

Chapter 12

Remote Islands Development Area in Kagoshima Prefecture

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1. Summary of the region

The area and population of remote islands within the Kagoshima Prefecture, when combined, surpass any other Japanese prefectures with remote islands. The ten municipalities within the designated Kagoshima Prefecture Remote Islands zone are comprised of 56,119 people (2005 Census data) living within an area of 1,253 km². If we combine this with the Amami Islands area, which has 12 municipalities, 126,483 people live on 1,231 km². This means that the combined remote islands zones rank highest in the country. Their combined areas exceed by 10 % that of the entire island of Okinawa, an island prefecture with an area of 2,276 km². Out of the 28 inhabited Kagoshima islands, 20 are under the Remote Islands Development Act; the remaining eight are under the Special Measures Law for Promotion and Development of Amami Islands (Fig. 1).

The Remote Islands Development Act was implemented in July 1953 to eliminate “backwardness” in the remote islands. In December 1953, post-WWII administration of the Amami district was returned to Japan by the U.S. military; this led to the creation of Amami’s own development act. Nagashima Is. and Shourajima Is. in 1976 and Ikarajima Is. in 1998 were removed from the Development Area and were thereafter collectively known as “graduates” as bridges connected the islands and they became subject to the Peninsula Development Act. Kagoshima Prefecture is the fourth largest in Japan because of its number of inhabited islands. These islands, including the Amami Islands, are scattered in a 600 km north-to-south stretch resembling an archipelago. The islands have temperate and subtropical areas, which significantly contribute towards their potential in producing resources unique to each island. The breadth of the expanse, which has a long transitive climate zone, is one of the rarest in the world.

The region’s uniqueness does not stop at latitudinal geography, however; Mount Miyanouradake is the highest Mountain of Kyushu and is part of the UNESCO World Heritage Site in Yakushima Is.. Migratory sea turtles also lay eggs there on a beach listed on the Ramsar List of Wetlands of International Importance, and the region has a unique vertical distribution of vegetation on which snow settles along a sea of coral reef. In terms of cultural and economic zones, those listed on the Remote Islands Development Act are most closely connected to the mainland, thus intensifying their diversity. While the

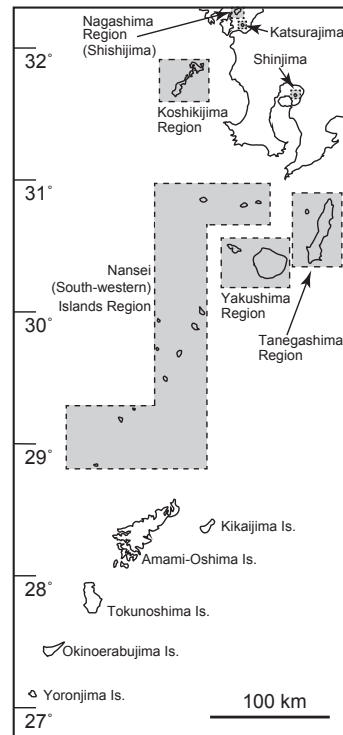


Fig. 1. The locations and regional distributions of the areas covered by the Remote Islands Development Act.

archipelago-like islands maintain continuity geographically, their societies and resources are diverse. As a result, in terms of economic development and promotion, we hope to maintain the multi-islands zones by capturing the individuality of each island region through demonstrating and availing ourselves of the merits of their vast scale and archipelago-like structure (NAGASHIMA 2010a).

2. The view and progression of remote islands development

Article 1, clause 1 of the Remote Islands Development Act promoted the “development of the economy of islands remote from the mainland through the establishment of measures to improve foundational conditions which are necessary for eliminating the backwardness caused by their isolation or remoteness from the mainland and to promote their industries.” This Act was no doubt created in response to social circumstances in 1953. The challenges then were to find innovative ways in which to use “light and water” and to improve a very limited transportation infrastructure. At the time, barges were widely used to link anchored vessels offshore and to use hard-to-access wharves that were found along quays that were known as “*hasike*.” Japanese society strongly advocated viewing those islands on which there were shortages of laborers (*i.e.*, young males) to operate *hasike* as uninhabitable - a view that even became part of the national agenda at one point. An example of this is Gajyajima Is. of Nansei Islands, which became uninhabited in 1970. The word “*shimachabi*,” which is written as “the pains and troubles of the remote islands,” has been widely used in Okinawa to express the hardships caused by weather such as typhoons, rainstorms, and droughts as well as difficulties in accessing health care, education, transportation, and communication on these islands. The remote islands area in Kagoshima Prefecture, especially the small-island archipelagos that are affiliated with Yakushima Is. (*e.g.*, Kuchinoerabujima Is. and Tanegashima Is.) as well as Nansei Islands and Koshikijima Is., experienced a similar inclination for collective emigration (NAGASHIMA *et al.* 2009). On the islands that remained inhabited, a wide societal gap developed with the mainland. For example, Koshikijima Is. had their transportation network so

disorganized that for example traffic lights needed to be installed outside schools for educational purposes and job seekers, as the case of 1950’s, had to be trained how to ride bicycles in order to be recruited outside the island (or else that could have hindered their chances).

This backwardness has been a matter of controversy. The Remote Islands Development Act clause stating the main objective, that is, to improve underdevelopment by eliminating “backwardness,” has not only been the backbone but also been at the forefront of the Act’s simple mentation; however, 50 years after the Act was passed, it was extensively revised in 2002 and reenacted in 2003. This occurred because it was felt that by acknowledging the backwardness of the islanders, this enabled them to receive generous financial support. Thus, in a sense, they were using their status of being in “special circumstances” to justify the advantages of receiving financial aid. Nevertheless, these islanders did not contentedly accept a situation that pointed to their backwardness because of their pride. Thus, those islanders who were involved in establishing and launching island revival programs were outraged by the tendency for only the old things to be introduced as benchmark values for tourism.

In a sense, the newly revised Act provided an opportunity to review the progress made after 50 years of investment to build a solid foundation for these islands (KUWAHARA 2012). The electricity supply, small-scale water-supply system, roads, harbors, fishing ports, health care, social care, airport, and public transport changed drastically from being neglected to being part of a national agenda. This compares with Kunio YANAGIDA’s radical criticisms, which dig deeply into the disparity between an ideal maritime nation and the reality of its lack of national policies for the islands: “even the statistics of the islands are insufficiently maintained as a maritime nation.” With the support of phenomenological studies (academic progression based on inspection, descriptive capture, practicality, and folklore) instigated by Tsuneichi MIYAMOTO and the Islands Research Group network, which was maintained in a geography classroom at the University of Tokyo, necessary administrative measures were linked up relating to the islands of Shimane, Nagasaki,

Kagoshima, Niigata, and Tokyo. This gave birth to the Remote Islands Development Act - the first proposed act by parliamentary members in Japan. In 1958, individual businesses belonging to each ministry were integrated into the Ministry of Land, Infrastructure, Transport and Tourism (formerly the Economic Planning Agency), which consolidated island affairs under one large umbrella to address matters comprehensively and determine how much business should be allowed to be carried out by each island. This, as a strategic national policy, largely contributed to the Act's firm and steady implementation and became the world's first such undertaking (NAGASHIMA 2012).

In 2003, the strategic reformation to transform the remote islands' contentment with "backwardness" had changed their direction from being prefecture-led to being managed by municipalities. In addition, a further amendment to the Act in 2012 witnessed an improvement in socio-environmental conditions that removed restrictive terms, including a societal and empowerment measure that led to subsidized internal non-infrastructure projects (e.g., management of facilities and event organizations), reducing fuel cost burdens, and supporting high school students who needed to travel to and live on another island or on the mainland to receive their education (NAGASHIMA 2010b). This change, which parallels that of the new law, was backed unanimously by all political parties, an extraordinary directive from the Diet. It also had as its background the positioning of bordering remote islands under the new Maritime and Border Policy and a change in the national interest. Moreover, it served the role of refreshing the resource development base and remote islands' vast sea area. It further received intense attention in terms of its own cultural preservation and its role in nature management (NAGASHIMA 2010a).

Islands have unique healing properties and provide space for relaxation. Individual remoteness, product specialties, different cultures, a refuge from hay fever, sports recreation to escape the heat and cold, island therapy, and "blue carbon" trade (protecting oceans and wetlands by assigning carbon credits as part of offsetting carbon-dioxide emissions) are a few examples of the new social market. Having the opportunity to meet somebody possessed

of vast and solid accomplishments and an all-around knowledge within a continuous space that is part of "satochi" (hometown), "satoyama" (home mountain), and "satoumi" (home seaside) provides a rare opportunity for city people. The Japanese *kanji* character for a child "warabe" is written as "stand" on top of "sato," which roughly translates to hometown or homeland. The children who grow up basking in the warmth of island society are full of trust for other human beings. The islands have thus provided not only a bountiful and rich surroundings in which city children recover and rekindle themselves, but also an environment for nurturing parenthood, nursing for vulnerable people, and education.

The obstacles to island life are the isolation, being surrounded by water, and smallness. While these may be seen as being disjoining or disengaging, social mitigation and a measure to extend island development will lead to a road that will boost the future for these islands (NAGASHIMA 2011b).

3. The current situation and the challenges of the areas under remote islands development in Kagoshima Prefecture

Depopulation and an aging population are notable and significant problems facing the regions under the Act. If we consider the 50 years from 1955 to 2005, the population in the regions has shrunk by 49.7 % (Table 1), a pattern of depopulation that differs notably from that of the Amami Islands (61.6 %). This is because the space in which there is a form of dependence on the relatively fast-moving populous mainland stands in contrast to Amami's unique space. The largest depopulating island regions, which are typically dependent island areas, are small-scale islands located closest to the mainland - Shinjima Is. (3.8 %, five people) and Katsurajima Is. (11.6 %, 18 people). In particular, these past 5 years have witnessed a 50 % decrease in the populations of Shinjima Is. and Katsurajima Is. On the other hand, regions in which some independence is maintained- such as Koshikijima Is. (26.3 %, three islands, 6,206 people), Nansei Islands (28.3 %, 10 islands, 1,135 people), and Shishijima Is. (38.1 %, one island, 851 people)- have seen their population reduction eased by roughly 10 %. Yakushima region and Tanegashima region have faced a 58.3 % and

53.9 % decrease, respectively, in the past 50 years; yet even when compared to the rest of the nation, their rate of reduction is relatively low. Moreover, in the past 5 years, the rate of depopulation has been small in the island regions that have an industrial foundation or infrastructure, and the population flow has increased to these islands due to special attention from the outside, such as being named a World Natural Heritage site and a Ramsar site.

In terms of the aging population, a similar phenomenon can be witnessed in regions in which we find a definitive existence, or lack of, industrial foundation. For example, 60 % of the population in Shinjima Is., which is a marginal rural community, is over 65 years old (2005 Census data). This is followed by Koshikijima Is. with 41.5 % and Shishijima Is. with 37.6 % over 65 years old. Nansei

Islands (31.4 %), the Tanegashima region (29.7 %), and the Yakushima region (27.5 %), by contrast, have an aged population that is comparable to that of the mainland (24.8 %); juxtaposing them highlights the difference in the level of severity. However, the Nansei Islands face challenges in that the majority of the islands support populations of roughly 100 people or fewer, which has led to a distorted structure in which the islanders are challenged to maintain a population of child-bearing age.

In terms of industrial structure, primary and construction industries comprise more of the total than do manufacturing or service sectors on the remote islands. While an income divide exists between the regions, the islands are relatively close to the prefectural average disparity (87.9 % in 2000, 89.3 % in 2005), and there are signs of improvement.

Table 1. The area (km²), population transition, and rate of aging in the Kagoshima Remote Islands zones

Island Zone	Land area (km ²)	Population			Number of household	Aging ratio (%)
		1955	2000	2005	2005	2005
Nagashima (Shishijima)	17.05	2,236	981	851	314	37.6
Katsurajima	0.33	131	32	18	7	22.2
Koshikijima		23,629		6,206		41.5
Kami-Koshikijima	44.14		3,132	2,750	1,293	
Naka-Koshikijima	7.31		393	347	186	
Shimo-Koshikijima	66.12		3,695	3,109	1,540	
Shinjima	0.13		12	5	3	60.1
Tanegashima		63,354		34,143		29.7
Tanegashima	444.99		35,695	34,128	15,388	
Mageshima	8.21		0	15	15	
Yakushima		23,614		13,761		27.5
Yakushima	504.88		13,706	13,614	6,052	
Kuchinoerabujima	35.77		169	147	78	
Nansei Islands Zone		4,010		1,135		31.4
Takeshima	4.21		91	83	41	
Iojima	11.65		150	140	80	
Kuroshima	15.37		259	239	133	
Kuchinoshima	13.33		173	125	83	
Nakanoshima	34.47		183	173	92	
Suwanosejima	27.66		74	49	28	
Tairajima	2.08		84	82	41	
Akusekijima	7.49		80	94	47	
Kodakarajima	1.01		43	48	26	
Takarajima	7.14		119	102	55	
Total	1,253.30		59,071	56,119	25,502	31

The biggest problems facing the remote islands region are transportation, medical care, and communication. Inadequacies in communication and education are especially notable in the Nansei Islands. Even before WWII, these islands were believed to suffer from an exceptional slowing down of applied education and elections laws. Recent data reveal that they were one of the last regions to join the fast-speed communication network. More recently, the Nansei Islands benefitted from a temporary trial, led by a cooperative effort with the Kagoshima University Computing and Communications Center, to integrate into the island a small-scale, high-speed communication system. This system became unnecessary when, around 2010, the islands became permanently connected by a stable, undersea cable that provides services that are comparable to those received on the mainland as part of the social infrastructure. Because of their location, the Nansei Islands have always required ships and freighters that could run long stances across the Setouchi (an inland sea between Shikoku, Kyushu and Honshu) Sea to the mainland; and, for the first time in Japan, they received some funds towards the construction of these ships and freighters. Although the last hasike was phased out in 1989 in Kodakarajima Is., even today, the frequency of available ships are poor and the fuel costs are a heavy burden, so the islanders are faced with problems running the ships (NAGASHIMA *et al.* 2009).

The remote islands development areas differ from the Amami region in that each island has its own distinct historical and natural conditions as well as, generally speaking, industry, culture, economy, and social activities. This means that each island and island region operates as a sort of unit.

Incorporating Amami into the chain unifies and accentuates its south-north continuity, and this allows it to benefit from, for example, connections provided to ship potatoes. Broad areas of the chain border tropical and subtropical zones, and Satsunan-shoto (Yakushima region, Tanegashima region and Nansei Islands) in particular reaps the benefits of this through its agricultural production (*e.g.*, growing early rice) and its ability to grow ornamental foliage plants. We can also see the benefits of these bordering characteristics in fisheries. On the other hand, the

Amami chain also has the unique characteristic of being directly hit by typhoons, faced with torrential rains, and being alongside the Kuroshio current.

Recently, emphasis has been placed on the merits of escaping pollen for hay-fever sufferers, as there are few coniferous forestation zones on the islands and the regions are slightly milder than a pure tropical zone. Non-profit organizations (NPO) are widening its sphere of activities everywhere to reinforce the local welfare, environment, education, etc. A NPO has recently started providing services and support for islanders to improve access to groceries and goods in a more convenient way.

The remote islands are beginning to shift away from the conventional constraints of being far removed, surrounded by sea, and smallness and are headed towards using their unique characteristics to the advantage and benefit of their populations. This will propel them forward towards spontaneous development and a new level of achievement in future (NAGASHIMA 2012).

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