## Landholding in Satsuma, 1868-1877

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The Meiji Restoration of 1868 marks the beginning of a new era for Japan and of growing conservatism for Satsuma. Paradoxically, the success in the modernization of the nation was in large measure attributable to the vision, statesmanship, and determination of young leaders from Satsuma. These leaders applied to the national scene a program of industrialization and economic organization which had been initiated previously in their own han. Mid-nineteenth century Satsuma, under the wise leadership of Shimazu Nariakira, was certainly one of the most powerful and progressive areas in the country. Nariakira was not a dilettante dabbling with Western gadgets. He was seriously interested in Western studies and realized the significance to state power of such subjects as chemistry and physics. In Japan he was a pioneer in experimenting with telegraphy, gas tamps, photography, and even in the use of romaji. He had actively promoted industries such as ceremics, glassmaking, textile mannfacturing which utilized water power, iron smelting, and armaments. It is to his credit that only one year after Commodore Perry left Japan Satsuma was ready to sail the first steamship made in Japan. It was the dynamic energy exemplified by these varied enterprises which enabled Satsuma to lead the Restoration.

After 1868 the same region of Satsuma, soon after renamed Kagoshima prefecture, lost this progressive thrust and steadily

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fell behind the rest of the nation in economic development. In 1877 the samurai of this region rose up in a reactionary rebellion which sorely tested the strength of the fledgling central government, and even today Kagoshima is described as the north pole of conservatism. For a variety of reasons Satsuma was unable to keep pace with the rapid social, cultural, and economic changes which the central government forced upon the nation. The effect of government reforms in Satsuma during the critical period between 1868 and 1877 was to eliminate or seriously weaken the potential for leadership which derived from the old feudal structure, while strengthening the samurai domination of the agrarian society, thus perpetuating conservatism.

This paper will concern itself mainly with the process by which the center of economic gravity in Satsuma shifted to this most conservative group, the samurai-farmer. The central government reforms which were instrumental in this shift were three: (1) the hanseki hökan movement of 1869 caused the retrocession of feudal domains to Imperial control; (2) the hai-han chi-ken (or "abolish the han; establish prefectures") movement removed local administrative control from the daimyo and placed it more directly under central government administration; (3) the chisō haisei, or land tax reform of 1873, established the principle of private ownership of land. These measures are well known and will not be described here in detail. Less studied are the effects which these reforms had upon the various strata of Satsuma society.1 Two broad categories of landholding interests in Satsuma must be described. First, in the castle-town of Kagoshima, the administrative seat of Satsuma han, there resided, beside the daimyo and other powerful independent landholders, numerous bureaucrats and rank-and-file samurai who depended upon the land for their income. Second, in the rural districts there resided even more samurai who administered the countryside, and often directly engaged in agricultural production. Their interests were closely related to their control of the peasant units known as kado, which will be discussed in detail below.

The daimyo was phased out of political control in the han by the successive slogans of hanseki hōkan and hai-han chi-ken. With the removal of the daimyo from the local scene the power

structure of feudal Satsuma was drastically altered, if not eliminated. The Shimazu daimyo had controlled the han for a period of over seven hundred years, longer than any other daimyo dynasty in Japan. Thus the prestige of the Shimazu had been tremendous within the han. It had been used in the past both for progressive and reactionary measures. In 1869 the Shimazu daimyo was in the forefront in the hanseki hōkan movement, being a signatory to the petition requesting permission to return the feudal domain to the emperor. When the petition was accepted in the same year, the daimyo lost his territory and his title. In return the government provided him with an annual pension equal to one-tenth of his former revenue. This settlement left him a rich man,2 for he was also relieved of old debts and freed from the expenses of maintaining a feudal administration. For a brief while he continued to be the symbol of local authority, but in 1871 the establishment of the prefectural system of government ushered in the newly appointed Governor Oyama as chief executive of Kagoshima prefecture.5 The ex-daimyo was left with only his family estate to manage, and he was removed from the seat of his former domain by an order of the central government to establish his residence in Tokyo.

The powerful territorial lords were also severely reduced in their influence in Satsuma politics. For centuries there has been in Satsuma a few great families possessing their own domains for which they maintained a separate administration and army, though their organization was virtually identical in structure to that of the daimyo's. These lords were the vassals of the Shimazu daimyo, and they were among the more powerful members of the council which advised him on important matters. When Lord Shimazu Tadayoshi petitioned to surrender his territory to the emperor, his vassals could do no less than make gestures of relinquishing their feudal holdings to him. Thus when the daimyo was relieved of his domain these vassals also found themselves bereft of their fiefs. However, just as the ex-daimyo received a generous financial settlement, his vassals probably suffered no great economic hardship. Though they

The lord of Iriki, for example, received a hereditary emolument of 300 koku from the central government as well as an annual payment of

were shorn of their political power and responsibilities, they were also relieved of the costs of maintaining an administrative staff and large military force.<sup>6</sup>

The Shimazu daimyo had been rated one of the wealthiest feudal lords in Tokugawa Japan. He was credited with an income of about 720,000 koku of rice (one koku = 4.9629 bushels), although in fact this was a highly inflated figure because Satsuma was the only han reporting its yield in terms of unhulled rice. About 55 per cent or more of this total yield had been assigned to various samurai as kyūchi taka, or salary land grants. The remainder was called kura-iri taka because the yield went into the han grain storage (kura) for general state expenditures. The kyūchi taka or salary land grants were of two types. Kagosnima taka provided compensation for jōkashi, samurai of the castletown; tokoro taka was assigned to gōshi, samurai residing in the gō or rural districts.

The kyūchi taha, or salary land grants, was a system for rewarding and maintaining the huge number of samurai in Satsuma. This method of compensation, found in the Tokugawa period only in Satsuma, is called chigyō seido, loosely translated as a system of enfeoffment. However, the samurai who was granted a certain taka (yield), did not become a landowner. The land still belonged to the han (kan chi, official land). The takamochi or taka grantee, was given the rights to a fixed rice income from the land assigned to him. In short, instead of the peasant cultivator delivering the rice tax to the han granary, as in the case of kura-iri taka, the kyūchi taka was turned over directly to the samurai. Peasants who worked the salary land also owed labor services to the taha holder.

Not all samurai were favored by grants of taka. A few were large taka holders, but the majority had very small grants which were insufficient to maintain a family. The taka was granted on a hereditary basis and served to supplement other income. However, the rights to the taka could be negotiated. Impecunious samurai could use the taka as security for a loan and thereby lose control of the rice yield from his salary land for successive

200 hoku from the annuity of the former daimyo. (Kanichi Asakawa, Documents of Iriki, pp 379 and 385.) harvests. It was possible for a sumarai to purchase the taka of another samurai, although the amount of such holdings was restricted in accordance with one's rank in the social hierarchy.

The retrocession of han territory for central government administration affected an important source of income for many Satsuma samurai. Since no other han had maintained the chigyo seido, or method of granting salary land to their warriors, the Meiji statesmen were confronted with the alternatives of insisting on uniform application of governmental regulations and procedures or of making appropriate adjustments for local variations. The government had promised to recompense the former samurai with one-half of the rice payments which their local given them previously, but Satsuma samurai who had been genting their income directly from their salary lands, resented the efforts to sever their ties to the land. The system of taka payments, therefore, was continued by the local government until 1873, when the land tax reform finally cancelled the rights of the samurai to their salary land.

In 1869 the han government took measures to reduce the taka holdings of the samurai by designating maximum limits in accordance with social rank. They affected primarily and predominantly the warriors residing in Kagoshima, the jokashi. The nine highest ranking families (including the former territorial lords) were given an annual yield amounting to 1,500 hoku, which still enabled them to live in style; thirty families were given an hereditary annual income of 300 hoku plus an additional 200 koku for the following fifteen years; five families were allowed an annual income of 300 koku; the lower rank jöhashi (Kagoshima samurai) were limited to 200 koku annually; and the goshi (samurai in the rural districts) were limited to an annual fifty hoku. The senior bureaucrats were reduced in their aggregate total income from 202,376 koku to a mere 26,013 koku, or 12.8 per cent of their former taka revenue. The surplus which was thus created was appropriated for use by the han government.9

This reduction of income of the "bureaucratic clique" reflected the shift of power to the lower rank samurai who formed an alliance with the goshi and lesser warriors against

their superiors.10 The existence of such an alliance may be surmised from the sudden and unaccustomed equality with their city cousins which was accorded to the göshi. The jöhashi had formerly scorned the gôshi as country bumpkins, and gôshi troops had been considered inferior. Military awards for participation in the Restoration movement, for example, had been given only to the jōkashi, not to the gōshi. This situation was now reversed and the goshi also were entitled to receive merit compensation. Social distinctions between city and country samurai were ordered to be discontinued, and an order of March 1869 forbade gôshi from providing menial services to the military, such as taking care of transportation and serving as guides and escorts which were beneath the dignity of samurai.11 Military men of the ashigaru rank and tsukishi, tsuki zokucho, and tsuki zohu, who belonged to a category between samurai and commoner, were maintained in their titles long after the central government had ordered the elimination of class distinctions other than the broad categories of kazoku, shizoku, and heimin, that is, of aristocracy, samurai, and commoner.12 The insistence of exact titles among these men of lower samurai strata reflected the significance they attached to feudal class status.

Very few of the lower rank samurai suffered from the taha adjustment of 1869. In fact, the aggregate total of their taha income was raised from 269,328 hohu to 326,737 hohu, a net gain of 57,409 hohu. However, their income generally was very modest. There were some 5,355 families among them who together received a stipend of 137,520 hohu, or an average of 25.68 hohu per household. Since the reform provided for an upper limit of 200 hohu for samurai of lower status, we may safely assume that the greater number received allotments considerably less than that of the average figure. Three-fifths of these jõhashi were of the former gokoshō gumi rank, a proud but poor group of samurai whose half-empty stomachs and constant talk of honor had made them a potent revolutionary force. Saigo Takamori, Okubo Toshimichi, Matsukata Masayoshi, and other Meiji leaders had emerged from this group.

The land tax reform of the Meiji government passed in 1873 more seriously affected the economic well-being of the jōhashi. The reform was designed to destroy the complex feudal land-holding rights and to establish the principle of private owner-ship of property. The purpose of the government was to carry out land surveys and establish the value of each plot of land based on the crop yield. When the land value was thus established the surface of the land was to be subject to a 3 per cent annual tax to be paid in money (not rice) by the landowner. Perhaps in order to maintain the high feudal exactions the Kagoshima officials stalled off the land survey in their prefecture until after the Rebellion of 1877, when it was carried out under occupation conditions. This retorm was resented by the samurai landomochi (holder of a taka) because his rights to the land were severed. It was determined that the taka holder was not the landowner. The new landownership was given to the cultivator who had carried the burden of former taxes.

Before the land tax reform the taka mochi had first claims to the rice harvest, even before the peasant. After the reform the samurai was paid from the prefectural grain storage, since he had lost his salary land. This meant that he no longer had a guarantee of his share of rice which had always been a commodity in short supply in Kagoshima. In 1875 the government decided to commute the samurai's pensions from payment in kind to money payments. The government of Kagoshima protested in behalf of the former warriors and this order was not carried out in Kagoshima until after the Rebellion. However, the prefectural administration had to pay a part of the annual samurai pension in cash because of the inadequate supply of local rice. The deficiency made up by money payments was calculated on the average price of rice for the past three years. Since the rice price constantly spiraled upward the money payment was never equal in value to its equivalent unit of rice.

The taka had been only one means of maintaining samurai in Satsuma han. Many samurai had no taka at all. Some had received maintenance rice as compensation for administrative duties within the han. Partial salary was paid by the distribution of paper, oil, sugar, and other commodities to officials. Some had received hereditary allowances as rewards for the participation of their forbears in the Korean campaigns of the late sixteenth century and in the battle of Sekigahara of 1600.17 Hence, the samurai salary structure in Kagoshima was extremely complex, causing special problems for administrators of the central government pension plan. Among the many problems was that of samurai officials dispossessed of office, notably the former retainers of the independent territorial lords. Efforts to compromise the central government program in order to adjust to Satsuma's peculiar problems aroused the wrath of non-Satsuma statesmen such as Kido, who were ever on their guard against special favoritism to this region.18 It is not possible here to go into the details of salary adjustments, relief measures, severance pay, pensions, and other means for alleviating samurai economic distress.16 It will be seen below, however, that the gōshi emerged relatively much better off by the terms of the Meiji government reforms than did their counterpart, the jōkashi, in the city of Kagoshima.

The maintenance of numerous samurai outside of the castletown was a unique feature of Satsuma han. Because these warriors were settled in rural districts known as gō, they were called gōshi. Before the Restoration they were regarded as socially inferior to the jōkashi, although many gōshi were quite influential and economically well off. Most of the gōshi were concentrated in samurai communities known as fumoto. The fumoto was the seat of district administration and in Satsuma this administration by samurai extended down to the headship of towns, agricultural villages, and fishing hamlets. In other words, the gōshi thoroughly dominated the life of the countryside.<sup>2n</sup>

Among the göshi there were great differences in social status and economic standing. Just as the jökashi looked down upon the göshi, so the fumoto göshi scorned those samurai who did not have administrative posts nor steady salary and therefore had to make a living on marginal land outside of the fumoto. Such göshi were little better off than peasants. When the han government adjusted the taka in 1869 there were 37,990 göshi households which received a total of 187,750 koku of rice,21 or an average of less than five koku per family. The distribution of this total was no doubt highly uneven. According to a pre-Restoration record, the taka holdings of göshi in one locality were as follows:22

Number of Households	Amount of Taka
6 families	50.00-100.00 hoku
18	20.00- 50.00
13	10.00- 20.00
68	1.00- 10.00
57	0.10- 1.00
170	0.10 and less

In addition to the above 332 families, another 105 families were listed as having less than 0.001 koku, and forty of these 105 families received only a token taka of a handful of rice. 23 Göshi with such limited taka obviously had to rely on other sources of income. The han government therefore permitted him to recision marginal land which was considered nonofficial land, that is, not subject to periodic redistribution under han supervision.

The so-called "official land" (kan chi) was land surveyed by the han government and distributed for cultivation to peasant groups called kado. Periodically, the land was surveyed and redistributed to take account of population changes and soil depletion. The term kadowari seido, which distinguishes Satsuma's landholding system, refers to this distribution of arable soil to the kado. It was through the kadowari system that the daimyo derived his taka, mentioned above as being over 720,000 koku. More than half of this amount was assigned to samurai as salary land grants.

The kado was a social unit of three or four peasant families, though as many as eight families in a kado have been recorded. These families had the collective responsibility for cultivating the land (often being required to plant cash crops for han monopolies), submitting their quota of the rice tax, and rendering compulsory labor services for the local administrators. The head of the kado was the myōzu who was assisted by two or three nago. The myōzu and nago each had their independent families, but it is probable that they were originally a kinship group, for each kado gave honor to a common kami, or spirit, and the nago on festive occasions gathered under the roof of the myōzu to exchange felicitations and demonstrate their solidarity. See

The land assigned by the han to the hado was divided by the myōzu. The share for each of the nago was probably smaller than that reserved for the myōzu.<sup>26</sup> Despite the principle of periodic redistribution the area of land given to a kado was relatively fixed and was not affected by an increase of kado population. In the earlier Tokugawa period when there were too many families within a kado, new units were created by opening up additional land for cultivation. By the time of the Meiji land tax reform which ended the kado system, the available land for new kado had become very scarce. The average yield for a kado ranged between twenty to forty koku28 and the tax obligation to the state remained the same. For these reasons Japanese economic historians have described the economy of the kadowari system as static, or stagnant.20

The labor obligations of the kado were also rotated among members of the kado under the supervision of the myōzu. A person having to perform corveé labor was called an ibu. Every healthy male in the kado between the ages of fifteen and sixty, thus including the myōzu and nago, were responsible for such work. At the age of fifteen a youth was said to have entered ibu (ibu iri) and he was given a plot of land in return for his labor. When he retired from labor obligations, the plot of land reverted to the kado for redistribution.<sup>30</sup>

The kado was responsible to the samurai who held hereditary rights to the salary land. Sometimes samurai with large kyūchi taka were in control of several kado. On the other hand, a single kado with its total yield of about twenty koku might be jointly owned by several samurai. In the latter case, one of the taka mochi was designated as ryōshu, literally lord of the fief, and the labor services of the kado would all be given to him alone. The ryōshu usually, but not always, was the samurai who held the largest share of the kado taka. The rice payment of course was made to each of the taka holders.<sup>31</sup>

Theoretically, the labor services were for public works or to enable the gōshi to devote his attention to his local administrative chores. In practice, the ryōshu (fief holder) could easily take advantage of peasant labor obligations to increase his own wealth. Among customary labor services were included such chores as keeping the ryōshu samurai's hedges trimmed, yard swept, and buildings in good repair. The kado contributed various materials such as bamboo to repair fences. When a typhoon threatened, the myōzu's first responsibility was to rush to the ryōshu's residence and shore up the mon (main gate) and buttress the walls of buildings. Only after this was completed was he expected to look after his own home. During the busy seasons, when the rice seedlings were being transplanted or when the golden grains of rice were being harvested, the ryōshu might use labor from the kado for his various other land holdings. D

Göshi holders of salary land were in a position to take advantage of peasants, whereas the jökashi had to rely on others to oversee their hado. The göshi were constantly in contact with the peasants, dominating their lives as ryöshu (lords of fiels), as administrators, and as money lenders who might charge usurious interest rates. Thus even after 1873, when the hado was for mally abolished, the göshi's hold over the peasants continued Elderly peasants as late as in the Taisho period are reported to have contributed traditional labor services for their former göshi masters. The peasants as late as in the Taisho period are reported to have contributed traditional labor services for their former göshi masters.

The Meiji land tax reform which abolished the kado nice confirmed the gashi in his possession of nonofficial or non-kado land. There were several types of nonofficial land differentiated by their quality and tax obligations and by whether the privilege of ownership extended to the peasants.

Land called ukimen were good rice paddies and fields usually located near the fumoto and reserved for gōshi.36 These choice pieces of land were granted by the han government as a supplement to gōshi salary. Taxes on ukimen were relatively light. Although ukimen holdings were described as "self-cultivating, self-harvesting" land, the actual practices of land utilization varied. Often the gōshi worked the land by himself. Sometimes free kado labor was used to cultivate the ukimen. Wealthy gōshi frequently rented his ukimen to tenants, either peasants or poor gōshi. Rent from such land often followed the formula "seven to the lord, three to the cultivator."

Kakechi was land reclaimed by the göshi at his own expense.25

Permission from the han was required to open up such land and the amount of kakechi which the göshi reclaimed at any one time was restricted. Again, the actual labor for reclamation was available for the wealthy göshi from the kado under his control. For

the first three years after development the land was free of tax obligations, so all the produce was kept by the owner. Thereafter, the tax was less than that for *kado* income. As in the case of *ukimen*, *kakechi* fields might be cultivated by the owner, by his household servants, or by tenants.

Eisakuchi was less desirable land which could be reclaimed by either gāshi or peasants. The tax on this land was high, equal to that for the kado. An advantage over the kado was that the owner of eisakuchi, as suggested by its name, could consider it as his hereditary property not subject to redistribution.

Two other types of land, mizoshita, mikake, and oyamano, were reclaimed from swamps, marshes, or similar marginal terrain.<sup>20</sup> The soil being relatively unproductive, taxes were deferred for as long as ten years, and assessments thereafter were of token nature.

The gōshi who had command of free kado labor acquired more and more reclaimed land of all types. Before 1873 the rapid expansion of nonofficial land restricted the increase of kado land. Moreover, the peasant found it more and more difficult to find grazing land for his animals and kindling wood for the hearth and bathhouse.<sup>40</sup> Whereas the economy of kado land was static, the nonofficial land was expansive in character.

This trend was enhanced by the Meiji land tax reform. Feudal holdings of agricultural land were made into private property which the owner could sell if he wished. Impoverished peasants who borrowed from gōshi soon found themselves working their former land as the gōshi's tenants. The Meiji reforms thus helped develop the gōnō, wealthy farmers with all the conservative social attitudes of the feudal gōshi. In Satsuma the Meiji reforms had removed the feudal power structure which had provided progressive leadership in the past, but the social and economic domination of the gōshi over the countryside remained intact and was actually strengthened. It was not until the land reform of 1947 that the power of the gōshi was reduced, giving the common peasant his first real independence.

## NOTES

- For a brief description of Satsuma society, see Robert K. Sakai, "Feudal Society and Modern Leadership in Satsuma-han," Journal of Asian Studies, Vol. XVI, No. 3, pp. 365-76.
- E. Herbert Norman, Japan's Emergence as a Modern State (New York, 1940), p. 99 (fn).
- Torao Haraguchi, Kagoshima ken no rekishi (Kyodo no rekishi serics), p. 447. Öyama's title in 1871 was kengonsanji, changed in 1874 to keurei.
- Isoo Iwakata and Tadao Yamada, Kagoshima ken nögyö hattatsu shi,
   p. 518 (Vol. II and special supplement in series of Nihon nögyö hattatsu shi); Kagoshima Prefecture, Kagoshima kon shi, III (1939), 344, (Herenfier, Ken shi.)
- 5. Men and, ibid., pp. 545 and 346-44.
- Ibid., pp. 548-49; Iwakata and Yamada, op. cit. p. 185; Hirobaco Fed.; tani, Kashizohu chitsuroku shobun no kenhyū (Tokyo, revised and supplemented, 1944), pp. 208-7.
- Ken shi, op. cit., pp. 731-32; Iwakata and Yamada. ap. cit., p. 450.
   Haraguchi, op. cit., p. 429.
- Fukatani, op. cit., p. 206-7; Ken shi, op. cit., pp. 783 and 750-51; Iwakata and Yamada, op. cit., pp. 514-15. The sale of take caused wide fluctuation in the income of Satsuma samurai. The Meiji government had to decide whether to give pensions on the basis of the original take or on the basis of current income.
- 9. Fukatani, op. cit., p. 206; Ken shi, op. cit., p. 547.
- 10. Iwakata and Yamada, op. cit., p. 519.
- 11. Ken shi, op. cit., p. 551.
- Ibid., pp. 553-56 and 730.
- 13. Ibid., pp. 547-48.
- 14. Haraguchi, op. cit., p. 448. Documents on the land reform in Japanese Ministry of Finance, Meiji zenki zaisei keizai shiryö shiisei, VII. 310 and 325. For a recent study of the land tax reform, see Meiji shiryö kenkyü renraku kai iinkai, Chisö kaisei to chihö jiji sei (Tokyo, 1956).
- 15. Haraguchi, op. cit., p. 448.
- Ken shi, op. cit., p. 733.
- 17. Ibid., pp. 558 and 748-49.
- Ibid., pp. 851-58. Gives excerpt of Kido's diary in which be airs his wrath against favoritism for Satsuma.
- 19. Ibid., op. cit., pp. 559-61 and 737-41.
- 20. Iwakata and Yamada, op. cit., pp. 492-93.
- Haraguchi, op. cit., p. 427.
- 22. Ibid., p. 426.
- 23. Ibid., p. 426.
- Tadao Yamada, Kadowari sashiki no hokai katei (Tokyo, 1959), pp. 3-4;
   Haraguchi, op. cit., p. 430; Iwakata and Yamada, op. cit., p. 483. A detailed study of the kadowari system is found in Kagoshima nöchi kaikahu shi (Kagoshima, 1954), pp. 9-53.
- 25. Yamada, op. cit., pp. 8-15; Iwakata and Yamada, op. cit., pp. 485 and 485.
- 26. Iwakata and Yamada, op. cit., p. 483.
- 27. Kagoshima nöchi kaikaku shi, op. cit., pp. 79-80.

- 28. Iwakata and Yamada, op. cit., pp. 484 and 308; Haraguchi, op. cit., p. 429.
- Iwakata and Yamada, op crt., p. 506; Kagoshima nöchi kaikaku shi, op. cit., p. 79.
- 30. Iwakata and Yamada, op. cit., pp. 483 and 488.

\$1. Ibid., p. 489.

 Senzo Hidemura, Sappan ni oheru ichijāsō gūshi no rōdō soshiki (reprint, n.d.) pp. 317-49; Iwakata and Yamada. op. cit., pp. 488; Torao Haraguchi, "Satsuma fumoto no shōgatsu," Nihon rekishi, 151 (Jan. 1961), 31-34.

88. Haraguchi, op. cit., p. 480.

54. Iwakata and Yamada, op. cit., pp. 506-12.

35. Hidemura, op. cit., p. 345.

- 36. Haraguchi, op. cit., p. 423; Iwakata and Yamada, op. cit., pp. 488-90.
- Haraguchi, op. cit., pp. 423-27; Iwakata and Yamada, op. cit., pp. 490-92;
   Kagoshima ndchi haihaku shi, op. cit., pp. 62-87.
- Haraguchi, op. cit., pp. 423-27; Kagoshima nöchi haihaku shi, op. cit., pp. 65-66 and 70-72.

Haraguchi, op. cit., pp. 423-27.

40. Kagoshima nochi kalkaku shi, op. cit., p. 80.