Okinawa's main island, is small scale, dependent on fossil fuel, and expensive. However, the availability and suitability of resources is limited in islands. In the meanwhile, the over-large tourists will also generate great pressure to the natural resource. How to keep the sustainable development of the tourism industry of Yaeyama becomes hot topic. Nowadays, the island community is considering about limitation to the quantity of tourists each day.

3.2.5 To avoid over-number immigration

During these years, Yaeyama islands are considered as a yearning southern paradise to keep away from the competitive world of the mainland by lots of immigrations from mainland of Japan, including the retired baby boom generation. The "Migration bubble" could be observed in the construction industry aiming to satisfying the demand of the apartment of the migrant nowadays. The architectural confirmation application increased largely during the past five year, from 256 in 2002 to 406 in 2006. Averagely, there is an inflow of the young generation near by 1000 people each year because 600 emigration but 1600 young person immigration. One the one hand, island population tends to leave their birthplaces and migrate to the cities and the coastal resorts in the search for better life and employment opportunities. On the other hand, other outside young people were attracted by the nature in the island, work three months to one year in the islands. About 10 percent of them select to settle down in the island. However, in Yaeyama, there are no remarkable industries to afford job opportunities. (Yomiuri Shimbun April 12, 2005). The increased population caused increasing demand for housing, food and water, and also waste and

pollution. The production of waste and pollution, the overexploitation and maintenance of the infrastructural will also affect the natural resources, finally, some impacts on the population in terms of human health and mortality will emerge (issue on the Nikkei business May 14, 2007). At the same time, the new residents always face to the frictions with the community customs, since there tend to be a trouble between the migrants who do not understand the culture of the island. Some places even the traditional culture has been discarded because the immigrants become the main part of the population gradually. During the investigation, the official staff expressed their anxious for the over-number immigrations. They have already declared the situation to public officially.

3.3 Nature and culture exploitation

Okinawa's promising agricultural products are in the area of high value-added "Healthy foods." "Okinawa" is fast becoming a brand name for "health and longevity" because of its world-renowned "healthy islands" image. Okinawa's life expectancy, in the past two decades, has increased from 72 to 77 years for men, and 79 to 85 years for women, making Okinawa the healthiest place in the world. Okinawa's longevity is the product of a complex combination of climate, culture, closely-knit social organizations, foods and lifestyles. Foods are considered to be the most important factor for long life. Various healthy foods have been developed and marketed nationwide. Here two cases of high value-added, diversified agriculture productions are presented.

3.3.1 Sugarcane VS pineapple

In Okinawa, sugarcane and pineapple have been the most important cash crops traditionally, accounting for more than 20% of all farm incomes and 50% of cultivated land. However, incomes from sugarcane

and pineapple production have declined significantly since 80th as a result of stagnant prices and productivity as well as increased international competition. With liberalization of pineapple imports (1990), Okinawa's fruit was costing about two to three times the world market price. Its canneries shrank from 23 to 1 (1997), and only a heavy subsidy from Tokyo kept the industry going. A 1995-6 study found pineapple plantations, which accounted for only 3 per cent of Okinawa's agriculture, responsible for over half of the soil run-off on the islands as a whole. Sugar cane was similarly problematic, with Okinawan sugar costing seven to eight times world market prices for raw sugar. It has been an urgent task for the local government and farmers to diversify from sugarcane centered monocultural agriculture into other diversified cash crops. During the last ten years, pineapple marketing (development entertainments and acted the tourist attracting in various places) was progressed, with cooperation with the souvenir shop and the restaurant, in the region. There was a rethinking that the farmer also voluntarily thought about sales, and it came to sell it for hundreds of yen/a piece as a souvenir (directly by post) for the tourist now. For the internet shopping, averagely, Ishigaki pineapple is about 800 yen each one, more expensive than average ones. Also, pineapple juice can be bought in internet shop by direct distribution from Ishigaki. In their advertisement, they emphasize on that the special climate condition and soil quality are best suitable for pineapple which is not only especially delicious, but also helpful for the skin and health.

3.3.2 Commercialization of Ryukyu Awamori

Another successful case in Yaeyama is to exploit the traditional sake to produce diversified products. The main product, Ryukyu Awamori Yaesen was originated from the wisdom of health maintenance in

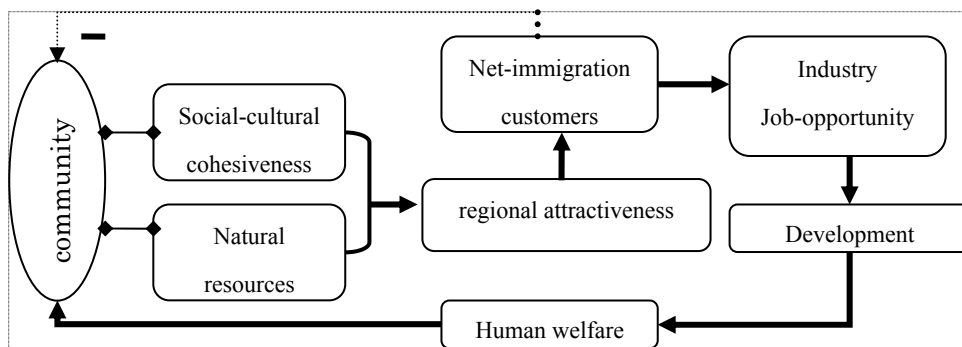
the old times. Awamori brandy was transmitted from Siam (present Thai country) to Ryukyu about 500 years ago, it was said that in the old time, there was no doctor in the islands, the local residents made this special medicine-flavor sake to keep healthy. The creator of this company returned back to the island and commercialized this "Awamori Sake" which was sold as souvenir in the beginning. Now the company has 50 employees, with about 800 million yen in annual turnover. Its business touches on not only sake but also various products, such as cosmetics. It uses its own Awamori sake, moromi vinegar, and the marine collagen removed from fish instead of animal collagen in the light of safety. In addition, the "Pineapple wine" is developed by virtue of mass-produced pineapple of local are. The "Pineapple wine" has been registered as fruit wine. The president mentioned this product is under the obligation of brewing sake based on farm products in region. The slogan of the company is: The whole heart is included in each drop.

Although production scales of these "niche" products are still small, they possess comparative advantages in uniqueness of resource use and technology. Furthermore, these products usually require more local inputs, including raw materials and labor, than conventional trading products.

4. ANALYSIS AND DISCUSSION

In Yaeyama islands case, it seems that a recycle loop including all the actors living on an island has been formed. Their inter-relations are illustrated in Figure 4.1. Population and socio-cultural cohesiveness is closely related to socio-demographic problems which then influence the process of development itself and human welfare. Development activities generate job and business opportunities which then provide income for the people. The quality of the islander's life will influence their

Figure 4.1 Inter-relations among all the factors



attitude to the shared culture and nature. Interaction between the economy and natural resources maybe not always occur directly. However, it always has some connection through promoting the regional attractiveness. The development of the region (such as infrastructure) will determine the human welfare, which then affects the activities and cohesiveness of the community, and community behaves as the culture and natural resources preservation principal carrier. The existence of migrants influence the social-cultural cohesiveness though community. And the activates of the tourists will cause burden to the natural resources. Among these relationships, the community can be regarded as the jumping-off point of the loop. The issue how to exert the community to preserve the natural resources and consolidate the social-culture can be illuminated from the case of Yaeyama Islands. The factors both exogenous and endogenous are analyzed as follow:

4.1 Exogenous factors for cultivating the regional community

4.1.1 Government temperate participation.

The islands somehow enjoy autonomous franchise. The level of moderation of the governmental participation should be paid great attention. From the comparison of the sugarcane and pineapple industries, pineapple industry did not have subsidy as sugarcane industry from government. The comparatively low-profit but high-cost pineapple

canneries were eliminated through fierce globalization competition.

Local pineapple planting people were somehow compelled to seek a way to save themselves. However, under the same severe globalization shock, some people recommended that sugar cane can be

transformed from being merely cane for sugar into the raw material for a range of industries, including fuel, distillation, fermentation, and fiber (high quality paper and cellulose), but anyway, sugarcane planting industry reacted and resuscitated more slowly than pineapple industry. Maybe there are many reasons in the viewpoint of the whole marketing strategy, the direct subsidy support is presumed to be one of the main reasons. The tiny profit made the people be contented with the status quo and lose their motivation to change. It seems that the financial support from government snuffed out the vigor of the industry in the long term. The government should guide the local community, not just afford money or subsidy for the local industry, because it will snuff out the vigor of the industry in the long term.

4.1.2 Knowledge learning from outside

Geographically, the island is isolated from the main land, but mentally, it should be inter-collected with outside. Learning knowledge from outside is helpful for updating and amelioration for the regional culture. In this case, most of the entrepreneurs returned to the island to start the business after they learned knowledge from outside, including universities or social institutions. They broad their eyes visions and activate their mind through learning outside. The qualities of independent, imaginative thinking and the cultivation of artistic sensitivity are

likely to be the seedbed of a new entrepreneurialism for the 21st century. And entrepreneurial culture may affect economic growth in an indirect way as well. A society characterized by an entrepreneurial culture may lead to higher levels of entrepreneurship subsequently triggering a process of economic dynamism, resulting in economic growth (Beugelsdijk, 2007).

4.2 Endogenous factors for cultivating the regional culture

4.2.1 Internal organization with the common mission: joint community establishment.

Just because of the limited resource and scale of the islands, it seems all the islanders know each other well, they could draw together to overcome the disadvantageous of the geographical remoteness. Moreover, the precious natural and culture is their indispensable living footstone, the community should undertake the mission to preserve these resources. This joint community, as the self-organization of the local people, now behaves as the physical carrier of the culture and executors for preservation of the natural resources. The joined mission is addressed as the soul of the community. In Yaeyama Islands, the Star sky manifesto expresses the shared vision and prospect for the future.

4.2.2 Human resource education

Human, as the attendee, is builder and also beneficiaries, in the development activities of region economy. The human resources require careful cultivation as well. Island's social and cultural diversity may turn out to be as precious as the biodiversity of its nature. In this context, the educated objective includes the young generation who were born in the islands and the immigrants. The education for the human resources pertained to

ascribed reasons for regional success or failure, values instilled in children, attitudes towards future developments, preference for equality versus freedom, preference for region versus private ownership of business, region versus individual responsibility for welfare, and the relative importance of freedom versus equality. The immigrants, can be fresh blood to impel the development of the island, but also can be encumbrance for the cohesiveness of the community. Yaeyama Islands pay attention to the education for the human. Not only hold many common citizen activities, including training lecture in the residential center, but also promulgate some regulation of the residents.

5. CONCLUSION

The distinctive feature for the islands is the resources limitation, it is insulated from the main market, unable to form scale of economy, in a word, islands may have many inherent disadvantages as many other laggard places. However, Yaeyama Islands effectively exert the limited resources, including the people, natural resources and culture through the common community. In this paper, we mainly focused on one element, the role of culture. Our finding is as follows:

- 1) Culture capital could be seemed as the key catalyst for social-cohesiveness and nature preservation. The case study illustrated the pursuit of local development path could depend on the cultivation of the culture and identity of the community.
- 2) As the self-organization of the local people as well as the physical carrier of the culture, community should be utilized effectively to preserve the natural resources, consolidate the social-culture, and assimilate the immigration.

Here is not the place to develop an elaborate blue-print for a sustainable island economy, but

some basic implications might be essayed. The results of this study are expected to provide some contribution to policy-maker in establishing a future strategic plan for others, particularly island areas such as South Pacific archipelago. This case study also implies:

1) In the development process of the laggard area, the good intention of the local or center government is reasonable and understandable, but moderation of the governmental participation should be paid great attention. Just afford money or subsidy for the local industry may be detrimental to the industry in the long term.

2) The education of the human resource is indispensable for the development of the local industry. This education comprises not only high level teaching about industrial technology and other knowledge from outside, but also entrepreneurship principles and love for the region.

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