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THE DEVELOPMENT AND TRANSFORMATION OF TOURIST
SETTLEMENTS ON THE HEAVY-SNOWY REGIONS OF
JAPAN

- WITH EMPHASIS ON SKI SETTLEMENTS -

BY

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CHAPTER I

INTRODUCTION

1. Purpose of Study

This dissertation is a study of the establishment and transformation of tourist settlements, in particular of ski settlements, in the snowy regions of Japan. The location and conditions for the establishment, or development, and the processes of change that has occurred in such settlements were also studied. The snowy areas of Japan have largely been opened for winter sports and other activities related to skiing, and some settlements have developed as a result of this interest in winter sports to cater to the increasing number of tourists visiting these areas annually.

The leisure time of the Japanese has shown marked changes in response to rising standards of living. This has been brought about by an advance in the national economy since the 1960's.¹ The expansion of recreational activities resulting from increased leisure is a universal phenomenon.²

The demand for leisure activities increases rapidly around big cities³, and shows a tendency to be diverse and expansive.⁴ In Japan, the enlargement of recreational areas is brought about by the concentration of population in and around the cities. Therefore, the regional development

of spare time activities occurs primarily around large urban centers. In such areas, there is a proliferation of cheap accommodations, such as the minshuku.^{5~7}

With the coming of winter each year, snow falls in the Japanese Archipelago, especially in Hokkaido, Tohoku, Hokuriku, the Central Highlands, and the Sanin Region, and the highland areas of Kyushu and Shikoku. The Ministry of Construction every February assesses the maximum depth of snow in the country and those areas with a snow cover of over 50 cm. are termed the "snow bound regions", which in 1975 covered 197,489 square kilometers, comprising 53.3% of the nation's total land area. In these snowy regions, those areas with especially heavy snow in particular, there is a trend towards depopulation which thus has serious socio-economic implications for the country as a whole.

With the regional development of leisure-seeking activities, many existing settlements have been changed and new ones have been formed. In these settlements, the structure of primary industry has been changed, and has become diversified. This has occurred in response to the development of ski grounds.⁸ In the past, settlements functioned only as agricultural or mountain villages. Today, tourism has become the chief source of income in these settlements.

The writer believes that ski ground settlement plays an important role in the formation of resort

settlements. Since the ski area and the settlement function as one unit, its location defines the settlement's character.

The investigation of the processes and patterns involved in the formation of ski resorts are based on geographical principles; since geography aims at explaining the regional differences in human activities. There are only limited studies to date that regard the region as a complex structure⁹ and attempts to understand it in relation to the whole settlement^{10~13} have only just begun. Studies regarding the geography of tourism, and the analyses to date, have tended to cover only small segments of the problem.

In order to clarify the so-called "landscape or area", it is necessary to have an understanding of the whole geographical phenomena. In Cholley's opinion¹⁴, it is indispensable to give careful consideration to the synthesis of the entire complex, instead of attempting to grasp only the segments.

The environment of ski areas are marginal for agricultural purposes. A phenomenon known as dekasegi (farmers working seasonally in major urban areas, especially in winter) emerged because of such regional conditions. Following World War II, skiing as a recreational activity appeared around large cities, altering the structure of many mountain villages and played a significant role in the development of the tourist industry.

However, most new settlements were formed in previously non-settled areas.

The writer believes that skiing serves as an index to show the increasing demands and diversification for recreation in Japan. The development of winter resorts like ski areas are definitely prescribed by environmental conditions, e.g. climate, landforms, and the transport facilities. Further, the writer believes that the development of ski settlements are somewhat pre-conditioned by existing resorts, forms of land tenure, availability of qualified people, existence of an administrative structure, and the tourist market. It is presupposed that these factors prescribe the development of tourist settlements. Therefore, the investigation of mountain settlements and the study of the regional development of recreational activities, are suitable subjects for geographical examination. An effort is also made to study the development of ski resorts as part of a regional development scheme.¹⁵

2. Existing Research and Problems

There has been limited geographical studies concerning ski areas and their settlements. M. Satoh¹⁶ was the first to study the environmental conditions and the manufacture of skis in Takada (present-day Jyoetsu-shi), the birth-place of skiing in Japan. Y. Takaike¹⁷ described the natural and traffic conditions in Kirigamine Plateau in Nagano Prefecture. Resort accommodations and ski grounds

on Mount Daisen in Tottori Prefecture were dealt by K. Nomoto¹⁸ who applied the concept of tourist flows to ski resorts. K. Hirose¹⁹, and K. Tsuchida²⁰, and E. Aoki and T. Itoh²¹ wrote on Sugadaira and explained the role of developers in the formation of tourist resorts.

On the other hand, R. Asakawa²² investigated the development of minshuku in the ski areas. Her main emphases were the distribution of labour and its relationship with agriculture, and the introduction of capital for development purposes. The socio-economic viewpoint was included for the first time, and thus became the model for subsequent studies.

In other countries, A.S. Carlson²³ in the late 1940's began to study the geographical aspects of tourism. The study of ski grounds is considered as part of the geography of tourism. He pointed out that the formation of tourist resorts, including ski areas, showed a remarkable growth in the northern portions of New Hampshire. He analysed the importance of snowcover and landforms in the development of skiing grounds. However, the research failed to focus the resort development within a regional framework. A.H. Perry²⁴ labeled the climatic conditions of ski areas in highland Scotland as the econo-climate, and explained the relationship between snowfall and altitude, and the snow cover conditions in sloping surfaces.

Some regional studies included the study of skiing grounds. For example, A.V. Hardy²⁵ described that tourism

was the leading industry in the highlands of the British Isles. Tourists had a tendency to use farm houses as holiday homes, and skiing as a recreational activity further promoted this tendency. J.Ginier²⁶ focused on the distribution of skiing grounds in the French Alps. I.B.Thompson²⁷ also touched upon the development of winter resorts in Savoie, France. As these studies were regional analyses, they did not include the correlation between skiing grounds and settlements.

Extensive research on tourist resorts, particularly those embodying ski grounds in France, Switzerland and Austria have been made by R.Balseinte^{28~29}, J.Joly³⁰, R. Knafou³¹, R.Mériaudeau³², A.Kröner³³, and R.Bépeille³⁴. Their viewpoints have concentrated principally on the resorts' location, distribution, tourist flow, tourist facilities, and the development of transportation in these areas. The research of R. Meriaudeau and R. Knafou discussed mainly the ski grounds only. This present dissertation considers the ski grounds and the settlements in its vicinity as one complex.

It is this writer's purpose to explain the role of ski resorts within the field of tourism geography and to point out the relevant problems.

The geography of tourism can be classified roughly into three parts, namely: 1) the monographic study of resorts and the form of tourism; 2) the study of the origin of resorts and the transformation of the socio-

economic structure; and 3) the locational study of tourist resorts. As a whole, a large number of studies tend to be of the first type; only a limited number of articles have treated the last two aspects.

Before World War II, there were few investigations about tourism in monographic form.³⁵⁻⁴² Studies on recreation and the flow of tourists appeared after the war years.⁴³⁻⁵⁰ The necessity for the systematization of this type of research was explained⁵¹⁻⁵², but the systematization was limited.

There has been considerable research on tourism in Europe and the United States, but the principal aims have been to understand tourist flows to be applied toward recreational planning and to provide guidelines for recreational policies.⁵³⁻⁵⁴

Recent studies by J.A.Pattmore⁵⁵, P.Lavery⁵⁶ and J. Coppock and S. Duffield⁵⁷ and J. Ginier stress the flow and form of tourists, and the value of resources for tourism. These studies treat regional planning for tourism, including recreational resources and environmental change. A new approach was given to recreational geography by J. Ginier⁵⁸⁻⁵⁹, i.e. he emphasised that the geography of tourism is a study of very diverse factors that include physical, human, economic and historical elements.

The study of resort areas began to appear after the 1950's. German geographers produced many studies of this kind.⁶⁰ In Japan, Y. Koike⁶¹ dealt with the concentric

nature of tourism around metropolitan areas. J. Yamamura⁶² employed the new point of view to explain the establishment of thermal spring resorts. The development of minshuku regions in Japan was treated by H. Ishii⁶³, while Sh. Yamamoto, et al.⁶⁴ referred to the development of tourism and its rural consequences. The transformation of resort settlements was also treated by T. Ichikawa.⁶⁵

As mentioned above, studies on the geography of tourism increased in number, but there were many studies that dealt almost entirely with the resorts distribution and flow of tourists. In contrast, studies treating the genesis of new settlements have been limited. Research of skiing grounds have tended to treat only skiing as the focus of study. It is necessary to understand that both elements, i.e. ski grounds and their settlements form a single complex. Therefore, in this thesis, settlements are treated as "skiing settlements" and careful consideration is given to the various conditions responsible for the formation of the whole areal structure.

3. Methodology

Ski settlements are treated as a kind of tourist resort, and the settlement is studied as an integral part of a regional structure. The region is a complex consisting of various elements, and it is based on relations between each of the components. In such a complex, the change which arises in one element influences

other elements over a period, until the whole changes.⁶⁶ For instance, if a ski ground is developed in a given settlement, and alters the landscape and the settlement structure, then the ski ground is responsible for such changes. In such cases, the author treated the emerging relationships as a new complex, i.e., a new ski settlement.

An attempt is made to explain the conditions leading to the formation of ski settlements by analysing the changing occupational activities.

The form of ski settlements is varied, but the essence cannot be understood by just enumerating the diverse factors. An effort must be made to explain some of the fundamental factors, i.e., those essential for the shape of ski settlements, and the causal relations existing between them. In the past, the geography of tourism focused on the character and form of tourist resorts. An effort is made in this study to combine regional analysis with settlement types. In this manner, it is possible to evolve from a morphological and social geographical analysis to that of areal structures, based on the origin of tourist settlements. In studying ski settlements, processes of change are considered, that is, the means by which a rural settlement changes to one with a different regional character. A comparison of developmental differences and structural changes that occurs between Japanese and European settlements are made. Particular emphasis is given to differences between the

winter resorts of Japan and their counterparts in the European Alps.

On the other hand, it is possible to classify the character of capital, i.e. local and imported capitals as the main component of ski ground developments. It is only when the region is well-suited for ski ground developments that external capital enters the area. Hence, it is also necessary to investigate the methods of capital inflow in examining the causes for the formation of ski settlements. The method for this study centers on the analysis of land use, the development processes, and the transformation of ski resorts. In addition, the alterations of the settlement's internal structure, as well as the modes of tourist industry development are analysed by statistical means, and interviews.

The developmental stages of ski resorts are not always identical. They also change with time. Although the modality of ski settlement evolution vary spatially, an effort is made to find out a system to identify the distinctive types and to systematise them. Such an analytical method is effective in choosing research areas. Based on such premises, typical ski settlements have been selected and analysed. In Chapter II, Nozawa Onsen was chosen as a case study where the ski ground developed within an existing settlement. Shiga Kogen, in Chapter III, illustrates the case where a ski resort developed in a non-settled area to form a new settlement. In Chapter IV, the origin of skiing areas is

traced historically, in an effort to specifically examine the development process and distribution of winter resorts in Japan. In addition, ski resorts are systematised according to evolutionary processes and stages to explain the conditions for the formation of these settlements.

CHAPTER II

THE DEVELOPMENT OF THE SKI RESORT

AT NOZAWA ONSEN

1. Overview of the Study Area

Nozawa Onsen-mura⁶⁷ is situated in the northern part of Nagano Prefecture. To the south, Mt. Menashi⁶⁸ forms the boundary between this village and Kijimadaira-mura. The Chikuma River flows along the borders of Iiyama-shi and Nozawa Onsen-mura to the west. (Fig. 1)

The main settlement of Nozawa Onsen lies between 540 and 600 meters above sea level on an alluvial fan. The period of snowfall⁶⁹ in this area occurs from mid-November to mid-April. There has been considerable seasonal migration of labour from this region (dekasegi) since the Edo period. Cottage industries were popular during the slack season and the locality came to be known for its rice paper and Akebi-ware manufacturing.

In 1975, Nozawa Onsen-mura was made up of ten settlements⁷⁰ and had a population of about 5,200. At Nozawa Onsen, one of the settlements, there are thirty inns with a total capacity of 2,200 tourists. Most of these inns began their businesses after the Meiji period and they have been locally owned and operated.

On the other hand, the minshuku has been established only since the 1950's and there are about 320 of them now.

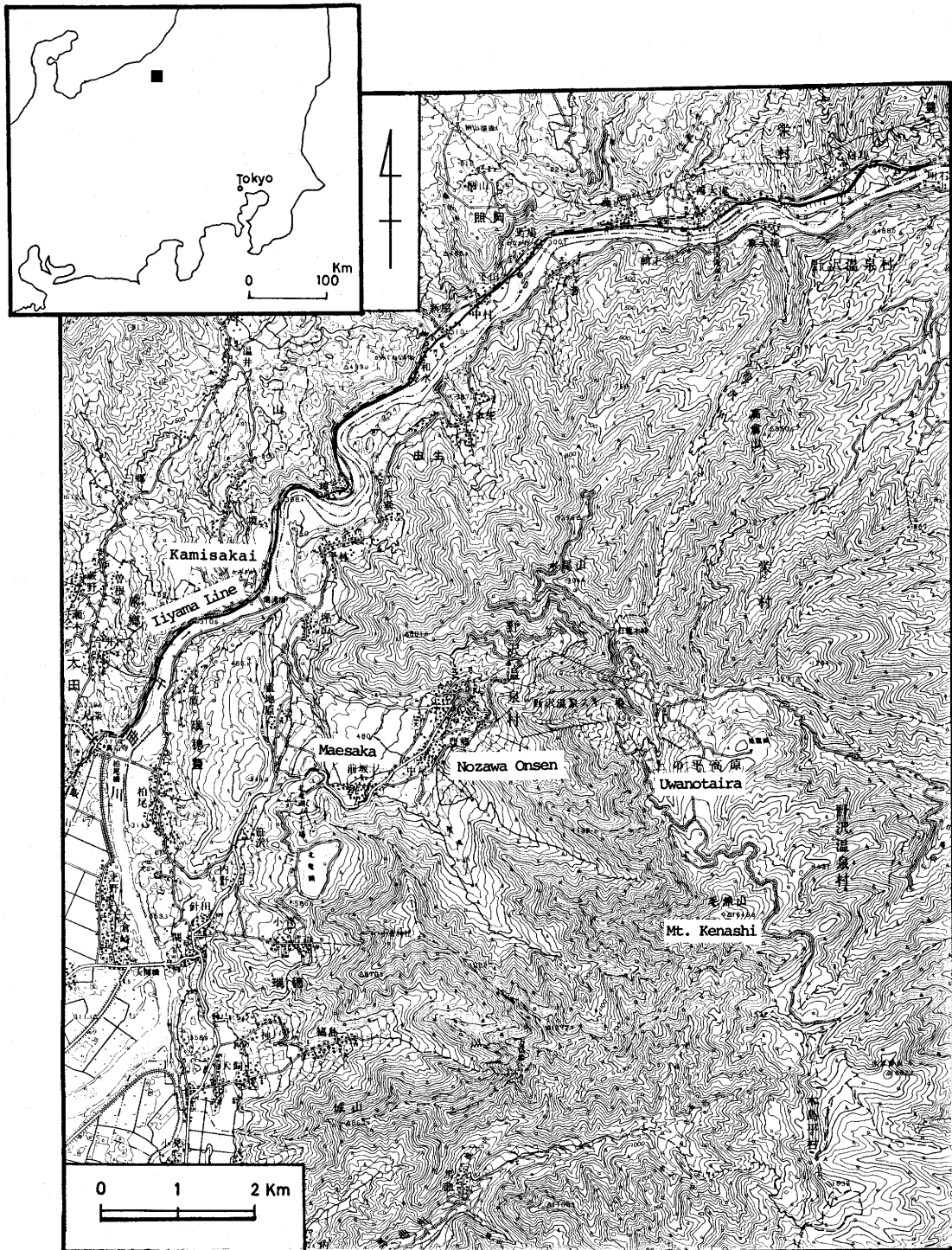


Figure 1. Location of Study Area (Nozawa Onsen)

They are used daily by approximately 15,000 persons. An increasing number of skiers have been coming to the area since the Taisho period; this has been especially true since World War II. As a result, the settlements have become a typical ski resort. Today, while agricultural and manufacturing activities generate between ¥200 and ¥500 millions in sales respectively, the total tourist industry generates about ¥3,000 million per annum.⁷¹

In 1970, the agricultural population represented 43.3 percent of the total number of inhabitants. They produced the bulk of the gross income.

2. The Development of Ski Resorts

Specifically, the development of ski resorts mean the evolution of the institutions and the subsequent settlement transformation. To explain the origin of winter resorts, it is necessary to trace historically the development process of the settlement. The evolution of Nozawa ski resort can be divided into four periods (Appendix, Table 1), according to the stages of setting up the various paraphernalia for skiing, the expansion and enlargement of the ski grounds, the organization of large ski meets, e.g. on a national or inter-national basis, and the establishment of the various types of accomodation for the skiers. The various highlights during each of these four periods are also discussed in some detail.

2 - 1) The First Period (Pre-1920's)

Skiing was first introduced to Nozawa Onsen in 1912.^{72~75} At that time Nozawa was a small village with hot springs and approximately ten inns⁷⁶ catering to farmers inhabiting the neighbouring area. Tourists for the health resort came from the surrounding villages in Nagano, and the adjacent districts in Niigata Prefecture. As the local snowfall is heavy, there were few visitors, except in early December and mid-January for the so-called Kannoyu [寒の湯].⁷⁷ The traditional practice of using the hot springs for curing health disorders during the Haruyu [春湯] and the Akiyu [秋湯], survived into the 1940's. Thus, the settlements filled the function as a local spa until after World War II. In the 1920's, other visitors, mainly students⁷⁸ who came for skiing, reached the spa by taking the newly-completed Iiyama Railway Line and the prefecture-operated ferryboat (Kamisakai to Hirabayashi) along the Chikuma River.⁷⁹

Nozawa Spa's Skiing Club was organised by local leaders in December 1923. The constituents of this club were made up by the local business administrators and a medical doctor.⁸⁰ Village authorities also helped in the setting up of this organization. The involvement of community leaders in this venture influenced the latter development of the ski settlement.⁸¹

The Hinokage skiing ground (present-day Hinokage Declivity) was developed by the Nozawa Spa's Skiing Club

by utilising the village-owned forest.

The local people who had been manufacturing Akebi-ware and Japanese paper as sources of supplementary income during the winter, also sought seasonal labour away from home. They took a growing interest in the development of skiing grounds since the winter recreation could, in economic terms, overcome the disadvantages of heavy snowfall.⁸²

It is said that ski areas are developed spontaneously, but it is this writer's view that they are developed by design, even in the beginning days of the sport.

2 - 2) The Second Period (1930-1945)

The Fifth Meiji Shrine National Ski Tournament was held at Nozawa Onsen in 1930. This was the first national meet held in the area. After that date, visitors gradually increased in number, reaching the resort from the Mamisakai Railroad Station on the Iiyama Railway Line.⁸³ During the same year, access was improved with the opening of a railway line between Nagano and Yasuda by the Nagano Electric Railway Co. Ltd., and the completion of a suspension bridge on the Chikuma River at Kamisakai.

The Ski Association of Japan held the first examinations for the licensing of ski instructors at Goshiki Onsen (Yamagata Prefecture) in December 1939, and at Nozawa Onsen in March 1940. The twelfth and thirteenth All Japan Students' Ski Championships were held in 1939 and 1940 at Nozawa.

With the improvement in the means of transportation and the increase of ski events, five new inns were added. Inhabitants of Nozawa operated them while carrying on their agricultural activities at the same time [半農半宿]⁸⁴

2 - 3) The Third Period (1946-1960)

In 1947, ski lifts to be used by American soldiers were installed by the United States Occupation Authorities at the Shiga Kogen, Nagano and at Mt. Moiwa, Hokkaido. The introduction of ski lifts stimulated every skiing ground, including Nozawa Onsen. Here, the first ski lift of wood underpinnings⁸⁵ was built in 1951. The building of this lift was carried out by the Nozawa Spa's Skiing Club. This organization managed the lift until 1962, when it was taken over by the village. The Nagano Electric Co. Ltd. introduced the "Carrier Ford", a 17-passenger snowmobile, to transport the increasing number of skiers.⁸⁶ However, snowfall was so heavy that this carrier was not able to operate efficiently. With the successful removal of snow with bulldozers, regular bus service was begun from Kijima to Nozawa Onsen during the winter. Skiers increased gradually in numbers, and the existing inns could not accommodate⁸⁷ the expanding numbers and the excess had to be sent to some farm-houses. By 1953, rural households of this kind numbered about twenty.⁸⁸

Following World War II, the settlement's function as a hot springs area declined as skiers increased. After

1955, few people came for therapeutic purposes.⁸⁹ The local inhabitants felt the need to raise the location of ski lifts to meet the demands of an increasing number of skiers. The open forest seemed to offer the landscape necessary for skiing (Fig. 2). Such favourable conditions proved to be a major advantage for the subsequent developments. As a result of the rapid increase of skiers, the farmer-operated minshuku changed from a marginal⁹⁰ to a full income producing activity.

2 - 4) The Fourth Period (Post-1960's)

As the limited amount of local funds had restricted the expansion of ski grounds, improvements could only be made with outside investments. However, the introduction of this sort of extraneous sources were blocked at Nozawa.⁹¹ The Nozawa Skiing Club acted largely as the local administrator, while the village authorities supported this organization financially. The Nozawa-gumi [野沢組]⁹² and Nozawa Onsen-mura made an agreement on the land ownership, and both organizations took the principle that only local capital was to be used to develop the resort. Therefore, outside investors found it difficult to enter into the area.

This club transferred the supervision of the skiing ground to the village authorities in 1963⁹³, since it was originally formed as a temporary organization, without legal recognition. As the club met many difficulties, it was deemed

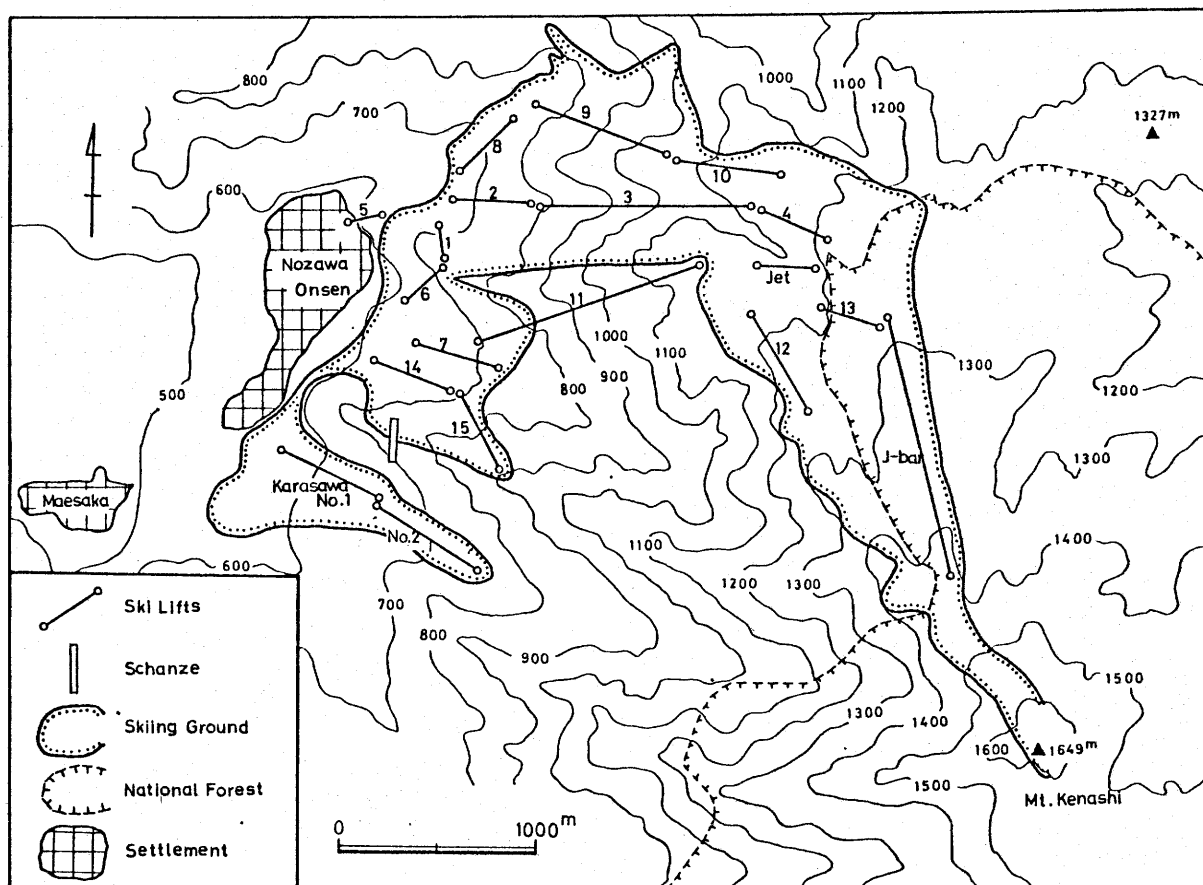


Figure 2. Distribution of Ski Slopes in Nozawa Onsen

irrelevant to administer the resort on its own. Following the transfer, village authorities increased the number of ski lifts. As the Public Management Enterprise Act applied to this particular venture, it simplified the introduction of public capital. In addition, local officials established some other tourist services, e.g. a gymnasium, a playground, and a long distance ski course.

In summary, the ski area was initially developed around the local spa, and latter changes were made possible with public investments. Today, Nozawa has developed into a major ski resort and can be classified as a "national type"⁹⁴, and nation-wide tournaments are frequently held there.

3. The Development of Skiing Grounds and Changes Brought to the Local Community.

3 - 1) Functional Changes of Local Spa

The 1871-1872 seasonal changes of visitors at Nozawa indicate a peak from June to September, and again in December (Fig. 3). The heavy snow from January to March impeded the arrival of visitors seeking therapy from the hot-springs. The spa only functioned during the mid-summer. This pattern continued until the early 1930's. In the early 1960's, visitors from January to March accounted for about 40 percent of the yearly total. The proportion of guests during the winter increased to 50 and 60 percent by the latter part

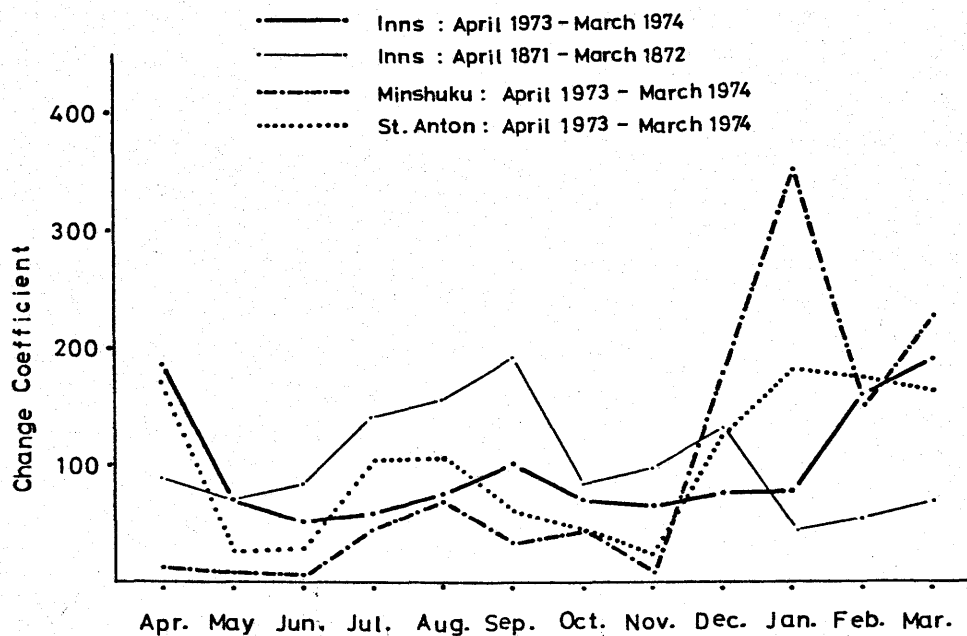


Figure 3. Changes in the Accommodation Patterns
at Nozawa Onsen and St. Anton

$$\text{Change Coefficient} = \frac{\text{Number of Tourists in Each Month}}{\text{Total Number of Tourist during a Year}} \times 1200$$

- Source : (1) *Lodging Statistics*, Innkeepers' Association of Nozawa Onsen.
 (2) *Statistics of Spa Visitors*, Nozawa-gumi.
 (3) *Statistics of Tourism*, Village Office of Nozawa Onsen-mura.
 (4) *Statistics of Tourism*, Tourist Association of St. Anton.

of the decade (Fig. 4). This phenomenon shows the changes in the settlement's functions.

There is a wide difference between Japanese and European skiers' length of stay in winter resorts. In Japan, skiers normally remain for two or three days. Their counterparts in the skiing grounds of Europe, including St. Anton⁹⁵ stay between two and three weeks.

The skiing season at St. Anton is from mid-December to Easter.⁹⁶ St. Anton, being 1,300 meters above sea level also functions as a summer resort. Therefore, it is a year round resort.⁹⁷

As the farmers' scope of agricultural operations⁹⁸ at Nozawa is limited, they a difficulty in earning enough income. Therefore, they tried to make tourism a year round business, i.e., accomodating skiers in winter and opening the settlement as a "students' village" in summer [夏季学生村]. The summer income helped to pay off the investments made for winter activities. As a result, Nozawa Onsen was gradually transformed into a ski settlement.

3 - 2) Changes in the Industrial and Population Structure

Excepting Nozawa Onsen, the permanent population of each of Nozawa Onsen-mura's settlements decreased between 1965 and 1974 (Table 1).

Mawsaka, 1.5 kilometers southwest of Nozawa Onsen, is a settlement⁹⁹ that accomodates skiers for the Hokuryuko

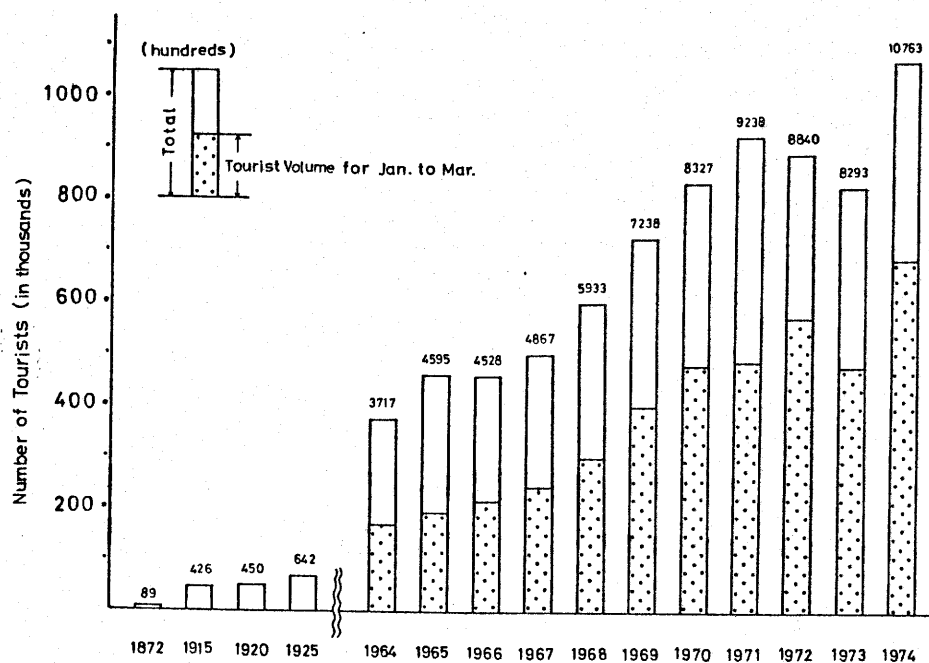


Figure 4. The Tourist Pattern at Nozawa Onsen
(1872 - 1974)

Note: 1872 to 1925, data for January - March not available.

- Source: (1) *Statistics of Spa Visitors*, Nozawa-gumi, 1872.
 (2) *Statistics of Nagano Prefecture*, Department of Statistics, Nagano Prefectural Office, 1915 - 1925.
 (3) *Statistics of Tourism*, Village Office of Nozawa Onsen-mura, 1964 - 1974.

Skiing Ground.¹⁰⁰ However, minshuku management has not been able to hold outmigration. The settlement's population has been decreasing yearly. Other settlements are also small agricultural settlements, and are characterised by rapid depopulation.

Table 1. Distribution of Population at
Nozawa Onsen-mura

Settlement	1960	1965	1970
Nozawa Onsen	3,172	3,148	3,165
Maesaka	494	429	405
Jyujibara	96	86	80
Tsuboyama	293	255	220
Others	2,380	1,578	1,354

Source: *National Population Census, 1960, 1965, 1970*,
Department of Statistics, Nozawa Onsen-mura.

The employment structure¹⁰¹ (Table 2) also shows some changes. In 1950, when the number of skiers began to increase, those engaged in manufacturing began to be affected. Next was the service industry. The population in this sector was the most affected by 1970, since the people engaged in services increased from 100 in 1950 to 154 people in 1970. As minshuku are generally managed by farmers as a sideline, official statistics do not reflect them. Therefore, it is estimated that the service industry's population is greater than the numbers indicate. The construction and retail trade segments increased remarkably;

Table 2. The Number of Secondary and Tertiary Workers
in Nozawa Onsen-mura (1950 - 1970)

Type of Industry	1950	1955	1960	1965	1970
Construction	86 (100)*	139 (162)	167 (194)	188 (219)	264 (307)
Manufacturing	449 (100)	359 (80)	389 (87)	346 (77)	393 (88)
sub-total	585 (100)	498 (84)	556 (95)	534 (91)	675 (112)
Wholesalers and Retailers	166 (100)	227 (137)	168 (101)	215 (130)	363 (219)
Transport	46 (100)	50 (109)	45 (98)	52 (113)	37 (80)
Service	285 (100)	348 (122)	414 (145)	392 (138)	439 (154)
Public Service	48 (100)	50 (104)	87 (181)	96 (200)	113 (235)
sub-total	545 (100)	675 (124)	714 (131)	755 (139)	958 (176)
TOTAL	1,130 (100)	1,173 (104)	1,274 (113)	1,289 (114)	1,615 (143)

* Base Year : 1950 at 100

Source : Adapted from *Statistics of Nagano Prefecture*
and Department of Statistics, Nozawa Onsen-mura.

people in the former occupation tripled, while those in the latter doubled in number between 1950 and 1970. This was a result of the increase in construction work, in conjunction with the development of tourist facilities at Nozawa Onsen.

The number of building permits issued increased significantly (Table 3). When new buildings were built, part of them were destined for minshuku purposes, while annexes were exclusively constructed for lodging. In other words, they were intended for minshuku. Thus, the construction work load has show yearly increases. As a result, with gradual increases in the demands for workmen, almost all farmers came into this spa from neighbouring agricultural villages.¹⁰²

Therefore, in addition to the former settlement function, the hot springs acquired a new one, that of skiing. In the process, the population engaged in primary activities decreased, while those in tertiary occupations rose rapidly.

4. The Development of Skiing Grounds and the Tourist Industry

4 - 1) Conditions for the Development of a Skiing Ground

At Nozawa, the snow attains depths of two meters or more every year, giving this settlement the best natural conditions for skiing. The long skiing season extending

Table 3. Number of Applications for Building Permits at Nozawa Onsen-mura

Year	New Building	Additions	Rebuilding	Additions and Rebuilding	Others	TOTAL
1968	46	46	9	5	17	123
1969	20	61	5	1	24	111
1970	23	65	1	1	38	128
1971	28	71	-	1	44	144
1972	26	65	-	1	47	139
1973	67	58	-	3	9	137

Source : Records of Applications for Building Permits, Department of Development,
Nozawa Onsen-mura, 1975.

from mid-December to early May played an important part in the development of the winter resort.

As shown in Table 4, there were 19 ski lifts in 1974, at Nozawa, with the first run made on November 29th. and the last on May 6th. During the 1974-1975 season, the various lifts ran between a maximum of 159 and a minimum of 122 days. In terms of days operated, the facilities at Nozawa are one of the longest used in the country. The local relief, about 1,000 meters, makes skiing possible on some occasions until the week-long holiday in early May, known as the "Golden Week". The Nozawa area, thus has been endowed with excellent natural conditions for skiing.¹⁰³

There are two ways of access to the resort: 1) from Nagano-shi to Kijima by the Nagano Electric Railway and from Kijima to Nozawa Onsen by bus; 2) from Togari Railway Station on the Iiyama Line by bus to Nozawa Onsen. In either case, it is necessary to use a bus, or some other form of motorised transport to reach Nozawa Onsen. The size of the skiing ground, the depth and the quality of the snow¹⁰⁴ and the long skiing season outweigh the hardships imposed by bus travel.

The success of a resort is dictated not only by its scale but also by the number of ski lifts, and natural features. The slope gradient at Nozawa averages between 9 and 22 degrees.¹⁰⁵ Thus the inclines satisfy all the needs according to the skills of the skiers.

Table 4. The Ski Lifts of Nozawa Onsen

Lift	Year of Construction	Length of Ski Lift	Number of Operational Days (1974-'75 Ski Season)	Cumulative Length
1	1951	208 ^m	136	208 ^m
2 (parallel)	1954	<495 481	159	1,184
3	1960	1,129	159	2,313
4	1961	473	159	2,786
5	1963	300	157	3,086
6	1963	251	122	3,337
7	1963	471	122	3,808
8	1965	320	122	4,128
9	1966	803	139	4,931
10	1967	598	122	5,529
Jet	1968	294	122	5,823
11	1969	1,295	122	7,118
12	1969	661	122	7,779
13	1969	355	143	8,134
Stemag	1969 (defunct)	200	-	8,334
14	1971	467	122	8,801
Karasawa No. 1	1971	590	122	9,391
No. 2	1971	614	122	10,005
J-bar	1972	1,250	143	11,255
15	1972	523	122	11,778

Source : Compiled from interviews with officials of The Tourist Promotion Board, Nozawa Onsen-mura, 1975.

Prior to 1963, as described above, ski lifts had been managed by the Nozawa Skiing Club. As there were only seven lifts with a total length of 3,079 meters, the club was able to provide the necessary maintenance and services. However, by the late 1960's, with the development of the area into one of the leading ski resorts, as (Table 4) judged by the number of lifts and their total length, more than 200 seasonal employees had to be kept daily for the maintenance of the equipment between December and April. With the concurrent increase in the number of minshuku, it was impossible to hire the seasonal labourers locally, since farmers had a side business of their own, i.e. the operation of the minshuku. For this reason, village authorities began recruiting workers from the neighbouring cities, towns, and villages and "Temporary Employees of the Tourist Industry Managed by Nozawa Onsen-mura" [野沢温泉村観光施設事業臨時職員].¹⁰⁶ Sixty percent of the necessary labour came from the neighbouring settlements. From December 1974 to March 1975 (the 1974-1975 skiing season) 206 temporary workers were hired, but the village was able to supply only 43 percent (88 persons) of the requirements. Seasonal employees came to Nozawa from the nearby agricultural settlements, especially from the eastern part of Iiyama-shi (60 persons, or 29 percent). Eighty percent of all winter employees came from a radius of 10 kilometers of the spa (Fig. 5).

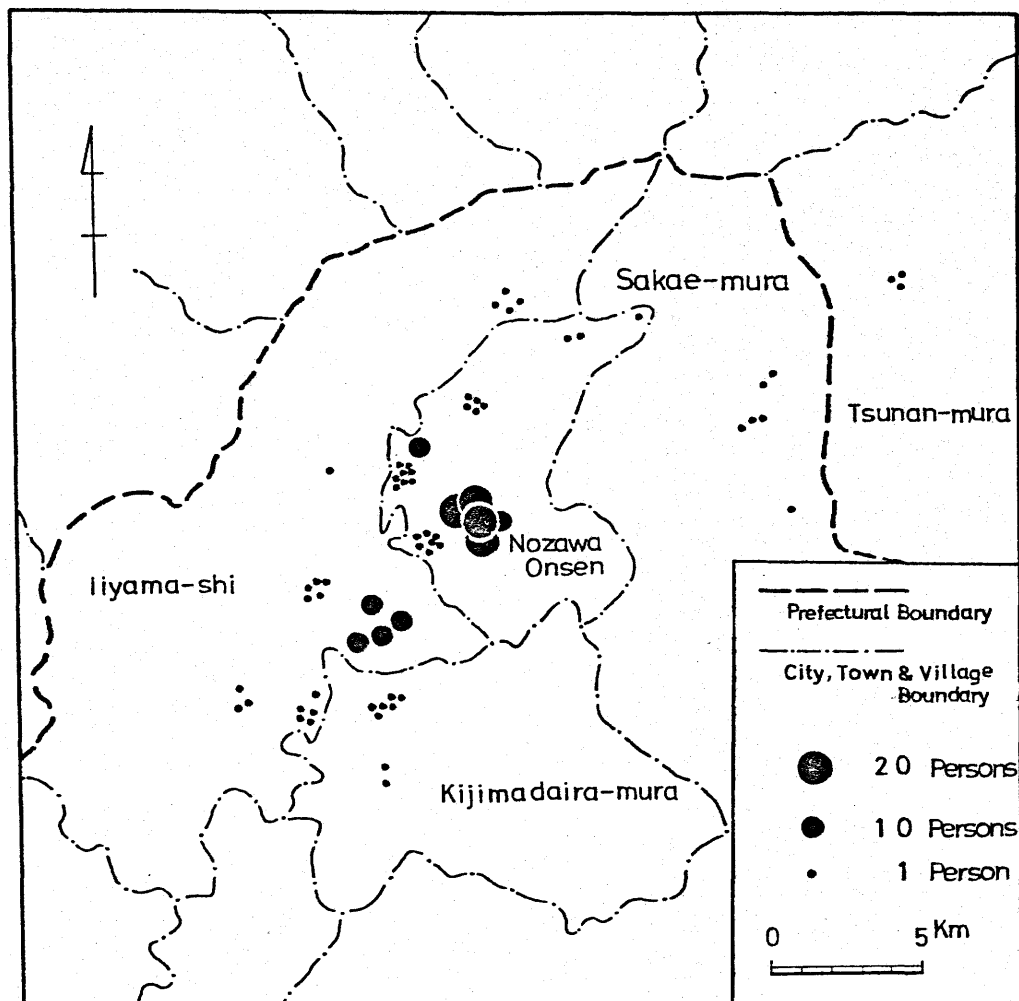


Figure 5. Places of Origin of Temporary Ski Workers for Nozawa Onsen in Winter (Dec. 1974 - Mar. 1975)

Source : Compiled from records derived from *The Register of Temporary Employees*, Tourist Promotion Board, Nozawa Onsen-mura, 1975.

4 - 2) The Development of Hotels and Inns

At Nozawa Onsen, fourteen inns were already in operation in 1920. These catered primarily to the local people ["Ohyu" 大湯] (Fig. 6). The operators were also part-time farmers [半農半宿]. As of 1977, only four of the thirty hotels and inns (Appendix, Table 2) in this spa were managed by non-locals.¹⁰⁷ In 1950, one out of four accomodation facilities was established by the Nagano Electric Train Co. Ltd.¹⁰⁸

There are two types of hotspring ownership, i.e. those of the Nozawa-gumi and those of the individual inns (Appendix, Table 2). However, most inns purchase their thermal water from the Nozawa-gumi, with the volumes being pre-determined. During the 1960's, the accomodation capacity of inns multiplied as the number of skiers increased. In the 1970's, 16 inns were enlarged or rebuilt with loans furnished by the Nozawa Agricultural Co-operative Association and the Federation of Nagano Agricultural Co-operative Union.¹⁰⁹ With increasing investments, there has been a growing tendency towards the re-organization of the lodging structure.

The Nozawa-gumi also sells hot spring water to five minshuku.¹¹⁰ Purchase was made possible in 1964, following a drawing among those interested in acquiring the water. With funds provided by the Nozawa Agricultural Co-operative Association, owners to two local lodges

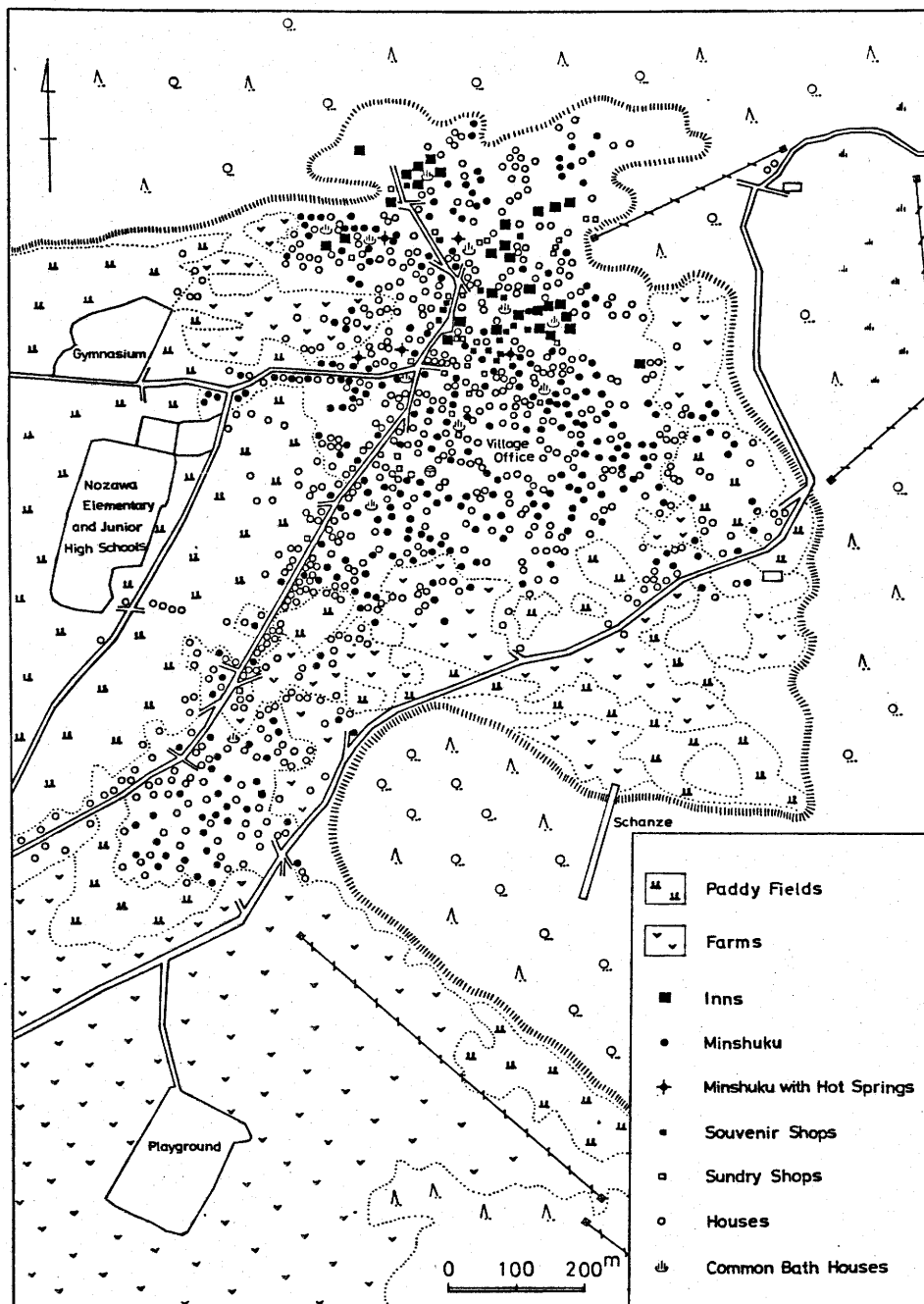


Figure 6. The Distribution of Inns and Minshuku and Land-Use in Nozawa Onsen

were enabled to have enough water to dedicate entirely to minshuku management. Acquisition of water allowed them to expand and to be ranked among the top 10 leading inns in terms of earnings. Moreover, as the five operate under the system of minshuku, charges are moderate compared to inns and hotels. Neighbouring farmers also come to the minshuku for bathing, particularly in summer. Thus, in contrast to hotels and some of the higher-grade inns, the function of hot-springs for healing purposes have been revived by these minshuku.

To the Japanese, ski resorts are made more attractive when combined with hot-springs. As charges differ between inns and minshuku, each attract visitors of different social classes. The existence of hot springs can diversify the functions of a tourist settlement for purposes other than skiing. Thermal sources are not monopolised by the leading lodges. There are 11 public hot-spring bathhouses in this spa, and visitors staying in minshuku can bathe there. The existence of these bathing facilities enable the minshuku to remain as moderately priced accomodations.

4 - 3) Development of Minshuku

It was in 1957 that minshuku were formally permitted to operate by the regional health centers (Table 5). In the first half of the 1950's, farmhouses began to be used by lodgers who could not be accomodated by the inns. Only

after 1962, minshuku as a business, began to be operated in earnest by local farmers. For example, in 1967 alone, 59 minshuku were added.

In general, minshuku tend to be initiated by the wealthy farmers. Notwithstanding, in the case of Nozawa, those with lesser means also participated in the business from an early phase, largely because the Nozawa Co-operative Association encouraged local farmers to operate minshuku as a supplementary job during the winter by providing financial assistance (Table 6).

In 1974, 321 dwellings operated as minshuku. This represented about 50 percent of the total number of houses in Nozawa Onsen. One characteristic of the minshuku in this settlement is that not only the number of minshuku has increased, but also the accommodation capacity of each has been expanding.

Normally the loan available to the intending household is limited to ¥20 million by the Nokyo, or agricultural co-operative. In addition, the Federation of Nagano Agricultural Co-operatives provides funds exceeding that of local co-operatives. In the 1970's, yearly loans made by the Nokyo amounted to more than ¥100 million.¹¹¹ The peak years were reached in 1972 and 1973.

4 - 4) Management of the Minshuku

The number of guests accommodated by the minshuku increased as a result of building enlargements during

Table 5. Minshuku Capacity at Nozawa Onsen, 1956 - 1974

Year	Number Opened	Capacity (persons)
1956	-	-
1957	5	68
1958	-	-
1959	-	-
1960	-	-
1961	-	-
1962	13	99
1963	2	36
1964	10	101
1965	23	266
1966	12	167
1967	59	1,007
1968	20	343
1969	22	420
1970	24	472
1971	36	703
1972	36	680
1973	34	918
1974	28	699
TOTAL	324	5,979

Note : With expansion and rebuilding of some of the Minshuku, the number of guests that could be actually accommodated in 1974 was 6,568.

Source : *Register of Permits Granted for the Operation of Lodging Houses*, Nakano Public Health Center, 1976.

Table 6. Loans Granted for the Construction of Inns and Minshuku at Nozawa Onsen
by the Agricultural Associations of Nagano Prefecture

Year	Nozawa Agricultural Co-operative Association		the Federation of Nagano Agricultural Co-operatives		Note
	Number of Loans	Amount (million yens)	Number of Loans	Amount (million yens)	
1960	-	Million ¥ -	-	Million ¥ -	
1961	2	2.0	-	-	
1962	-	-	-	-	
1963	27	64.4	-	-	
1964	N.A.	163.5	-	-	
1965	47	196.5	-	-	
1966	N.A.	55.7	1	19.0	1 inn
1967	N.A.	73.4	4	73.0	4 inns
1968	54	80.7	2	60.4	2 inns
1969	N.A.	86.0	3	52.8	2 inns, 1 shop
1970	76	123.6	-	-	{ 2 inns, 2 shops, 1 Minshuku
1971	73	142.0	5	84.0	4 inns, 2 Minshuku
1972	98	282.0	6	247.8	4 inns, 1 shop,
1973	79	300.0	8	348.0	{ 3 Minshuku
1974	51	203.9	4	255.0	{ 2 inns, 1 shop, 1 Minshuku

N.A. : Not Available

Source : Ledger of Loans Granted, Nozawa Onsen Agricultural Co-operative Association, 1976.

the 1960's and investments made during the 1970's.¹¹² There were also cases where several operators joining together to operate a minibus¹¹³ which made for them between ¥30 and ¥40 million a year.¹¹⁴

Table 7 shows that only in 8 households (2.6 percent) is minshuku operation specialised. In general, the management is multi-faceted, with 46.7 percent belonging to the C₂ and C₃ categories.¹¹⁵

Figure 7 shows the relationship between the scale of minshuku according to the number of persons that can be accommodated and the type of management. Generally, 15 to 30 persons can be accommodated per household. These dwellings, initially with an accommodation capacity of 10 to 15 people, generally have large operating capitals, and they normally expand to accommodate 15 to 30 guests. The latter figure is about the limit that a farm family can accommodate comfortably, without employing extra hands. Assistance from outside the family must be sought in cases where the number of guests to be accommodated exceed 30. Therefore, it is this writer's belief that minshuku with capacities for more than 50 guests, must be managed by professional minshuku operators. The semi-professionals and professional minshuku operators must employ temporary employees¹¹⁶ from the neighbouring settlements whose existence are not ski related.

Table 8 shows the actual conditions of the various representative types of minshuku.

Table 7. Types of Minshuku Operation

	TYPE	Number	Percent
A	Minshuku Only	8	2.6
B	B1 Minshuku as the Main and Farming as a Subsidiary Activity	44	14.6
	B2 Minshuku as the Main and Occupation other than Agriculture as a Subsidiary	32	17.2
	B3 B2 + Farming	20	
C	C1 Farming as the Main and Minshuku as a Subsidiary Activity	29	9.6
	C2 Other Occupation besides Agriculture as the Main and Minshuku as a Subsidiary Activity	91	46.7
	C3 C2 + Farming	50	
D	Minshuku as a Minor Source of Income	28	9.3
	TOTAL	302	100.0

Source : Interviews, 1974

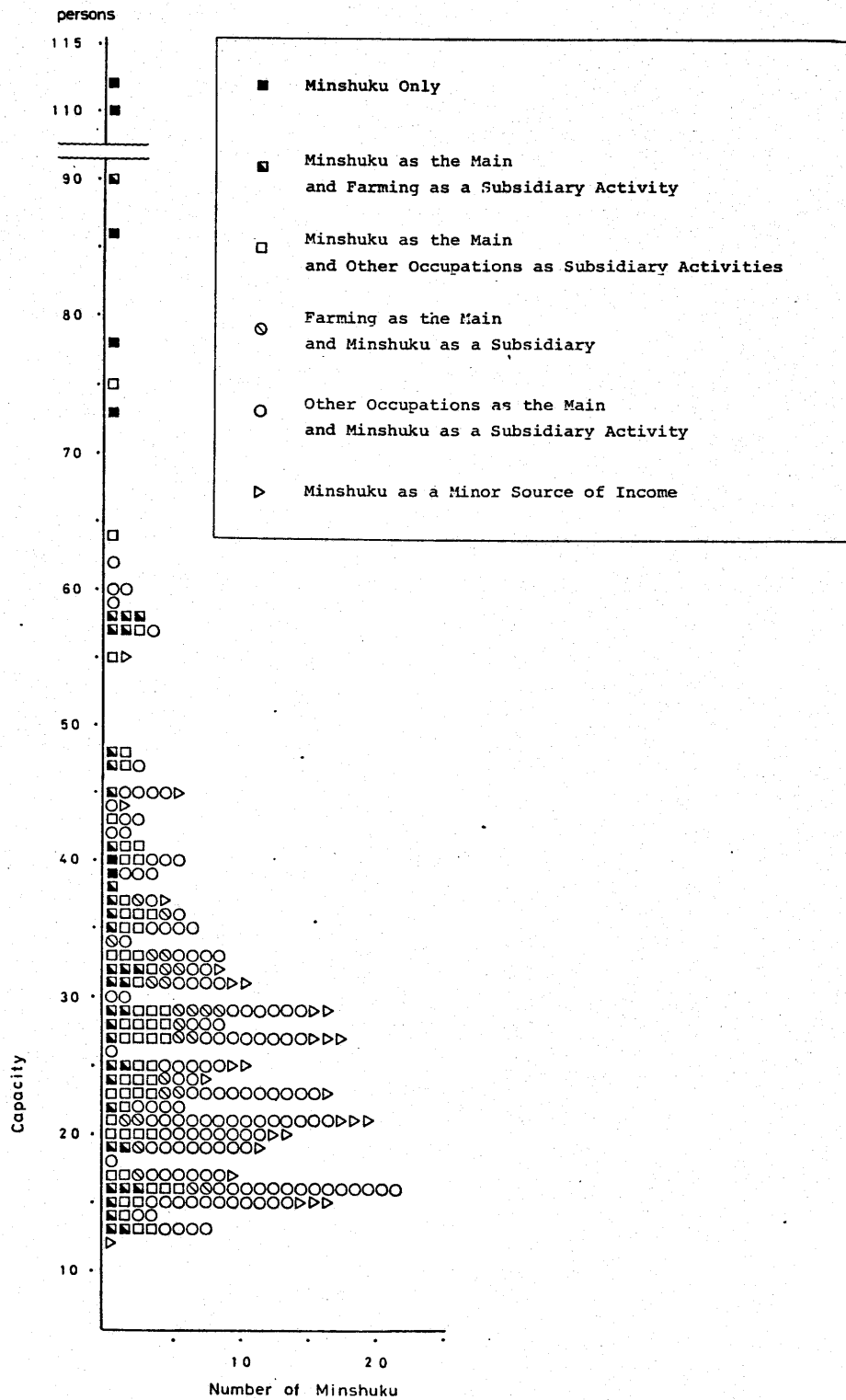


Figure 7. The Relationship between Types of Operation and Capacity of Minshuku

Source : Compiled from interviews with Minshuku operators, 1975.

Table 8. Case Studies of Four Minshuku Operators

Item \ Type	A	B	C	D
1. Family Managed	Husband, Wife, a 21-year old son and the Grandparents. Total : 5 persons.	Husband, Wife, 2 children less than 15 years of age, a 21-year old son and the Grandparents. Total : 7 persons.	Husband, wife, and 2 children between 21 and 23 years of age. Total : 4 persons.	Husband, Wife, Grandmother and 3 Children less than 16 years of age. Total : 6 persons.
2. Farm Managed	•Paddy Field 30a* (40a leased out) •Field 20a (10a leased out) •Forest 8ha	•Paddy Field 20a •Field 15a •Forest 20a	•Paddy Field 30a (40a leased out) •Field 10a •Forest 4ha	•Paddy Field 60a •Field 20a •Forest 2ha
3. Initial Year of Operation	1964	1957	1954	1967
Number of Tatami** Initially	40	20	50	42
1975	165	121	90	42
4. Construction				
a) New	Bath, Kitchen Kendo hall (1973), Restaurant in the skiing ground (1969)	All new (with hot-spring)	Guest rooms, Bath, Lavatory	All new
b) Re-building	Guest rooms, Lavatory, Dining room		Kitchen Dining room	
5. Source of Capital for Minshuku Management	From Nokyo 1969 ¥ 2 million 1970 ¥ 3 million 1972 ¥ 6 million 1973 ¥ 4 million	From Savings 1963 ¥ 200,000 1971 ¥ 10 million From Nokyo 1963 ¥ 300,000 1971 ¥ 7 million 1973 ¥ 3 million	From Savings 1952 ¥ 1.3 million 1960 ¥ 1 million 1972 ¥ 1 million From Nokyo 1960 ¥ 500,000 1972 ¥ 2.5 million	From Savings 1967 ¥ 6.8 million 1970 ¥ 200,000 From Nokyo 1967 ¥ 1.2 million
6. Source of Food, e.g. vegetables, rice, and eggs	Mostly purchased	Purchased	Mostly home-grown	All home-grown
7. Labour (for the busy season)	1 full-time worker and in winter 10 temporary workers per day in addition	Family members and in winter an addition of 1 or 2 temporary workers per day.	Family members and in winter an addition of 1 or 2 temporary workers per day.	Only family labor
8. Income from Minshuku Management	90 %	100 %	60 %	40 %
9. Sale of Land	-	30ares of paddy land in 1971.	-	231 m ² of residential land in 1970.
10. Number of Guests per Year	5,000	6,000	2,000	700

* 1 heacare = 100 ares

** 1 tatami = 1.65 m² (a tatami is a Japanese straw mat)

Source : Interviews, 1975.

Minshuku "A" belongs to a type where the owner relies largely on lodging activities for his livelihood. (A in Table 7). It is normally run on a large scale, with the operator cultivating some 30 ares of paddy, and about 20 ares of field crops.¹¹⁷

The 70-tatami mat gymnasium is also an indicator of operational scale. This gymnasium is used as a Japanese fencing training camp during the summer.¹¹⁸ Group ski parties during the winter has also contributed to the specialization of this minshuku. Type "A" operator had borrowed all of his investment funds from the Nozawa Agricultural Co-operative Association. There is only one regular employee throughout the year, but during the ski season (December to March) 10 additional temporary workers are employed. As the necessary employees cannot be found at Nozawa, they are hired from the neighbouring settlements.

In many cases, the large minshuku have agreements with tour agents. For example, in 1972, type "A" managed to secure agreements with agents in Tokyo and Osaka. At one time, this operator was a full-time farmer with 70 ares of paddy, 30 ares of field crops, and 8 hectares of forest land. After business began to expand in 1964, the owner began to devote himself entirely to minshuku.

The proprietor of minshuku "B" began to dedicate exclusively to the business after 1964, when he obtained hot springs water by customary lot. He was a merchant

dealing with Akebi ware, a well-known product of Nozawa Onsen. In 1971, he disposed of the paddy fields (30 ares) to begin the minshuku business, which soon prospered because of its hot spring water. The inn accommodates about 6,000 guests a year, ranking quite high in the minshuku operational structure.

Minshuku "C" (a type where minshuku is the main occupation, and farming plays a subsidiary role; B₁ in Table 7) was the first to begin the trade in the region. When "C" rebuilt his house casually in 1952, before opening for business, skiers who could not be accommodated in the local inns began to stay in this dwelling. Business operations were begun in 1964, and subsequently, ¥3.5 millions were invested for improvements. This is a type of minshuku that belong to the middle group, as far as the management scale is concerned.

Before 1967, operator "D" (a type where farming is the principle occupation; C₁ in Table 7) specialised in farming, cultivating 60 ares of paddy, 20 ares of field crops, and 2 hectares of lumberable trees. In the process of rebuilding the house in 1969, the second floor was modified and the owner opened it as a minshuku. With proceeds from the sale of timber from his forest, and part of his land (321 square meters), he was able to raise the necessary operational funds with a minimum of borrowing. The general trend after 1968 was to dispose part of the real estate to begin the business. Hence, farm families

divide their efforts and funds to manage both the minshuku and the farm.

With increasing lodging activities, the value of local edible plants such as bracken (warabi 蕨) and osmund (zenmai 蕨) increased. It is nowadays a general practice to sell such native plants to tourists. Local people¹¹⁹ can gather them free, without concern for land ownership. Currently, the gathering of such wild plants is an important activity.

5. Changes in Land Use

Table 9 shows the land ownership pattern at the Nozawa ski area. Of a total of 150 hectares, 59.0 (39.3 percent) is owned communally by the Nozawa-gumi, 37.8 (25.3 percent) privately (290 persons), 21.2 (14.2 percent) is held by the village, and the rest (32.0 hectares) belongs to the national government. That owned by the Nozawa-gumi and the village, amounts to 80.2 hectares, corresponding to 53.5 percent of the total. If the national forest is added to the previous figure, the total comes to 112.2 hectares, or 74.8 percent. The existence of such vast tracts of public land has enabled the development of the ski resort.

Rent for the national forest (32 hectares) is estimated by the forest service station according to "The Restoration Act of Earnings" [収益還元方式]¹²⁰. The estimation is based on the income from recreational

Table 9. Land Ownership at the Nozawa Ski Ground

(unit : hectares)

Ski Slope (Gelande)	Area	Village Land	Nozawa-gumi Communal Land	Private Land	National Forest
Hinokage	23.0	11.5	-	11.5	-
Uwanotaira	30.0	-	30.0	-	-
Utopia	12.0	-	12.0	-	-
Nagasaka	9.0	3.0	-	6.0	-
Kokusetsu	32.0	-	-	-	32.0
Yunomine	17.0	-	17.0	-	-
Mukaibayashi	14.0	2.8	-	11.2	-
Karasawa	13.0	3.9	-	9.1	-
TOTAL	150.0	21.2	59.0	37.8	32.0
Land Value (¥/3.3 m ²)		-	18	29	*

* Refer to Note 120 on p.128

Source : Compiled from Interviews with officials of The Tourist Promotion Board,
Nozawa Onsen-mura, 1975.

activities. There are two ski lifts and a village-operated restaurant within the national forest.¹²¹ Prior to 1973, the rent amounted to ¥100,000 per year. However, annual payments increased to ¥1 million after the above mentioned Act became effective.¹²²

The agricultural land use of Nozawa Onsen is shown in Figure 6. Before World War II, fields around this settlement were almost devoted exclusively to the cultivation of mulberry. Hops and Tobacco¹²³ declined in the latter half of the 1960's when minshuku operations increased. The change resulted from the competition between cultivation and management of minshuku during summer. On the other hand, the cultivation of tomatoes increased¹²⁴ amongst those farmers not operating minshuku. In 1971, the Nokyo built a workshop for processing the produce for the markets.

Most of the minshuku-operating farm houses (the so-called students' village; 83 houses in 1975) cultivate asparagus.¹²⁵ Since it is necessary to perform only a few sterilization processes in the cultivation of this plant, there is only a small labour investment.¹²⁶ With the increase of minshuku in the 1970's, the area devoted to asparagus has shown a corresponding increment.

The proportion of paddy fields temporarily abandoned stood at 4.8 percent at Nozawa Onsen-mura in 1974, 11.1 percent in the adjoining city of Iiyama, and 9.0 percent in Kijimadaira-mura. Thus, Nozawa has a smaller area in fallow. As the mean cultivated area in 1974 was 45 ares

per household, owners were able to produce an adequate supply of rice for their minshuku. Thus, they did not have to leave their fields in fallow. However, marginal areas have been left uncultivated. In recent years, especially after 1970, fruit trees¹²⁷ like cherry, chestnut, and walnut have been planted in such spots.

Farmers who operated inns capable of accomodating over 50 people, i.e. the full-time operators (about 40 houses in 1975) tend to cultivate rice only for self-consumption, and the rest of the land is leased out. With the development of the minshuku, farmers have tended to specialise in two ways, i.e. those who dedicate primarily to minshuku, with farming as a subsidiary occupation, [民主農従] and those who specialise in agriculture, with minshuku as a supplementary occupation [農主民従].

Land use changes, i.e., the use of arable land for purposes other than for farming, averaged 10 per year in the 1960's, and that figure increased in the 1970's. This implies that with the establishment of a ski resort, remarkable changes have taken place in agricultural land use (Appendix, Table 3).

6. Conditions for the Establishment of the Ski Settlement in Nozawa Onsen

The development of skiing grounds began in 1924, with the Nozawa ski resort. The leading innkeepers took the initiative in the development of the resort settlements,

and they formed the Nozawa Skiing Club for this purpose. Local entrepreneurs preferred to develop with local capital. Therefore, the majority of the inns and minshuku came to be operated by local people. As the location of Nozawa Onsen offered excellent natural conditions for skiing, e.g. depth and quality of snow, and a variety of surfaces, many settlers turned to the tourist industry, following the decline of traditional local industries.

At Nozawa, the national forest was used for ski grounds. Before the development for ski purpose, the forest had no economic value. Similar forests made important contributions to the development of large scale ski grounds elsewhere in Japan. After World War II the local people were able to block external capital from entering the settlement since development were publicly controlled, i.e. skiing grounds were established under village management.

With the advent of skiing, the existing thermal springs' function was drastically transformed. The settlement was changed from a spa to that of a winter resort. Moreover, the employment structure is being changed, with the service and retail merchants predominating.

The tourist industry has grown remarkably with the development of skiing grounds. Many of the minshuku have been managed by farmers as a side business during the winter.

Local inhabitants gradually developed the area with

the opening of a large skiing ground. As a result, Nozawa Onsen has come to perform new functions, with skiing activities as the pivot.

CHAPTER III

PREREQUISITES TO THE FORMATION OF A SKI
SETTLEMENT AT SHIGA KOGEN

1. Overview of the Study Area

Shiga Kogen is located in Nagano Prefecture, in north-central Japan, and it is governed from the town of Yamanouchi (Fig. 8). This plateau is centrally located in Joshinetsu Kogen National Park. The plateau has been developed as the largest ski resort in Japan. In the present study, the winter resort is classed as a "National type".

The plateau is surrounded by a series of mountains, e.g. Mt. Shirane (2,295 meters above sea level), Mt. Yokote (2,305 meters), Mt. Iwasugo (1,960 meters) and Mt. Ryuoh (1,900 meters). Some mountains like Yokote, Shiga, Higashitate, Nishitate and Yakebitai have slopes well-suited for skiing, since they have experienced limited erosion.

The site lies within the communal forest held by Kutsuno, a settlement administratively belonging to the town of Yamanouchi. In the 1920's, local inhabitants used the natural vegetation, such as grass, small bamboo, trees like white fir, hemlock and spruce for hay, charcoal-making, chopsticks and cabinetry.

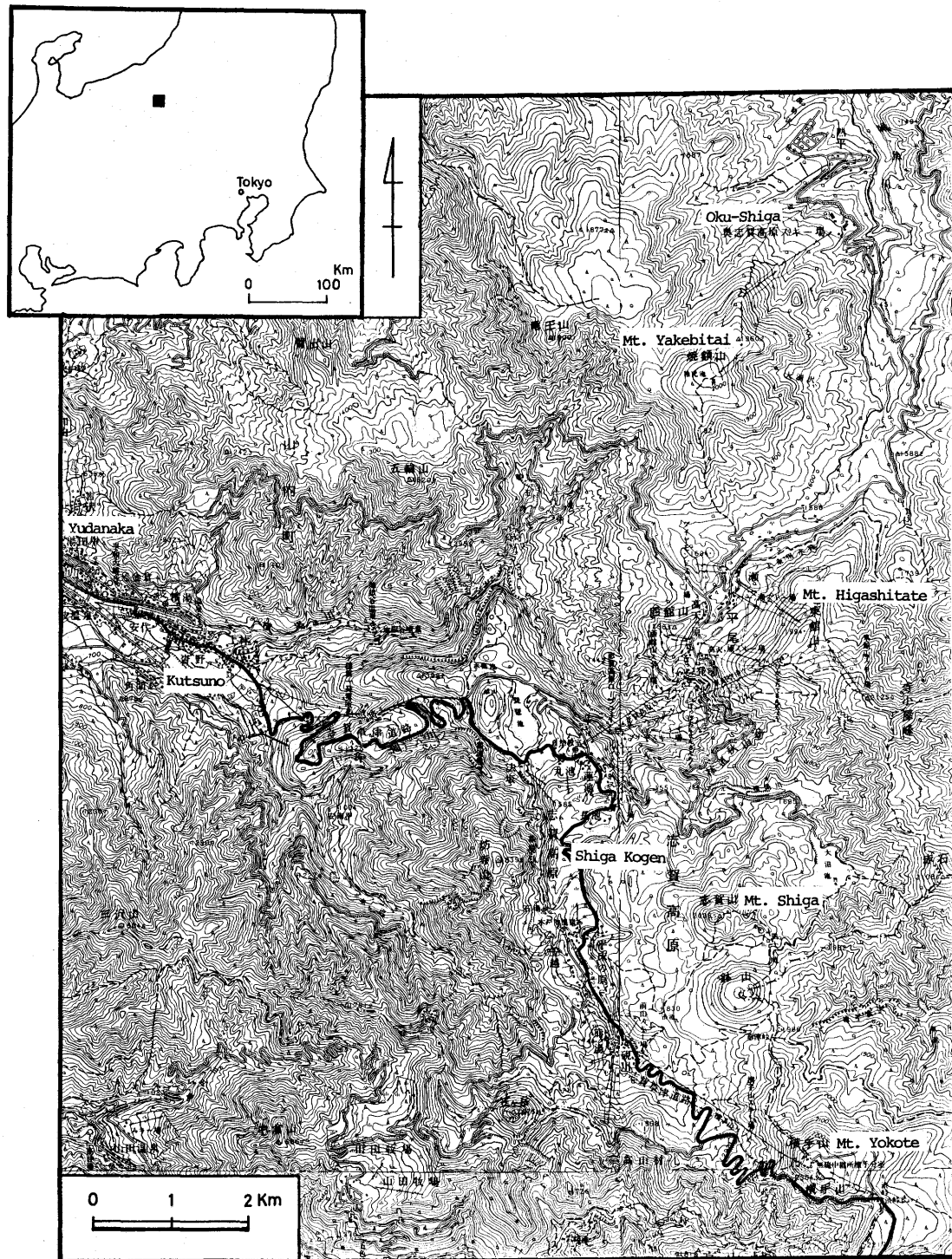


Figure 8. Location of Study Area (Shiga Kogen)

There were only three seasonal inns on this plateau; two at Hoppo Onsen and one at Kumanoyu. Presently, there are 96 inns, 61 rest houses owned or operated by companies. The new winter resorts were developed around the ski slopes.

2. The Processes of Settlement Development

The developmental process of the ski resort at Shiga Kogen can be divided into three periods and in the following pages this is discussed according to the stages of the establishment of the various types of lodging catering to the skiers, the expansion and enlargement of the ski facilities, e.g. the construction of ski lifts and ropeways and the holding of large-scale ski meets on a national or international basis.

2 - 1) The First Period (1929 - 1945)

In 1929, skiing was introduced to Shiga Kogen. A Norwegian ski group had visited Shiga Kogen and suggested its development. In 1927, the Nagano Electric Railway Company had extended its lines from Shinshu-Nakano to Yudanaka, at the foot of the plateau. During the same year, the Wago-kai¹²⁸ (Kutsuno's juridical corporation) was established to administer the activities at Shiga Kogen

At the same time, there were three seasonally-operated inns at Hoppo Onsen and Kumanoyu hot springs. During the winter, the innkeepers remained in the village

of Kutsuno. However, with an increasing number of skiers beginning to visit the area in the late 1920's, owners began to operate their inns during the winter months.

The railway company began to build a number of accommodations between 1929 and 1935, following the lease of a 200 hectare communal tract.¹²⁹⁻¹³¹ This initiative was copied by a local entrepreneur, Nobuyoshi Kobayashi who also built a cottage.¹³²

In 1930, the International Tourist Bureau of the Ministry of Railways designated the plateau as an International Skiing Ground.¹³³ In the following year, the National Railway extended its lines to Yudanaka, a settlement at the base of Shiga Kogen.

Despite the improved accessibility prior to World War II, there were only 9 inns.¹³⁴ The innkeepers came from Kutsuno and carried out business during the winter. Therefore, excepting Kumanoyu and Hoppo Onsen, the operators returned to Kutsuno and engaged in agriculture and forestry, or made a living as craftsmen during the off-seasons.¹³⁵

In the 1930's, the ski slopes were gradually developed. This was the period when the inhabitants of Kutsuno migrated to Shiga Kogen to begin the management of rest houses and huts.¹³⁶ These accommodations enabled the local inhabitants to earn an income not only in winter, but also throughout the year.

2 - 2) The Second Period (1946 - 1954)

In 1946, the U.S. Occupational Forces took over 14.5 hectares of land in the neighbourhood of Maruike, and in the following year, they built the ski lift at the Maruike Ski Ground. This lift, the first one to be built in Japan¹³⁷ was to be of major significance for the latter development of the plateau.

Following the relinquishment of the area by the U.S. Army in 1952, the Nagano Electric Railway Co. Ltd. acquired control of the skiing ground along with the ski lift. In addition, the innkeepers established the Tourist Society of the Shiga Kogen to develop the resort.

In 1949, bus services were begun from Yudanaka to Kumanoyu, and in 1950, to Hoppo Onsen. However, services were limited to the summer season. A ski bus service was begun in 1953 from Tokyo to Shiga Kogen. This operation enabled the winter service from Yudanaka to Hosaka (present-day Sun Valley Skiing Ground).

It was only after 15 years following World War II that ski lifts were gradually built and transport conditions improved.

2 - 3) The Third Period (Post-1955)

In 1949, the area, including Shiga Kogen, was officially named the Joshinetsu Kogen National Park¹³⁸ by the Ministry of Public Welfare. The designation served

to enhance the development of tourist resorts at the site. Developers began building ski facilities during this period. By 1959, there were two ski lifts in operation (spanning 432 meters) owned by the Nagano Electric Railway Co. Ltd.. The Hosaka Ski Lift Co. Ltd. and the Kidoike Onsen Ski Lift Co. Ltd were organised in 1955, followed by the Shigayama Lift Co. Ltd. in 1956, the Yokoteyama Lift Co. Ltd. in 1958, the Shiga Kogen Kanko Kaihatsu Co. Ltd.¹³⁹ in 1959, the Kumanoyu Lift Co. Ltd. in 1960, and the Shiga Kogen Ropeway Co. Ltd. in 1960.

The ski lift and ropeway companies were established with capital furnished by the local people (members of the Wago-kai). They built the facilities through their initiatives and hardwork.

Throughout the country, this was the period when companies with surplus capital attempted, among other activities, to operate skiing grounds. It was almost impossible to develop large scale ski resorts with limited capital, but the Wago-kai as the owner of this plateau, blocked large investors from making investment on Shiga Kogen. Investments were limited to members of the Wago-kai.

Transport improvements greatly influenced the expansion of ski areas. But transport began in the winter of 1958 between Yudanaka and Kumanoyu. In addition, the through train from Osaka to Nagano¹⁴⁰ was re-routed by the Japan National Railway (a public corporation) to provide access to the area, and in 1965, a toll road was opened from Shiga Kogen to Kusatsu Onsen.

It was during the third period that the means of access, and the resorts, including skiing grounds, began to become crowded (Appendix, Table 4).

3. The Establishment of New Resort Settlements and the Opening of Ski Grounds

3 - 1) Domiciliation and Expansion of Seasonal Settlements at Hoppo Onsen and Kumanoyu

As stated above, prior to 1929, there were only three seasonal inns at Shiga Kogen¹⁴¹ (two at Hoppo Onsen, and one at Kumanoyu). Both spas were opened only during the summer months since winter access to the region was blocked by heavy snow attaining depths of three meters or more. The operators lived in Kutsuno, their home village, during the winter.¹⁴² When local people came for baths at Hoppo Onsen, the innkeepers moved up to Shiga Kogen, and returned to their home village when the visitors left. Some operators cleared the upland forest for cultivation, and farmed plots of about a hectare to meet their food needs, especially vegetables.¹⁴³

During the latter half of the 1920's¹⁴⁴, skiers began to enter this plateau on foot from Yudanaka. As a result, beginning in 1929, Hoppo Onsen innkeepers spent winters by operating their lodges. Similarly, the winter operation at Kumanoyu began in 1931. In 1931, company

rest houses were opened at Hoppo Onsen by private enterprises¹⁴⁵ and in 1937, the Japanese National Railways opened a cottage at Kumanoyu.¹⁴⁶

Thus, seasonal settlements were established at Shiga Kogen, and the business became a permanent feature of this area (Fig. 9).

By the mid-1930's, the summer/winter income ratio at Kumanoyu, became equalised.¹⁴⁷ Figure 10 shows the seasonal movement of visitors in the latter half of the 1930's. Excepting Tengunoyu, the business peak occurred during the snowy period.

The seasonal changes for 1975 show similar trends (Fig. 11). The peak is registered between January and March. Thus, the use of this plateau for tourism continues unabated during the winter.

The settlements of Hoppo Onsen and Kumanoyu began to take a permanent character with the development of skiing grounds, i.e. recreational activities based on skiing provided the economic basis for these settlements.

3 - 2) The Development of New Settlements at Maruike and Suzurikawa

The bus service began between Yudanaka and Maruike in 1937, helped to expand the tourist industry, especially at Maruike, Hasuike, and Biwaike. About half of the tourist accommodation facilities opened between 1930 and 1942 were located at Maruike. As shown in Table 10, many

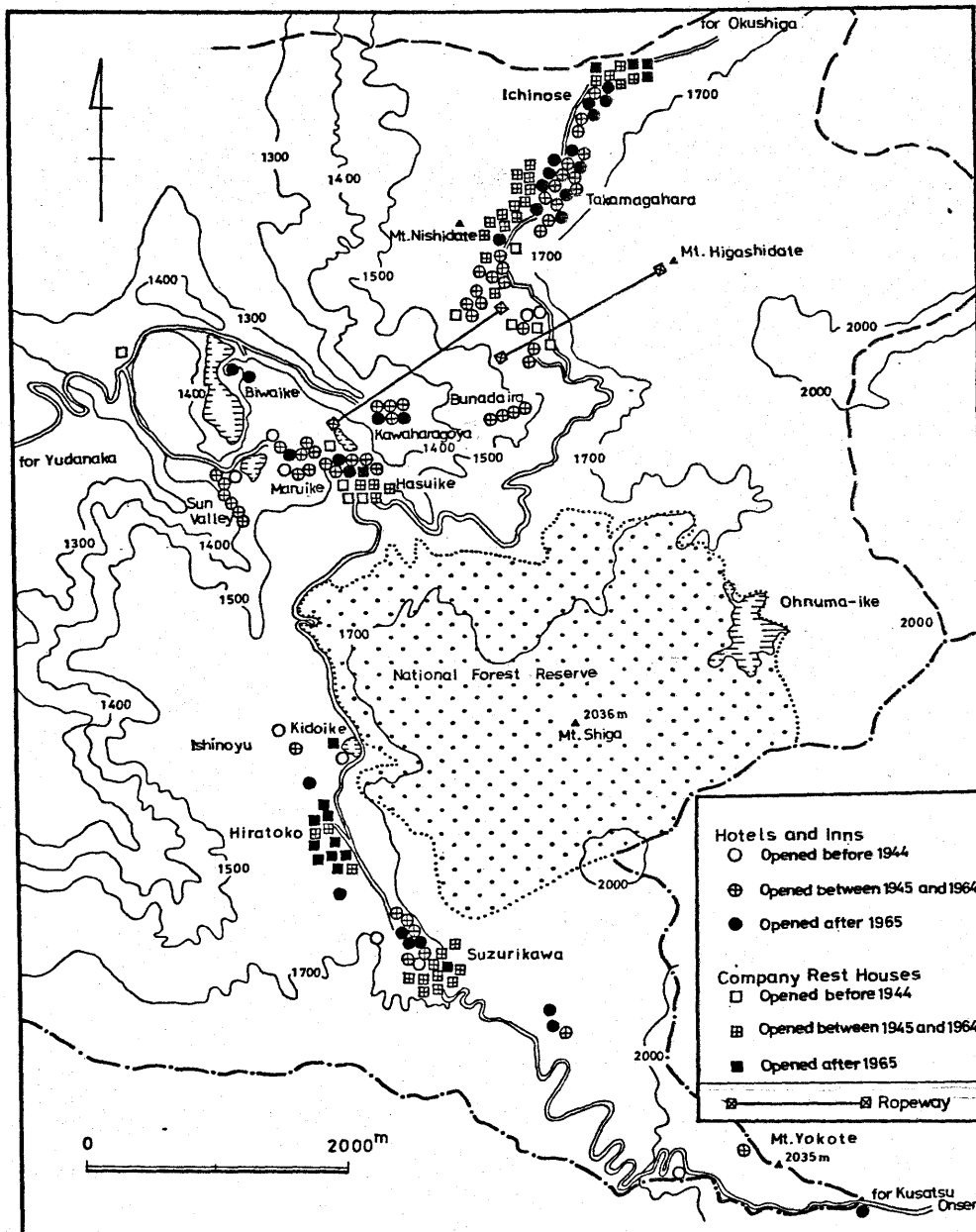


Figure 9. Distribution of Inns and Company Rest Houses, Shiga Kogen

Source : Data from Interviews, 1976.

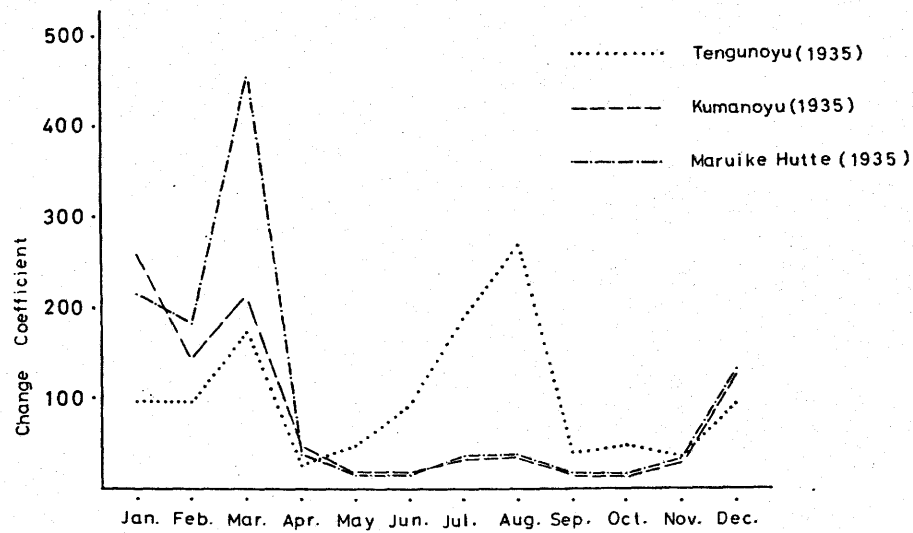


Figure 10. Monthly Tourist Flow of Shiga Kogen,
Late 1930's

* Figure derived as shown in Figure 3.

Source : Matsumoto, K. " The Human Geography of Shiga Kogen ",
Chirigaku, Vol. 4 (1936), No. 1, p. 303.

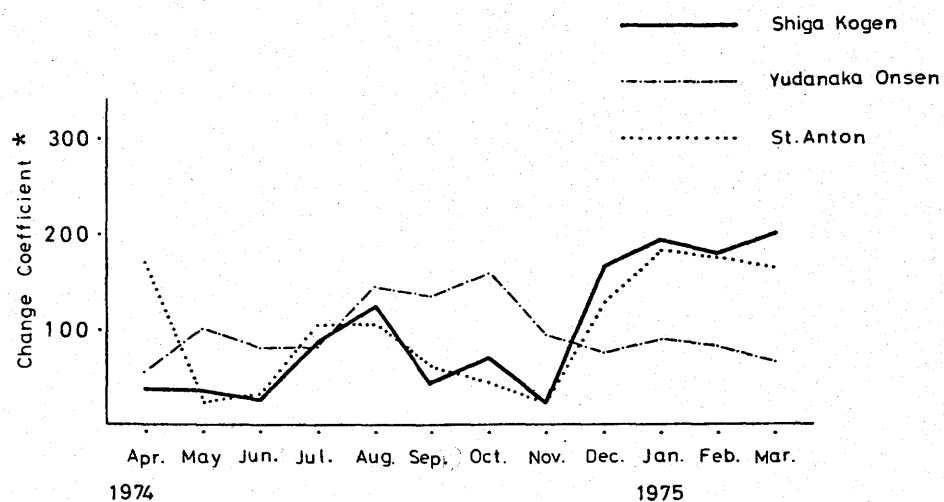


Figure 11. Monthly Tourist Flow of Shiga Kogen,
Yudanaka Onsen and St. Anton

* Figure derived as shown in Figure 3.

Source : (1) *Statistics of Tourism*, Tourist Promotion Board,
Yamanouchi-machi, 1974 - 1975.

(2) *Statistics of Tourism*, Tourist Association of
St. Anton, April 1973 - March 1974.

Table 10. The Number of Hotels and Inns Opened
at Shiga Kogen (1930 - 1974)

District	Year	District											TOTAL		
		Sun Valley	Biwaike	Maruike	Hasuike	Kawaharagoya	Kidoike	Ishinoyu	Kumanoyu	Yokoteyama	Hoppo	Bunadaira		Takamagahara	Ichinose
Before	1929	-	-	-	-	-	-	-	1	-	2	-	-	-	3
	1930	-	-	1	-	-	-	-	-	-	-	-	-	-	1
	1931	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1932	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1933	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	1934	-	-	-	-	-	-	1	-	-	-	-	-	-	1
	1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1936	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1937	-	-	1	-	-	-	-	1	-	-	-	-	-	2
	1938	1	-	-	-	-	-	-	-	-	-	-	-	-	1
	1939	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1940	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1942	-	-	-	-	-	-	-	-	1	-	-	-	-	1
	1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1948	1	-	-	-	-	-	-	-	-	-	-	-	-	1
	1949	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	1950	-	-	-	-	-	-	1	-	-	-	-	-	-	1
	1951	-	-	1	-	-	-	-	-	-	-	-	-	-	1
	1952	-	-	1	-	-	-	-	1	-	-	1	-	-	3
	1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1954	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	1955	-	-	-	-	-	-	1	-	-	-	-	-	-	1
	1956	3	-	-	2	2	-	1	-	-	-	-	-	-	8
	1957	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	1958	1	-	-	-	1	-	1	-	-	2	2	1	-	8
	1959	-	-	2	1	-	-	-	-	-	2	1	1	-	7
	1960	-	-	-	-	-	-	1	-	-	1	-	-	-	2
	1961	-	-	-	-	-	-	-	-	1	-	-	-	-	1
	1962	-	-	-	-	-	-	-	-	1	-	-	-	-	1
	1963	1	-	1	-	-	-	-	-	1	-	-	1	-	4
	1964	-	-	1	-	1	-	1	-	-	-	2	12	-	17
	1965	-	-	-	1	-	-	2	-	-	-	-	1	-	4
	1966	-	1	-	-	-	-	-	-	-	-	-	-	-	1
	1967	-	-	-	-	1	-	1	1	-	-	-	1	-	4
	1968	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1969	-	-	-	1	1	-	-	-	-	-	-	3	-	5
	1970	-	-	-	-	-	-	-	-	-	-	1	3	-	4
	1971	-	-	-	-	-	-	-	-	-	-	-	2	-	2
	1972	-	-	1	-	-	-	-	-	-	-	-	2	-	3
	1973	-	1	-	-	-	-	1	-	3	-	-	-	-	5
	1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL		7	2	9	7	6	1	4	10	6	9	4	6	25	96

Source : Interviews, 1976

inns and hotels (56 percent of the total) were built between 1955 and 1965.

On the other hand, the opening of company rest houses by private concerns increased during the 1960's (Appendix, Table 5). 64 percent of the company rest houses opened during this period. The facilities were opened earlier at Maruike, Sun Valley and Hasuike, while others were opened later at Hoppon Onsen, Takamagahara, Ichinose, and Hiratoko. For example, in 1963, Ichinose, one of the company rest house districts, was developed by the Wago-kai. This local group wanted to divide the communal forests in order to share the proceeds among members.¹⁴⁸ Such an action by the Wago-kai members was meant to increase the number of inns and hotels at Shiga Kogen, so that they would benefit the members' younger sons.

Prior to the 1950's, more tourists visited the plateau during the summer than in the winter (Appendix, Figure 1). However, in the following decade, the number of winter tourists began to account for 60 percent of the year's total.¹⁴⁹ As can be seen from Figure 12, by the late 1960's, there was a larger number of tourists at Shiga Kogen than at the Yamanouchi Onsenkyo, which included Kanbayashi and Yudanaka Onsen. The rapid growth was brought about by an increase of skiers who had learned at the new site.

Subsequent to the development of the region, the

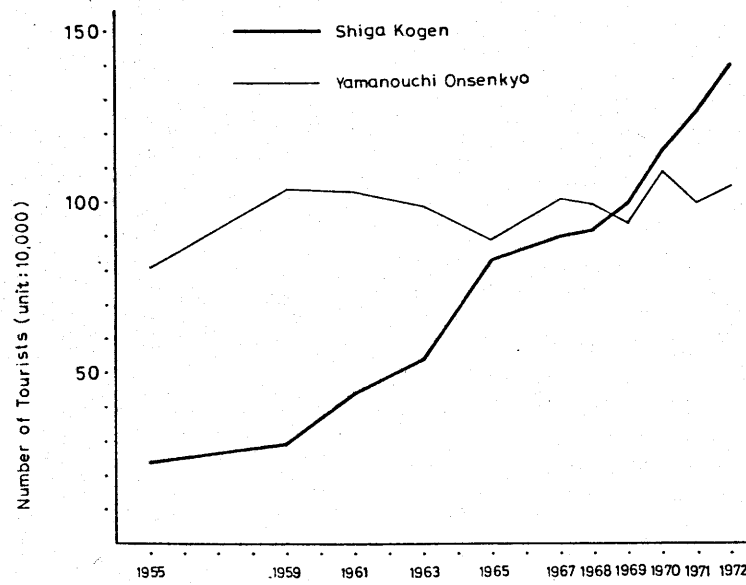


Figure 12. Increase of Tourists at Shiga Kogen

Source : *Statistics of Tourism*, Tourist Promotion Board, Yamanouchi-machi, 1955 - 1972.

permanent population of Shiga Kogen increased from 199 in 1960 to 731 in 1975 (Table 11). This increase in the permanent population in the 1970's was truly remarkable.¹⁵⁰ In spite of the increment, there were no efforts to build schools at the site. As a result, all school-age children had to be transported by bus to a school at Yudanaka, at the foot of Shiga Kogen.

4. The Tourist Industry and the Skiing Ground

4 - 1) Skiing Ground Facilities

As shown in Figure 13, there are 48 ski lifts at Shiga Kogen.¹⁵¹ Since the land belonged to the Wago-kai, developers hoping to build ski lifts had to obtain permits from this agency. They also had to acquire an authorization from the Board of Environment, since the area had been designated as a national park. The Wago-kai only allowed its members and the Nagano Electric Railway Co. Ltd. to operate ski lifts. Therefore, all investors, excepting the Nagano Electric Railway Co. Ltd., are members of the Wago-kai.¹⁵² The six major enterprises, established between 1955 and 1960, were the result of investments by Wago-kai members (Appendix, Table 6). This was also the period when most funds were invested in the development of skiing grounds. The growth of large-scale ski resorts soon outpaced the financial resources that could be generally locally obtained. Despite these

Table 11. Shiga Kogen Population (1960 - 1975)

Year	Shiga Kogen			Yamanouchi		
	Number of Household	Population	1960 = 100	Number of Household	Population	1960 = 100
1960	40	199	100	4,135	20,170	100
1965	81	341	171	4,381	19,519	97
1966	94	436	219	4,455	19,767	98
1967	99	455	229	4,505	19,747	98
1968	112	460	234	4,578	19,722	98
1969	121	469	236	4,585	19,630	97
1970	280	615	309	5,066	19,245	95
1971	284	655	329	5,030	19,216	95
1972	277	670	337	5,059	19,262	95
1973	301	707	355	5,071	19,305	95
1974	279	722	363	5,066	19,325	96
1975	287	731	367	5,098	19,358	96

Source : Adapted from " Register of Residents, 1960 " and " National Population Census, 1960., 1965., 1970., 1975. ", Department of Statistics, Yamanouchi-machi.

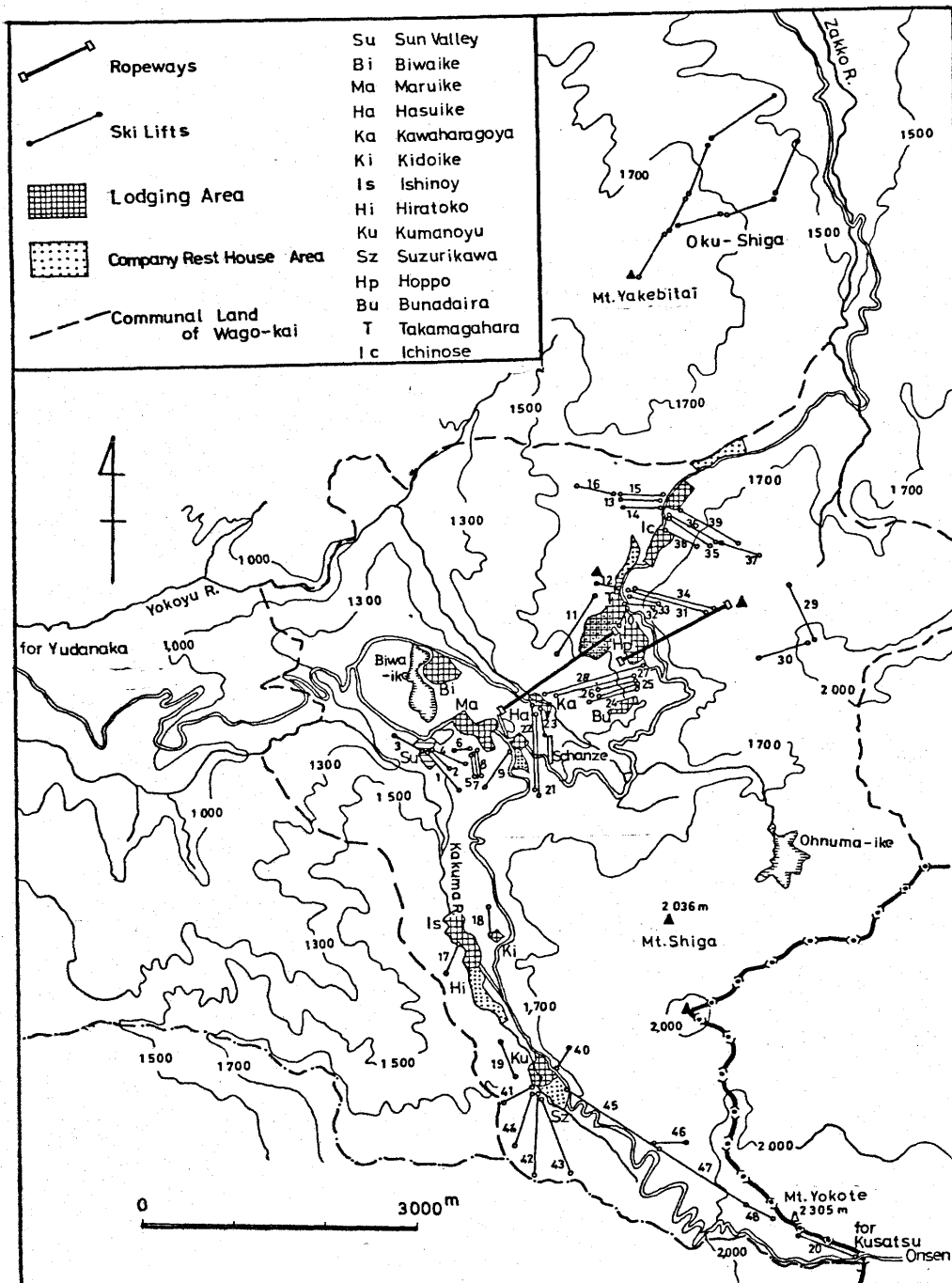


Figure 13. Distribution of Ski Grounds at Shiga Kogen

Note : The figures against the ski lifts in the map indicate the number of the ski lifts.

limitations, ski lift companies continued to be established by its members at Shiga Kogen, under the direction and control of the Wago-kai. Thus, the local agency began to amass a large income from the development of skiing grounds and company rest houses.

Ground rental charges varied according to the land use.¹⁵³ Rents were higher for company rest houses, and cheaper for hotens and inns operated by members of the Wago-kai.

The ski lifts in the districts of Maruike and Sun Valley were built in the 1950's. The Shiga Kogen Kanko Co. Ltd., founded by the Wago-kai in 1959, developed Takamagahara and Ichinose into skiing grounds. The members of the Wago-kai also founded the Shiga Kogen Ropeway Co. Ltd., and in 1959, it built the ropeway from Hasuike to Hoppo Onsen. The construction of ropeways was one of the many factors that influenced the expansion of skiing grounds in the region.

In an average year, snow begins to fall on this plateau from mid-November, and the ski season is usually from December to early May. The snowfall is normally quite heavy, since all the ski slopes in Shiga Kogen are more than 1,400 meters above sea level.¹⁵⁴ The amount of snowcover during winter is the determining factor influencing the location as well as the management of skiing grounds. The lowest ski area on this plateau is about 1,350 meters above sea level; thus it is possible to ski from early

December to early May.¹⁵⁵ The large grounds (the national type, see note 87) operate for more than 100 days during this period, and in most cases, the lifts operate for more than 120 days (Appendix, Fig. 2). Skiing on this plateau is possible for about 30 days more than any other place in Japan. Sixteen lifts (34 percent of all lifts) operate continuously until the early May holidays.

The total ski lift extension of 27,412 meters in 1975, made it possible to classify this area as one of the largest skiing grounds in Japan. During the winter, there was a total of 250 workers¹⁵⁶ employed by the lift operators. However, two-thirds were temporary workers.

4 - 2) Hotels and Inns

73 percent of all inns and hotels at Shiga Kogen were opened in the 1950's and 1960's.¹⁵⁷ With an increase of skiers in the latter half of the 1960's and 1970's, the pace of lodging remodelling and enlargement accelerated (Table 12). The pace has accelerated in the 1970's. Funds to build the inns and hotels, or to alter structures, were provided in the form of long term loans by the Hirao Nogyo Kyodo Kumiai¹⁵⁸ (the agricultural co-operative, usually called "Nokyo" in Japan) (Table 13). Initially, the accommodation facilities were mostly of wood. After the early 1960's, buildings were rebuilt with ferroconcrete. Since 70 percent of the buildings cost over ¥100 million

Table 12. Number of Building Permits Issued by Department of Construction, Yamanouchi-machi (1965 - 1974)

Year	New Building	Annexes	Rebuildings	Others	TOTAL
1965	7	16	2	0	25
1966	9(1)	19	0	2	30
1967	15	31	2	0	48
1968	13(4)	24	0	0	37
1969	13(2)	20	1	0	34
1970	-	-	-	-	66
1971	30(7)	30	2	0	62
1972	25(3)	32	1	0	58
1973	34(5)	26(2)	3	0	63
1974	15(5)	18	0	0	33

N.B. 1) The number in parenthesis denote the number of wooden rooms and garages.

2) " Other " include changes in the use of the buildings, and renovations.

Source : Department of Construction, Yamanouchi-machi.

Table 13. Loans Granted by the Agricultural Co-operative Association for the Promotion of Tourism at Shiga Kogen

(Unit:¥10,000)

Year	Hirao Nokyo (Agricultural Co-operative Association)		Federation of Nagano Agricultural Co-operative Union	
	Number of Loans	Amount	Number of Loans	Amount
1960	30	2,150	-	-
1961	35	2,420	-	-
1962	43	2,770	-	-
1963	51	3,250	-	-
1964	53	6,200	-	-
1965	60	12,350	-	-
1966	75	16,700	3	1,115
1967	104	25,400	2	5,000
1968	116	32,560	1	2,500
1969	110	40,730	1	4,000
1970	113	52,380	5	26,000
1971	114	69,200	6	29,500
1972	126	107,060	11	169,850
1973	125	110,750	12	112,300
1974	120	101,550	4	34,300

Source : Ledger of Loans Granted, Hirao Agricultural Co-operative Association.

per unit, funds for such investments were provided by the Nokyo. The management of hotels and inns were also under the direction of the local Nokyo. They have dealt with all large expansions on operations.

Agricultural co-operatives still play a large role in the development of tourism at Shiga Kogen. The extent of these associations' influences can be seen from the amounts invested. The total loaned by the Nokyo for the construction of buildings and ski lifts, and enlargement of buildings amounted to ¥9,000 million: the Hirao Co-operative provided ¥5,700 million, while the Federation of Nagano Agricultural Co-operative Union arranged the other ¥3,300 million.

As a result of these loans, the lodging capacity was enlarged (Table 14). The expansion ratio was 245 in 1965, and 749 in 1975 measured against a base of 100 in 1950. It can thus be seen that the number of loans increased in the decade 1965-1975. In 1975, lodging-related employees totaled 652 (Appendix, Table 7). In addition, it is estimated that there were another 1,600 to 1,700 seasonal employees during the winter season.

Nearly 60 percent of seasonal workers are supplied by neighbouring settlements within a radius of 20 kilometers.¹⁵⁹ Large ski resorts, the national type, such as at Shiga Kogen, had difficulties in acquiring labour from the villages alone. The development of winter resorts has increased the employment opportunities for the local people. This is

Table 14. Authorized Capacity of Hotels and Inns in Shiga Kogen

District	Year					
	1929	1937	1955	1965	1975	
Sun Valley	-	-	20(1)	753(7)	1,940(7)	
Maruike	-	180(2)	470(3)	1,041(8)	2,850(11)	
Hasuike	-	-	145(5)	538(8)	925(7)	
Kawaharagoya	-	-	-	120(5)	520(6)	
Kidoike (including Hiratoko)	-	100(2)	150(3)	256(3)	520(5)	
Kumanoyu	80(1)	130(2)	445(4)	904(9)	2,320(10)	
Yokoteyama	-	-	65(3)	78(6)	290(6)	
Hoppo	540(2)	540(2)	600(2)	690(9)	1,540(9)	
Bunadaira	-	-	50(1)	150(5)	190(4)	
Takamahara	-	-	40(1)	370(5)	840(6)	
Ichinose	-	-	-	N.A.(11)	3,390(25)	
TOTAL	620(3)	950(8)	1,985(22)	4,900(76)	15,325(96)	

Source : 1929 - Interviews by the author.

: 1937 - The Association of Spas of Nagano Prefecture (1937) : *The Guide of Shinano Spa*
(Supplemented by the author's interviews).

: 1955 - K. Shiraishi (1966) : *An Introduction to Tourism in the Shiga Kogen, Shinano*,
Vol. 8., pp.538-552.

: 1965 - T. Ichikawa (1966) : *Geography of Highlands in Japan*, p. 240., Reibunsha.

: 1975 - Department of Statistics, Yamanouchi-machi.

N.B. Figures in parentheses show the number of inns or hotels.

important as an additional source of income for the farmers during the winter months.

The development of the winter resort at this plateau cannot be understood without studying the members composing the Wago-kai (Table 15). Among members, 59 percent are engaged in agriculture or forestry, reflecting the nature of their home village. Under the heading "other" in Table 15, it must be noted that it was only after the 1960's that most of the hotels and inns were opened. Of the founders' family relationships, 67 percent were first sons, and 33 percent were younger sons. Branch families¹⁶⁰ numbering 27 (33 percent) are few in number.

Initially, all lodging operators owned farm land. However, farming as a source of livelihood soon decreased, as business became established and profits began to increase. Nevertheless, nearly one-third of all hotel and inn operators still engage in agriculture in some way.¹⁶¹ (Appendix, Fig. 3)

The majority of owners, i.e. 79 percent (67 hotels and inns) still keep the hontaku [本宅].¹⁶² Such a behavioral pattern reflects the strong bonds existing between the new settlements and the native village of Kutsuno.

Originally, the Wago-kai did not allow the establishment of health resorts by private concerns, since it believed that they did not benefit their members. Later, when business began to improve, it was decided to allow the

Table 15. Characteristics of the Founders of the Hotels and Inns in Shiga Kogen

Character	District											TOTAL			
	Sun Valley	Biwaikie	Maruikie	Hasuikie	Kawaharagoya	Kidoikie and Ishinoyu	Kumanoyu	Yokoteyama	Hoppo	Bunadaira	Takamagahara		Ichinose		
Native Village	Kutsuno	5	1	6	6	6	3	9	5	9	4	6	25	85	
	Outside Kutsuno	2	1	3	1	-	2	1	1	-	-	-	-		11
	TOTAL	7	2	9	7	6	5	10	6	9	4	6	25		96
* Former Occupation	Mainly Agriculture	3	-	2	2	5	1	3	4	2	2	1	12	37	
	Mainly Forestry	-	-	1	1	1	-	4	1	1	1	2	1	13	
	Others	2	1	3	3	-	2	2	-	6	1	3	12	35	
	TOTAL	5	1	6	6	6	3	9	5	9	4	6	25	85	
* Family Ranking	The Eldest Son/Daughter	1	-	4	4	6	2	5	4	6	2	3	20	57	
	Second Son	4	1	1	1	-	-	3	1	3	1	3	3	21	
	Third Son	-	-	1	1	-	1	1	-	-	1	-	2	7	
	TOTAL	5	1	6	6	6	3	9	5	9	4	6	25	85	
* Member from Branch Families	4	1	-	1	1	2	5	1	1	2	3	6	27		
Engaged in Agriculture as well	4	-	1	1	3	1	-	4	2	2	2	12	32		
* From Shibu or Kanbayashi Spa	-	-	2	1	-	1	-	-	2	-	2	9	17		
* Family House in Kutsuno (本 宅)	Used by Family Member	3	-	2	4	6	2	4	5	3	3	2	13	47	
	Existent but Vacant	-	-	1	1	-	-	3	-	1	1	2	3	12	
	Leased Out	1	-	-	-	-	-	2	-	3	-	1	1	8	
	Non-Existent	1	1	3	1	-	1	-	-	2	-	1	8	18	
	TOTAL	5	1	6	6	6	3	9	5	9	4	6	25	85	

* Number of persons from Kutsuno.

Source : Interviews, Feb., 1976.

establishment of such places¹⁶³ for the members' younger sons. The companies and the Wago-kai hoped that rest houses would feel obligated to employ the members or their sons as administrators. Presently, 41 of the 62 establishments have hired such persons (Appendix, Table 8). Members of branch families frequently become administrators. Only 12 percent of the administrators take up agriculture as a side job. From this, it is evident that the development of the tourist industry centers on the location of the skiing grounds at Shiga Kogen. However, it is important to note that new settlements have been developed primarily by migrants from Kutsuno.

4 - 3) Development of Transport and Communications

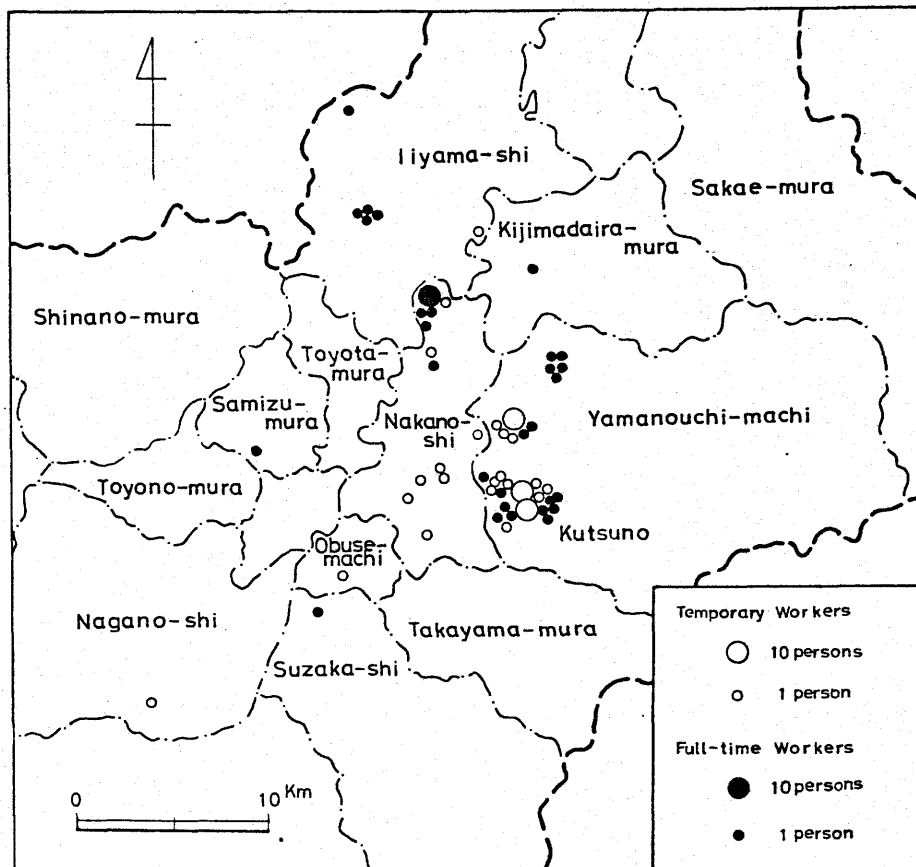
Bus service was begun in 1937 between Yudanaka and Maruike by the Nagano Electric Railway Co. Ltd.¹⁶⁴ In addition, despite of the limited number of inhabitants at Shiga Kogen, a post office was opened at Maruike in 1941, primarily for the benefit of an increasing number of tourists. Hirao's village chief presented "The Petition for Installation of Telephones in Shiga Kogen" to the governor of Nagano Prefecture in 1935. Such an action meant that tourism had become so important that public facilities such as telephones were necessary. Acts like these reflected the spirit of the people who promoted the development of tourism.

The element that had the greatest influence on the

tourist trade was the extension of the bus service to the region. This service enabled the development at Maruike until the first half of the 1950's. Only a few skiers went to the Hoppo Spa. It was developed only after ropeways and ski lifts were installed. In the same manner, Kumanoyu (including Suzurikawa) remained stagnant prior to the opening of the winter bus service.

The ropeway constructed by the Shiga Kogen Ropeway Co. Ltd. in 1960 linked Maruike and Hoppo Onsen. This ropeway, built by members of the Wago-kai, was instrumental in developing Hoppo, Takamagahara, and Ichinose as skiing grounds. The company operates seven ski lifts (total extension of 3,071 meters) and a number of restaurants. In the winter of 1975, a total of 52 permanent and 55 seasonal workers, most of whom were recruited from within a radius of 20 kilometers, were employed by the company (Fig. 14).

Bus services were operated by the Nagano Electric Railway Co. Ltd. with outside capital, while the ropeway and ski lifts, as well as lodgings were managed by members of the Wago-kai. The more influential members of the Wago-kai, i.e., the sake brewers and the main hoteliers in the villages of Shibu Onsen, built the intra-resort transport facilities.¹⁶⁵



N.B. Of the temporary workers 5 were from Akita Pref., 2 each from Saitama and Hyogo Pref. and 1 each from the prefecture of Niigata, Yamagata, Kanagawa, Hokkaido Kyoto Osaka.

Figure 14. Employees of Shiga Kogen Ropeway Company
(February 1976)

Source : Compiled from interviews with officials of Shiga Kogen Ropeway Company.

5. Changes in Tourism Based on the Development of Skiing Grounds

During the Meiji era, i.e., before 1910, the communal forestlands of Kutsuno, in Shiga Kogen, were used by the members of the Wago-kai.^{166~167} Beginning in the Taisho Era, i.e. before 1925, the Wago-kai perceived the value of Shiga Kogen for recreational purposes and considered the construction of a road. Concurrently, Kanbayashi began to be developed for skiing purposes. Nevertheless, few people saw the potentials of Shiga Kogen as a skiing ground; instead they intended to develop it as a summer resort. The hot springs and the natural landscapes were promoted to attract tourists to the area. In the process, the economic function of the land changed from that of forestry to a recreational one.

In 1927, the Wago-kai, composed of 293 Kutsuno inhabitants, was established as a juridical entity to promote tourism. Excepting the Nagano Electric Railway Co. Ltd., the Wago-kai did not encourage outsiders to invest in local recreational development; instead it limited it to the members of the Wago-kai. Moreover, the local entity obligated the builders of company rest houses to employ its members as overseers. The policy of the Wago-kai was to assist members to administer the tourist industry.

The Wago-kai introduced skiing to the plateau during

the late 1920's. The excellent natural conditions helped to promote skiing as a popular sport on the plateau. As a result, local cottage industries such as chopstick, bamboo ware and charcoal making declined rapidly after 1950.¹⁶⁸

Tourism was quite developed by 1949 when the plateau was converted into a national park. In that year, the Ministry of Public Welfare decided to implement a "Land Use Plan for the Institutions in Shiga Kogen"¹⁶⁹ This plan became the basis for subsequent land uses in the area (Fig. 15).

In 1950, among the Wago-kai's revenues, the income from timber amounted to 55.1 percent of the total while real estate rentals (lands and hot springs owned by the Wago-kai) from tourism earned only 9.8 percent (Table 16). By 1974, the share of timber had decreased to 4.5 percent, while that of land and hot spring rentals had increased to 42.6 percent.¹⁷⁰ Thus, land use has gradually become geared towards tourism.

6. The Formation of New Settlements in Shiga Kogen

Shiga Kogen is one of the typical examples of new resort settlements established in a non-settled area. Similar communities have appeared at the Norikura Kogen, Tsugaike Kogen, and the Kirigamine.

Favourable social and natural conditions are prerequisites for the formation of great resorts. Shiga

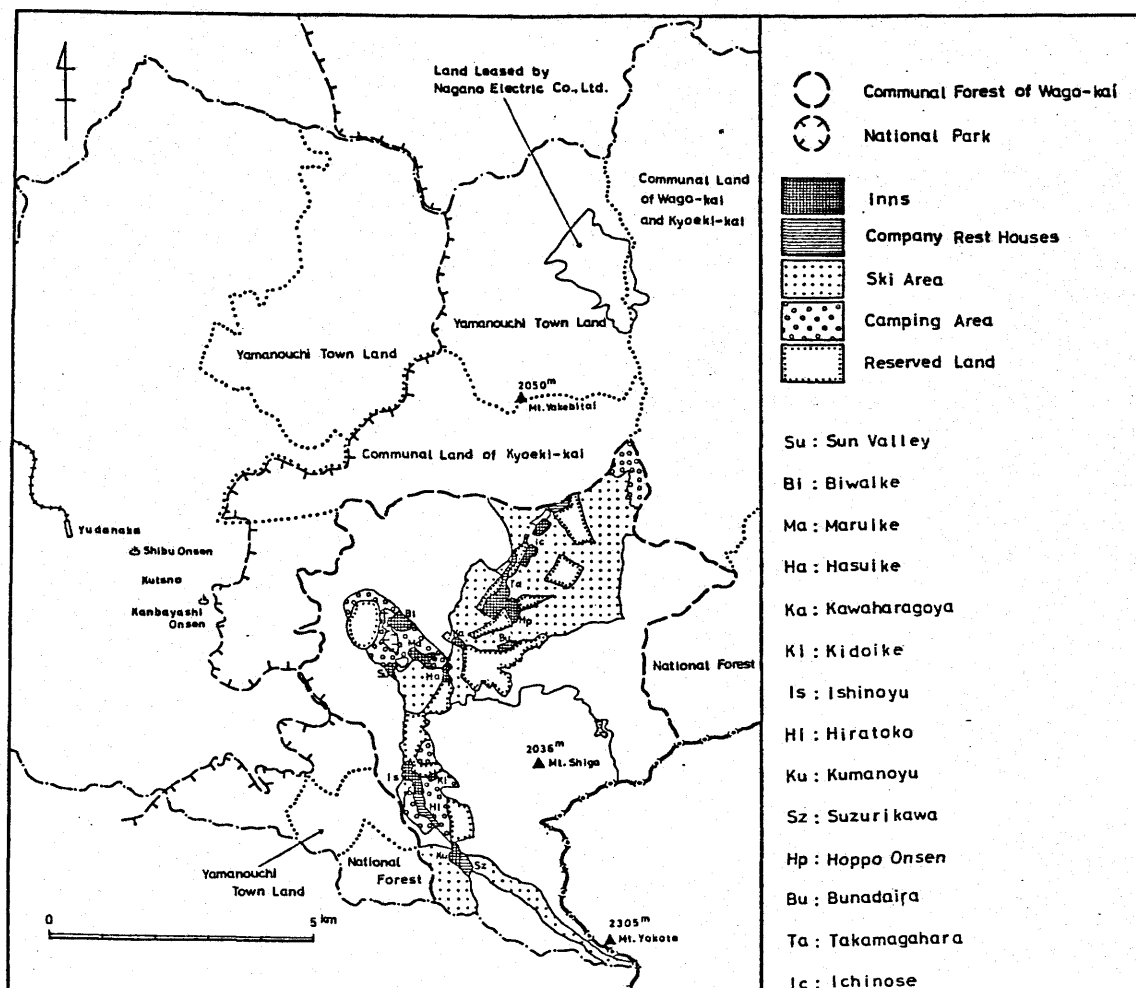


Figure 15. Distribution of Planned Land-Use, Shiga Kogen

Source : Adapted from *Land Use Map of Shiga Kogen*, Department of Tourism, Yamanouchi-machi, 1975.

Table 16. Wago-kai's Source of Income

Sources of Income	Year and Income		1960		1974	
	Amount (yen)	%	Amount (yen)	%	Amount (yen)	%
Timber	39,575,972	55.0	4,016,685	4.5		
Rental of 1) Real Estate	4,765,000	9.8	36,273,883	42.6		
2) Hot Springs	2,250,000		1,310,902			
Subsidy from the Town of Yamanouchi	11,250,000	15.6	-	-		
Dividends from 1) Shiga-Kogen Ropeway Co., Ltd.	900,000	5.0	720,000	5.2		
2) Shiga-Kogen Kanko Kaihatsu Co., Ltd.	2,400,000		3,778,125			
3) Nagano Electric Railway Co., Ltd.	300,000		61,202			
Road Tolls	-	-	34,800,000	39.4		
Others	10,485,000	14.6	7,355,445	8.3		
TOTAL	71,925,972	100.0	88,316,242	100.0		

Source : Compiled from Annual Report of The Wago-kai, 1960., 1974.

Kogen fulfills such conditions, i.e. heavy snowfall of good quality, and a variety of ski slopes.

The new settlements were formed successively from Maruike to higher areas.¹⁷¹ Most resorts are located above the 1,400 meter line. Since there was no land use competition between forestry and tourism development, it was easy to build new settlements. The hot springs were slowly tapped, and made an important contribution to regional development. The existence of thermal waters served as an added attraction, and served to make the area a year-round resort.

It is land tenure that determines the socio-economic directions of an area. The Wago-kai owns the plateau. This kind of ownership facilitated the expansion of ski area, enabled the operation of the tourist industry from Kutsuno, and was responsible for the formation of settlements within a short span of time.

As farmers, the inhabitants of Kutsuno did not have enough savings to invest in the development of tourism, but the local agricultural co-operative helped to finance the development of resorts.

CHAPTER IV

CHARACTERISTICS OF SKI SETTLEMENT TYPES

The previous two chapters dealt with the conditions for the development of skiing grounds in Japan based on the experience of the two most developed ones in the country, namely Nozawa Onsen and Shiga Kogen. The former was developed in an already settled area whilst the latter was developed in a previously non-settled area. This chapter discusses the nation's skiing grounds on a historical basis, covering the aspects of regional development, history, and types, of ski grounds and settlements.

1. The Development Process of Ski Grounds in Japan

The process of ski ground development in Japan can be discussed in relation to the increase of the ski population, the establishment of ski lifts and ropeways in the ski resorts and the pouring in of large investments with the development of such tourist facilities by large concerns such as Tokyu Co., Seibu Co., and the private railway companies such as Nankai Railway Co.. From these viewpoints, the developmental process of ski resorts in Japan can be divided into three periods.

1 - 1) The First Period (1911 to the early 1940's)

In 1911, Major Theodor von Lerch, an Austrian,

introduced skiing to Japan.^{172, 173} (Appendix, Table 9)
 Within a few years, the sport spread throughout
 the country; even ski clubs were established in many
 universities. Early ski slopes (1920's to 1941) were
 developed by small entrepreneurs.¹⁷⁴ For example, in
 March 1911, when von Lerch went from Yokohama to Goshiki
 Onsen in Yamagata Prefecture, it was a local innkeeper
 who expressed the interest in developing ski areas.^{175, 176}
 Similarly, the innkeepers at Nozawa Onsen played a major
 role in the development of the sport.

Following the introduction of skiing into Japan,
 diffusion was accomplished mainly by student. Gradually,
 membership increased¹⁷⁷ as ski areas were developed in
 the Joshinetsu region¹⁷⁸, an area close to Tokyo. At the
 same time, minshuku developed at Sugadaira and Hosono
 in Kitashiro-mura (now Happo in Hakuba-mura). They became
 the skiers' centers. It was only in 1927 that slopes were
 developed by the local people at Sugadaira. Silkworm
 rearing rooms in the attic of farmhouses were used as
 minshuku.¹⁷⁹

The hot springs provided the conditions for the
 development of skiing grounds during the first phase.¹⁸⁰
 These resorts had the necessary accommodation facilities,
 but only a limited number of bathers during the snow
 season.¹⁸¹

- 1 - 2) The Second Period (the late 1940's to the
 early 1950's)

The Occupation Authorities of the U.S. Army appropriated some terrain at Maruike in Shiga Kogen and Mt. Moiwa in Sapporo, to build ski lifts for their exclusive use. These apparatus enabled a variety of activities, including cross-country, climbing, and slope skiing. The lift had a great influence in the development of ski grounds in Japan. Soon, the ski population increased.

In the 1950's, ski lifts were built at the Nozawa Onsen, Sugadaira, Happo-one in Hakuba-mura, and Zao Onsen in Yamagata Prefecture.¹⁸² In converting communal forests into ski resorts, the local people invited outside investment, i.e. from Tokyu Co. and Kokudo Keikaku Co.. The Japanese National Railway had also relaxed its restrictions on transporting the ski equipment.¹⁸³ Subsequently, 24-hour round trips to skiing grounds became possible¹⁸⁴, due to the establishment of ski lifts along the Jyoetsu Line, and their proximity to Tokyo. Conditions that allowed for the development of ski resorts in the second period was the location of these areas along a rail line with direct linkages to a major city.

1 - 3) The Third Period (Post-1955)

Beginning about 1955, the general concept of ski grounds changed drastically. The idea of an ideal place for the sport shifted from a "spa with snow" to that of a "large area with varied landforms".

With increasing per capita income resulting from

the rapid economic growth, and reduction of travelling time between large cities and the ski areas, the population of enthusiasts grew rapidly to change the character of winter resorts. As a consequence, minshuku began to be opened in earnest by the local people, e.g. in Iiyama District of Oku-shinano¹⁸⁵, and many agricultural Settlements experienced remarkable change. Among the outcomes was the retention of labour that had to migrate to Tokyo during the winter. Surplus workers were able to find jobs near their home villages, as a result of the flourishing minshuku business.

Beginning in the latter half of the 1950's, *aficionados* began to demand larger scale ski areas. This trend encouraged private railroad companies¹⁸⁶ to participate in the development of skiing grounds. At the same time, areas that could be reached by highways, e.g. Naeba Ski Resort, began to be developed by external investments following the improvement of the National Road 17. This differed from those located along railroads. Such developments set the trend for the evolution of ski resorts after the latter half of the 1960's. The enlargement of existing sites is also characteristic of changes in the late 1960's. Normally, enlargement consisted of the extension of ski lifts, one of the most important factors in the operation of ski slopes. In the past, the preferred location were along railway lines, but today, the tendency is to be sited in "places with excellent natural conditions".¹⁸⁷

2. Distribution of Ski Grounds and Its Influencing Factors

Fundamentally, there are four factors influencing the development of ski sites in Japan. These are : 1) existence of appropriate environmental conditions; 2) changes in the operation of the skiing grounds' paraphernalia, mainly ski lifts; 3) easy accessibility from large cities; and 4) existence of moderately-priced accommodations. The first two conditions are based on environmental factors, while the third and fourth conditions are socio-economic ones, based on the relationship between the ski resorts' natural conditions¹⁸⁸ and the large cities.

2 - 1) Distribution of Ski Areas

For the development of skiing grounds, the availability of fast and reliable transportation from large cities, not to mention the natural conditions, is the main condition. In this manner, sites along the Joetsu Line satisfy this prerequisite and they were able to develop rapidly after World War II. In order to understand the prerequisites, it is necessary to study the ski areas' distribution.

The distribution of ski resorts in 1923 is shown in Figure 16. Ohmachi, Kusatsu Onsen, Nozawa Onsen, Akakura Onsen, Seki Onsen, and Tsubame Onsen, all hot springs, and Mt. Ibuki, Mt. Daisen, and those in Hokkaido, were already famous places in those days. The location of ski grounds then, was different from that of today. At that

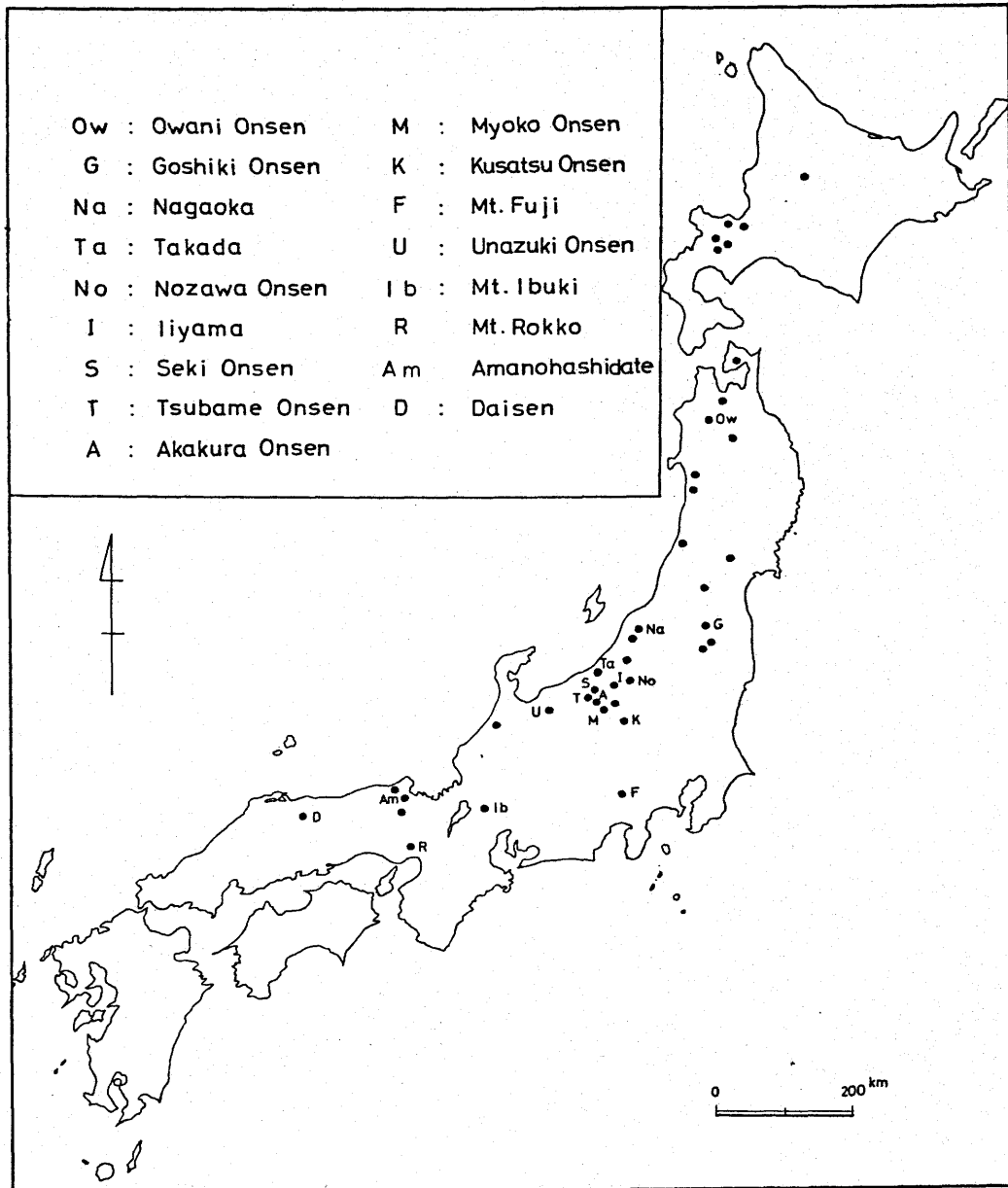


Figure 16. Distribution of Major Ski Grounds in Japan, 1923

Source : *Skiing and Skating*, Railroad Ministry, 1924.

time, skiers choose areas with heavy snowfall, variable slopes, and hot springs.¹⁸⁹ The distance from metropolitan centers was not relevant, as one can see from the Goshiki Onsen in Yamagata Prefecture. Such resorts offered plenty of good quality snow, and also attracted many foreigners. However, business in such areas declined after World War II. This can be attributed to the fact that, skiing was once a sport practised by people in the upper classes. These individuals placed value on the natural landscape, rather than in the problems of transportation and communication.

With rapid industrialization and economic growth in the post World War II period, urbanization proceeded rapidly, and along with it, the ski population in Japan increased. Since skiing has been perceived as a week-end trip to the hills, practitioners preferred sites close to large cities. Such a perception is portrayed by the Sayama Indoor Skiing Ground, developed in 1959 by the Seibu Company.¹⁹⁰

In the U.S., there are ski resorts with artificial snow in the southern parts of the Appalachian Mountains. However, for serious skiing, people must go to the northern part of the Appalachians or to the Rocky Mountains. It is interesting, though, that artificial ski areas have never gained popularity in Japan.

With improvements in the means of transportation after 1960, e.g., the reduction of travelling time by

train, and the rapid development of highways, skiers now tend to demand large grounds with high quality snow. In the future, it is possible that good ski resorts will be developed even if they are, to a certain extent, far from large cities.¹⁹¹

2 - 2) Factors Influencing the Location of Ski Resorts

2 - 2 i) Natural Conditions

In terms of quality, powdery to moist snow is suitable for skiing. In general, areas with "good snow" lie in parts of Hokkaido, northern Tohoku, and the highlands of Central Japan. As compared with these regions, snow in the climatically mild lowlands of central and western Japan is very moist and not suited for the sport.

For good skiing, it is necessary to have a minimum snow depth of 50 centimeters. At Sugadaira, where slopes are entirely grass-covered, it is possible to ski with only 30 centimeters of snowfall. In most Japanese skiing grounds, however, it is desirable that there be over one meter of snow though excessive precipitation makes access difficult.¹⁹² In the European Alps, it is possible to ski on only 30 centimeters of snow, because of low temperatures, and cold dry air.

In economic terms, the period of snowfall determines the location of a skiing ground. The ability to practise

the sport during the latter part of December and early April is among the prerequisites.¹⁹³ Winter resorts have not developed well in areas with a skiing period of less than 90 days, and in places without snowfalls at the end and beginning of the year.¹⁹⁴ Slopes with short seasons are found in the western parts of Japan, but those with longer periods, i.e., where activities can be practised from mid-December to early May, exist in Hokkaido, Tohoku, and the highlands of Shinetsu.

Most favourable surface conditions occur where the local relief is over 800 meters.¹⁹⁵ However, a minimum difference of 500 meters is a must. If we assume that 500 meters is the minimum distance for a lift to operate efficiently, and if the average slope is about 13 degrees for a medium grade, the relief of this skiing ground is only around 113 meters. Likewise, when the length of the slope is 500 meters, and the difference in elevation is 100 meters, the average incline is 11.5 degrees. Therefore, the general height is about 120 meters for 500 meters of slope.

In Japan, the base of volcanoes is developed as skiing grounds.¹⁹⁶ Sugadaira and Kirigamine are not attractive for skiing, since both areas use the unweathered volcanic surface. On the other hand, the eroded surfaces of Happo-One, Shiga Kogen,¹⁹⁷ Nozawa Onsen, Kashimayari, and Tanigawa-Tenjindaira provide excellent slope conditions. The direction of slope, along with the incline¹⁹⁸ are

important conditions for the establishment of ski resorts. Northeast facing slopes are considered the best in Japan, while those oriented to the east or north are second in rank.¹⁹⁹ Snowfall and its quality are influenced by the direction of slope. The direction of slope is an important prerequisite especially where the elevation above sea level is low.

As stated above, snowcover is the most important natural factor in the location of ski areas, and Figure 17 shows the relation between annual maximum depth of snow cover and sites. Almost all ski grounds are in a region where snow depth exceed 50 centimeters. They are clustered around Nagano Prefecture. Such a distributional pattern implies that the socio-economic conditions for the development of ski slopes, i.e., the time distance between centers of winter sports and large cities, and the capital to develop the skiing grounds, are dominant factors.

2 - 2 ii) The Socio-Economic Conditions

Figure 17 shows that the distribution of skiing grounds is not uniform within snowy regions. The pattern is based more on the time required to reach the site from large cities, and the investments in skiing grounds.

Accessibility plays an important role in the location of skiing grounds, since visitors originate primarily from large cities. Railroads and cars are the main means

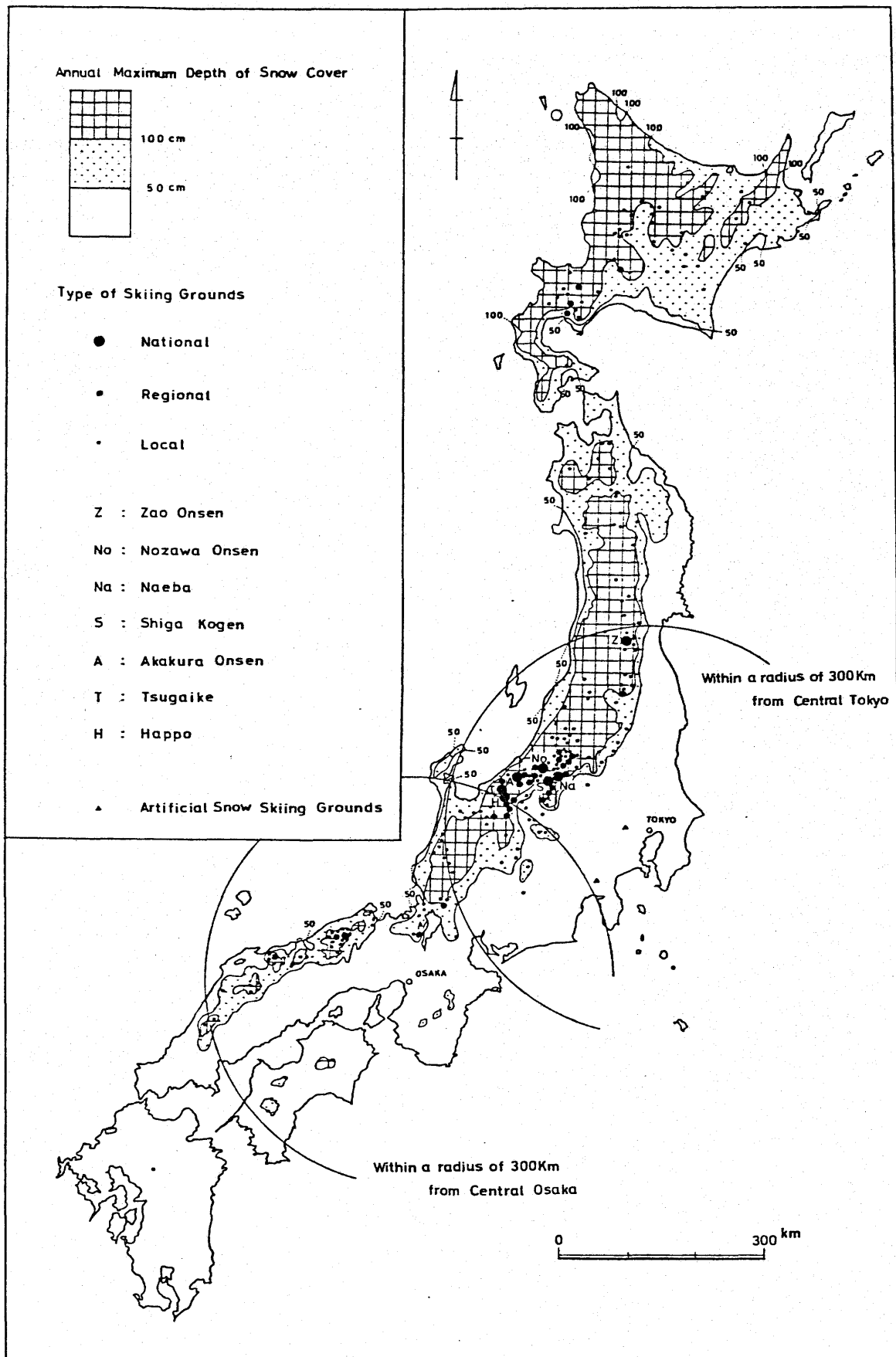


Figure 17. The Relationship between Annual Maximum Depth of Snow Cover and the Distribution of Ski Grounds in Japan

Source: (1) Writer's investigations, 1974.

(2) *Climatic Atlas of Japan, Vol.2*, Japan Meteorological Agency, 1972.

of transportation. In general, skiers are likely to adopt the following strategy: a) take a train to leave from large cities; and b) ride a car from the railroad station to the slopes.²⁰⁰ Sites along the Joetsu Line have been well endowed, since skiers can use a trough train.

A ski trip in Central Japan normally lasts two days, and skiers usually use week ends, consecutive holidays, and year-end vacations. In contrast, Americans and Europeans remain longer, since the system of paid holidays is firmly established in those societies.²⁰¹ In addition, winter resorts function as summer resorts as well. In Europe, the ski slopes are used as year-round resorts.

Ski resorts in Japan were established by adding a function to existing settlements, and the minshuku originated when these settlements were undergoing their metamorphoses. Some resorts were developed in the first half of the 1960's by large enterprises, i.e., by private railways. Presently, these corporations tend to operate all activities related to recreation, including accommodations.²⁰² In France, new, large ski resorts, like La Plagne, Les Menuires, and Isola 2000,²⁰³ established at altitude of about 2,000 meters above sea level, have developed independent of existing settlements.

3. Settlement Types Based on the Process of Evolution

The evolution of ski grounds was most influenced by the pre-existence of settlements in the vicinity of the appropriate sites. The classification of settlement types based on their genesis is indispensable in understanding the evolution and the process of transformation of ski resorts. In this thesis, an attempt is made to devise a typology of Japanese ski areas by understanding their origin and their processes of metamorphosis. Following an examination of sites within the country, the settlements were classified into four types.

The first is the type developed from agricultural or forestry settlements. The evolution and the processes of change in such communities are influenced by pre-existing economic structures and natural conditions. Minshuku management became an important source of income following the development of resorts in rice growing areas. In such settlements, lodging came to substitute the second paddy crop. The recreational activity also served to absorb the local labour, thus decreasing the proportion of members going away during the winter to seek employment.

Improvement of accessibility was important in increasing the number of skiers, and it was also instrumental in raising the minshuku income. The lodging activities changed the nature of agriculture. This type is represented by settlements along the Oito and Joetsu Lines.

In contrast, there are the upland farming settlements chiefly in the highlands. As the agricultural land in these areas have been restricted, the development of ski grounds have played an important role in the provision of employment during winter. Although there are slopes close to upland farming sites, there are instances of settlements without minshuku, e.g. at Tashiro at Tsumagoi-mura in Gunma Prefecture, where a distinct regional feature has developed, with the farms turing only to minshuku operations during the winter.

Naeba, Yuzawa-machi, in Niigata Prefecture, developed by Kokudo Keikaku Co. Ltd. in 1961, is an example of a settlement that formerly relied on forestry for its livelihood. The community was composed of 18 households, and the inhabitants were employed either part or full-time by the local forest service office. Following the development of skiing, the number of houses increased to 40 and the income derived from minshuku during the winter came to account for 70 percent of the total income.

Settlements developed from thermal springs from the second type. Many spas evolved into winter resorts. Akakura Onsen in Niigata Prefecture, and Kusatsu Onsen, and Nozawa Onsen, are good examples.

Hoppo Onsen, and Kumanoyu in Shiga Kogen, and Manza Onsen in Gunma Prefecture represent seasonal thermal resorts²⁰⁴ which began to operate year round, subsequent

to the development of skiing grounds. Both Hoppo Onsen and Kumanoyu were opened in the 1800's as spas. The Kanbayashi Skiing grounds (750 meters above sea level) close to Kutsuno, were not very popular until the 1930's when increasing numbers of skiers began to use Shiga Kogen because of its favourable environmental conditions. With the emergence of winter activities, local inhabitants began to build their homes in order to settle on the plateau. Similar events took place at Manza Onsen and Shirahone Onsen.

The third is the type of ski settlements developing from religious settlements. Nakasha and Hokosha, at the foot of Mt. Togakushi, were small communities located in front of the Togakushi Shrine. These villages were essentially religious settlements. In 1960, with the development of skiing close to the villages, they gained a new function i.e. that of recreation. Subsequently, the "Shachu" [社中], or Shinto Priests of Togakushi Shrine began to act also as inn keepers. As of 1977, in addition to the Shachu, the local people operated 30 minshuku. Located about 1,000 meters above sea level, the communities also function as summer resorts.

Otaki and Kurosawa, both of Otaki-mura, at the foot of Mt. Ontake were also religious settlements. Course of events similar to that at Togakushi took place when skiing began to be practised here.

The fourth type are settlements resulting from the establishment of new skiing grounds. After World War II, considerable numbers of people wanted to simply practise the sport, rather than engage in cross-country skiing, and ski-climbing. As the number of skiers grew within a short time, new resorts were developed in former non-settled areas. Often, local inhabitants moved their residences to establish new settlements. Shiga Kogen is a typical case. Suzurikawa, Ichinose, Takamagahara, and Maruike were opened after the 1950's. At Norikura Kogen, skiing was introduced in 1924, when a local resident opened a cottage modeled after a sakugoya [作小屋], i.e., a temporary building for cultivators, and named it Suzurangoya.²⁰⁵ Ever since, the number of settlers have increased rapidly, especially after the 1960's.²⁰⁶

Kowashimizu in Kirigamine Plateau is also one of the new settlements developed on a skiing ground after 1939.²⁰⁷

On the other hand, there are new settlements resulting from external investments, e.g. maruike in Shiga Kogen was developed with the opening of Maruike Hutte in 1930, with funds from the Nagano Electric Railway Co. Ltd.. As stated above, the first ski lift in Japan was built here in 1947, and with it, the local people began to develop the resort, especially in the latter half of the 1950's. Happo-One (1958), Naeba (1961), and Madarao Kogen (1972) are also examples of new ski areas developed with external funding. Existing communities close to the foregoing

recreational sites have experienced remarkable changes.

4 Conditions for the Establishment of Ski Settlements

4 - 1) Ski Areas and Their Settlements

In Japan, the settlements either border on or they are located close to the skiing grounds, and their function is primarily to provide services to skiers.

Figure 18 shows examples of winter resorts that have developed from existing settlements. Happo-One, in Hakuba-mura, was an agricultural settlement that offered minshuku services for climbers, even before World War II. After the war, with external investments, skiing grounds developed to altitudes close to 1,800 meters above sea level and in the process, the agricultural settlement was converted to a recreational one.

Switzerland's Zermatt at 1,620 meters above sea level functioned as a base for mountain climbing during the 19th. century. However, a large resort developed at an altitude of 3,407 meters, following the construction of railroads and lifts. Presently, it has developed into an all-season center.²⁰⁸

Subsequent to these changes, populations in the mountain and sub-alpine zones have declined in general, not only in Europe, but also in Japan, but with the establishment of ski resorts in some places, the populations in those areas developed for winter sports have shown

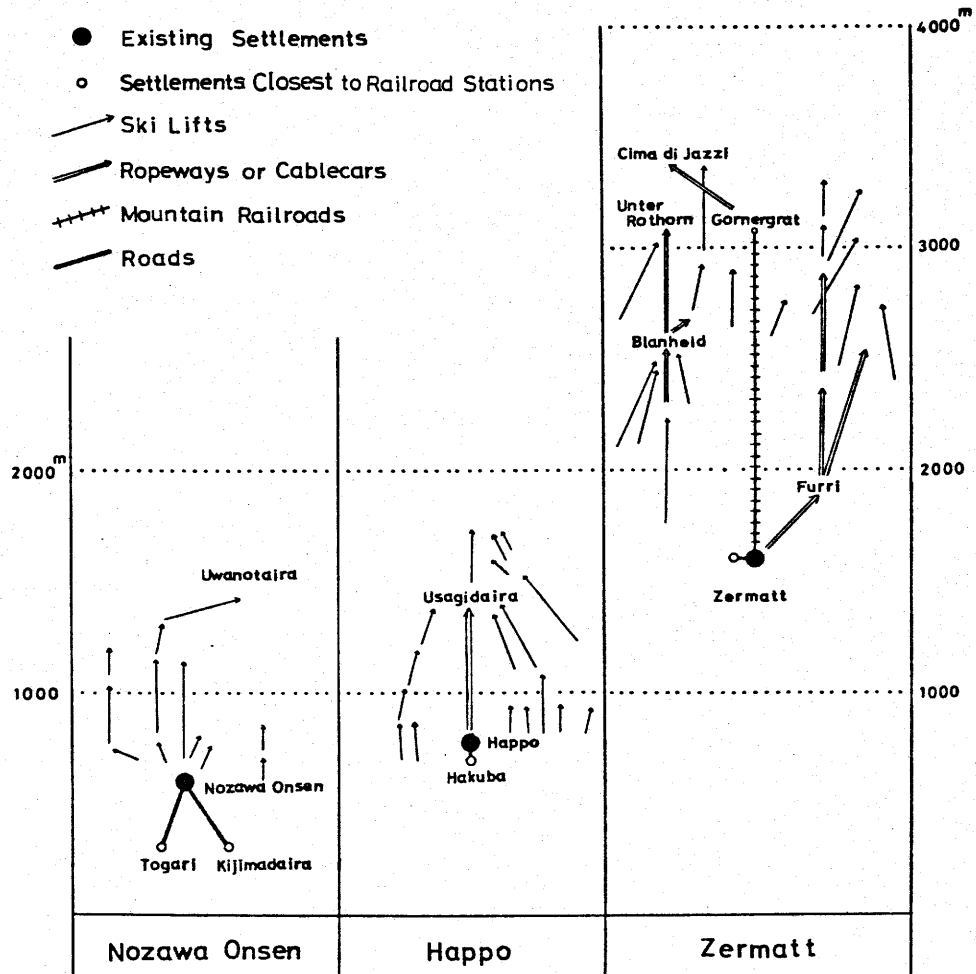


Figure 18. Comparison of Ski Settlements Developed from Existing Settlements (Examples from Japan and Switzerland)

Source : Compiled from data received by the author through his interviews with the ski lift operators at Nozawa Onsen and Happo in Japan and at Zermatt, Switzerland, in 1975.

remarkable population increases.

In comparison to the European ski resorts, those at Nozawa Onsen and Happo are established at a much lower height e.g. at Switzerland's Zermatt. The reason is probably because settlements in Japan were seldom established beyond the mountain zone and hence the ski grounds have not been able to develop beyond the sub-alpine zone owing to the skiers' needs for the facilities of the settlements after their day's exertions on the slopes. On the other hand, settlements in the European Alps were established in the sub-alpine zones, at a higher altitude than those in Japan, and hence their ski resorts are able to develop well into the alpine zone.

Newly established skiing settlements, as in the case of Norikura Kogen, are shown in Figure 19. With the introduction of skiing in the 1920's, a ski cottage was built at Kanayamadaira (present-day Suzuran) at 1,480 meters above sea level. This small cottage became the nucleus for the new tourist settlement after World War II.²⁰⁹ Most settlers moved out of Onogawa, the closest village, at 1,050 meters above sea level. Thus, the community, also known as the "One Hundred Houses of Onogawa" which had developed during the Edo period, was inhabited by only 13 families in 1973.

At Courchevel, including St. Bon Courchevel, and La Praz, in Savoie, France, three resorts named Courchevel 1,550, 1,850 and 1,650 (the figures stand for the altitudes

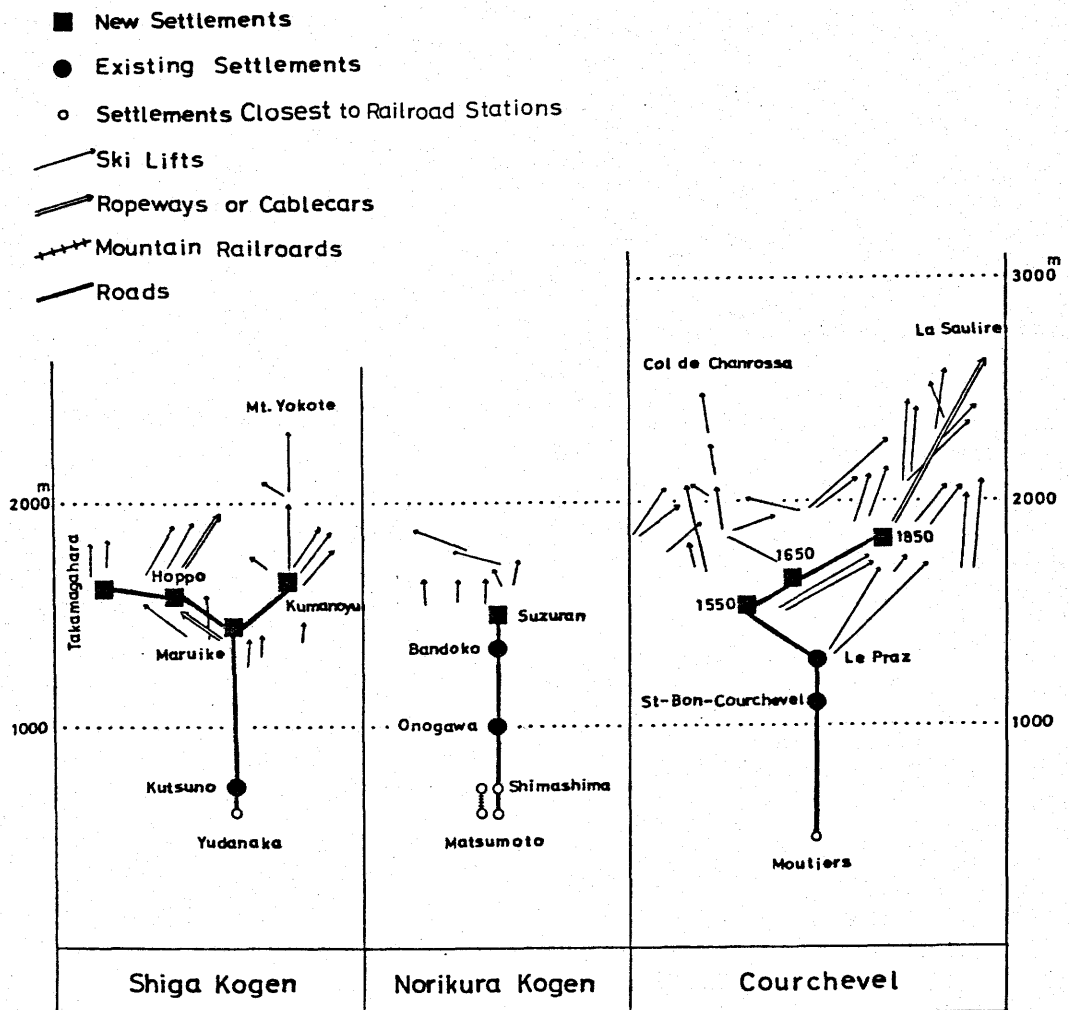


Figure 19. Comparison of Newly Developed Ski Settlements
(Examples from Japan and France)

Source : Compiled from data received by the author though his interviews with the ski lift operators at Shiga Kogen and Norikura Kogen in Japan and at Courchevel, France, in 1975.

of each of the settlements) were formed after 1960. The local people, who had provided the main investment funds, also accepted financial assistance from the French government. The result was the rapid growth of Courchevel's population from 170 persons in 1954 to 374 in 1968.²¹⁰ Presently there are 68 hotels with accommodations for 15,000 tourists.²¹¹ Courchevel serves as an example of how tourism and new tourists resorts have been developed in a sub-alpine zone²¹² through the establishment of ski grounds.

As stated above, if there is a more suitable ski area at altitudes higher than those of existing settlements, then there needs to form new settlements. Therefore, there is a very good possibility that higher areas will be developed for year-round tourism.

4 - 2) Factors Responsible for the Expansion of Ski Resorts

Skiing is highly seasonal. Therefore, it is important that a resort possesses resources to attract visitors during the other season. Rapid changes take place if the settlement is able to function as an all-season resort, e.g. hot spring cures, hiking, sightseeing, and mountain climbing. In Japan, there are many instances where small settlements such as Nozawa Onsen, Kusatsu Onsen, Zao Onsen, Akakura Onsen, have become large ski settlements. These sites offer recreational possibilities

other than thermal springs.

Along the coast, there are all-season resorts like Atami Onsen, where the proximity to the sea, as well as the existence of hot springs, attract the leisure-seeking people. In the snow-clad areas, resorts are operated for only a short period of the year. In extreme cases, e.g. "fuyuzumi" [冬住み], the thermal springs are closed during the winter and the personnel return to their home villages. Kusatsu Onsen was an example of such a settlement before the Meiji period. Due to a phenomenon known as fuyugare, i.e., the decline of visitors during the winter, the local people wanted to develop skiing as an alternative source of income. Many early skiing grounds were begun by local inn-keepers. Today, hot springs have a double purpose, i.e., to attract people during all seasons and to diversify the attractions of a resort. It is then possible to state that hot springs are important in the formation of ski settlements.

An attempt is also made to point out the conditions for the formation of ski settlements. The number of suitable slopes determines the scale of these winter resorts. Natural conditions, including the quality of snow, and landforms are also necessary for the origin and development of these resorts. Recently established places at Shiga Kogen, and at Tsugaike have grown because of their favourable physical environments.

The location of slopes adjacent to agricultural

settlements has aided the growth of minshuku. Minshuku has been an important element in the conversion of agricultural settlements into ski resorts. This has been especially true of high elevation farming areas, where only one planting, either paddy or some other crop, was possible during the year. In such cases, local inhabitants were able to earn a satisfactory income from the operation of minshuku during the winter, instead of relying on supplementary occupations during the slack season.

On the other hand, with time, settlements can grow or remain stagnant. In the case of pre-existing settlements, some grew with the development of minshuku, which in turn were favoured by the existence of snow-covered areas, and hot springs. The thermal baths tend to extend the tourist season in the ski settlements. Nozawa Onsen is one such example.

Togari, along the Iiyama Line, and Ishiuchi and Urasa along the Joetsu Line, are also examples of resorts with origins based on existing settlements. However, the development of these areas were restricted by the quality and depth of snow, and slope conditions. Growth was also restricted by the lack of ancillary tourist attractions apart from the snow.

Progressive and stagnant types are also found among new settlements. Tsugaike, and Norikura Kogen, including Shiga Kogen, belong to the former type. At Norikura, the population of the mountain zone over 1,200 meters

above sea level has increased with the development of tourism in Japan, as it did in the European Alps. Also, the number of inhabitants below 800 meters has tended to increase with industrialization and urbanization.

The progressive settlements have changed the altitudinal distribution of population. In a zone like Madarao Kogen further population changes have occurred following the infusion of large investments.

A representative example of a stagnant settlement is Kowashimizu in Kirigamine. It was the first ski resort to be established in the late 1920's. Good accessibility, proximity to Tokyo, and the existence of grasslands facilitated its development. Today, Kirigamine is not a favoured ski settlement, because of its unattractive landforms, and the existence of centers developed elsewhere.

CHAPTER V

CONCLUSION

In this dissertation, an attempt was made to explain the origins and the geofactors associated with the development of ski settlements in Japan. A pioneering effort was made to study the development of two winter resorts in order to understand the conditions responsible for their formation and transformation. Their development and distribution were explained and classified according to their location.

Nozawa Onsen is an example of a settlement that changed in response to the development of skiing grounds adjacent to existing settlements. Initially, Nozawa was a small village noted for its hot springs that had medicinal properties, that attracted local farmers. With increasing number of skiers, its functions changed to that of a winter resort. The existence of thermal waters undoubtedly aided in its developing into a ski settlement. As compared to Nozawa, the ski grounds at Shiga Kogen were developed in a formerly non-settled area. The seasonal spas of Hoppo Onsen and Kumanoyu were converted into permanent ones with the development of skiing. Maruike, Suzurikawa, Takamagahara and Ichinose were developed in similar fashion. They were formed with the transfer of people from the village of Kutsuno.

Therefore, the new settlements are tied consanguineally and territorially with the original village. They may seem independent settlements at first sight, but they are not independent in regards to their social functions.

The settlements have been classified according to those originating from existing ones and those that have been newly developed. The former ones include the agricultural settlements of Hoppo and Sugadaira, and the spas of Nozawa and Kusatsu, while the latter ones have evolved either as a result of the migration of local people, e.g. Suzurikawa, and Ichinose in Shiga Kogen, and Shirakabako, or as an outcome of external investments like in Naeba, and Madarao Kogen.

Table 17 shows the classification of ski resorts according to their origin and development. From the foregoing statements and this table, it is possible to summarise as follows: a) drastic changes have taken place on existing settlements when resorts were developed adjacent to these communities, e.g. Nozawa Spa; and b) new settlements resulted when ski areas were developed in formerly uninhabited areas, e.g. Shiga Kogen. These two types embody nearly all the ski settlements of Japan.

Locationally, almost all Japanese areas concerned are concentrated in sites with over 50 centimeters of annual maximum depth of snow cover and with a skiing period of over 100 days. In addition to these natural conditions, the existence of hot springs was a prerequisite for

Table 17. Types of Ski Settlements

ORIGIN OF SETTLEMENTS		LOCATION
Developed From Existing Settlements	Agricultural and Forestry Settlements	Paddy Farming Settlements Hosono, Sanosaka, Nakatsuna, Ishiuchi, Muikamachi, Urasa, Togari and Happo
		Non-paddy Farming Settlements Sugadaira, and Bandoko(Norikura Kogen)
	Spa Settlements	Forestry Settlements Asagai(Naeba Skiing Ground)
		Permanent Spa Settlements* Zao, Akakura, Kusatsu, Yuzawa, and Nozawa Onsen
Newly Developed	Religious Settlements	Seasonal Spa Settlements** Hoppe, Kumanoyu, Manza, and Shirahone
	For Tourism	Togakushi and Ohtaki Ichinose, Suzurikawa, Tsugaiké, Suzuran, and Kowashimizu Maruike and Madarao

* These were already permanent settlements even before the establishment of the skiing grounds.

** These became permanent settlements only after the establishment of the skiing grounds.

the formation and development of ski settlements in Japan.

Settlements have also been developed in response to recreational demands in the major urban industrial centers, and to regional characteristics, created by the natural and historical conditions. This dissertation points out the main and socio-economic conditions needed in the development of such settlements:

1) The formation of ski settlements depend to a large extent on such natural conditions as the ski slopes and, the quality and quantity of snow-cover. These factors being favourable in the ski resorts of Shiga Kogen, Tsugaike Kogen and the other new areas mentioned in this paper have contributed to their establishment as ski settlements in previously unsettled areas.

2) Accessibility and transportation facilities also play important roles in the development of a ski resort. Since most of the skiers are from the major urban centers, the existence of a railway station near to the ski ground, trains being the primary means of transport for most of these skiers, and the connecting transport facilities from this station to the ski ground, are hence vital conditions.

3) The distance between the settlement, where accomodation is available, and the ski slopes is another factor for the development of a ski resort, as the

nearer they are to each other, the functions of the settlement correspondingly increases. As such the older ski settlements are in a more advantageous position than the new settlements in that they satisfy conditions 2) and 3) better.

4) The form of land ownership is of utmost significance in the formation of ski resorts, since they occupy vast areas. The existence of communal lands is much more advantageous. Acquisition of small tracts of land from individuals is difficult and time consuming. The investment pattern is classified into local and external capitals. It is comparatively easy for the local people to develop skiing grounds because of the existence of common lands. In the case of external investors, the ability to acquire lands is an important condition in determining whether developers can extend their businesses to the skiing grounds.

5) Ski resorts with other recreational functions were the ones that have developed the most. For example, a highland ski settlement may also have the function of a summer recreational area. Since skiing is seasonal in nature, it is important to have year-round attractions. Moreover, the facilities are used efficiently. For example, the existence of hot springs is an important condition for the development of ski settlements. Examples of ski resorts that perform these additional functions, besides just skiing, are Nozawa Onsen,

Shiga Kogen, Kusatsu Onsen, Zao Onsen and the other large scale ski grounds.

6) For the development of a ski resort, the existence of high class accomodation facilities is not really such an important factor. Rather, it is the availability of plentiful cheap lodgings in a ski settlement that matters more. Thus, in the heavy-snowy regions where minshuku can be operated in the settlements, these cheap accomodation have contributed greatly to the development of the ski ground. Further, minshuku operations have also transformed the previously solely agricultural settlements by providing the farmers with an additional source of income, as well as changing the traditional pattern of labour usage in winter for now the excess labour during winter can be fully utilised locally without their having to leave the settlement in search of winter employment.

Ski settlements are thus normally formed when the above mentioned conditions are satisfied. However, with the development of ski grounds in existing settlements, or in new areas, the distribution of population in the mountain and sub-alpine zones is greatly affected.

FOOTNOTES*

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3. Joffle Dumazedier, "Leisure" in *International Encyclopedia of the Social Science*, 1968.
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4. I. Cosgrove and R. Jackson, *The Geography of Recreation and Leisure*, Hutchinson, London, 1972, pp. 93-113.
5. Minshuku are cheap lodging houses in tourist resorts, and most of them are usually operated by farmers or fishermen as a source of supplementary income.
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* Papers written in Japanese are shown with the letter (J), while those with English abstracts are shown with the letters (J-E).

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67. This village was renamed Toyosato-mura in 1953, and merged with Ichikawa-mura in 1956.
68. There is a general slope from Mt. Kenashi on the southeast to Uwanotaira. The snow is frequently about three meters deep.

69. The snow cover is between one and two meters deep around Nozawa Onsen.
70. Nozawa Onsen-mura includes Nozawa Onsen (the main settlement), Nakano, Maesaka, Jujibara, Hirabayashi, Yatare, Mushio, Nanagamaki, Higashi-Otaki, and Akashi. In this research, Nakano is included with Nozawa Onsen.
71. The author arrived at this figure with the data obtained from the village office at Nozawa Onsen-mura. This consumption figure is only for lodging and souvenirs.
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75. Students who went to Iiyama MiddleSchool under the old system lived in the boarding house during the winter. These students returned during their spring vacation in March in 1912 to improve their skiing ability. (Interviews with E. Kobayashi and local inhabitants.)
76. There were four inns with hot springs before 1870. Seven more were added by 1912. Prior to the 1930's, lodging and agricultural activities [半農半宿]

were carried out concurrently. Inns were normally busy from mid-March to the first week of April (the so-called Haruyu "春湯" period), then in mid-July (the festival of Kosuge Shrine), in August (Ushinoyu "丑湯"), and in the last week of September (Akiyu "秋湯"). (This information has been related by Mr. C. Kohno, a local resident, who was born in 1893.)

77. Visitors usually remained for about ten days, a time block referred to as a "One Stay" [ひとまわり].
78. According to E. Kobayashi, Hosei University students were among the earliest students to visit the Nozawa Onsen in January 1923.
79. Visitors for Nozawa Onsen disembarked at Iiyama Railway Line's Kamisakai Railroad Station (present-day Iiyama Line of the National Railway), then crossed the Chikuma River by ferry, and finally travelled on foot from Kamisakai to Nozawa Onsen.
80. According to interviews, the leading people were the graduates of Iiyama Middle School.
81. "The village authorities, the intended inn operators, and the Nozawa Skiing Club as the leader, did not do their best to publicise and entice the skiers under the catch phrase of 'good skiing and hot springs'." T. Katagiri, op. cit., note 73, p. 2.
82. "As we were at the mercy of heavy snow and the cold from the old times, we had hoped to break away from this silent resignation to make a profit from the snow. It was indispensable that we were also active

politically; moreover, we had studied the snow scientifically. Our desire to find a solution to the snow damage made me a member of the prefectural assembly. Anyway, we racked our brains to escape from our sad lot and to improve our living standards to that of non-snow covered areas." T. Katagiri, op, cit., note 73, p. 2.

83. Related by K. Tomii, a resident of Nozawa Onsen.
84. The outline of Nozawa Onsen, according to "A General Survey of Toyosato-mura" is as follows: The community has 503 houses. The Akebi ware is manufactured in 77 percent of all households, and constitutes a major source of supplementary income during the winter months. The peak of emigration to other parts of the country was from the end of the Taisho to the early days of the Showa period, continuing up to the World War II period.
85. They brought the Ogushi Mining Co.'s cableway engineers from Suzaka-shi to build the wooden underpinnings for the ski lift. The larch from the village's communal forest was used for this purpose. The ski lift was rebuilt with iron frames in 1956.
86. A Snowmobile produced by the Ford Motor Company of the United States.
87. There were inns in 1952. It was estimated that the total daily lodging capacity was 1,000 persons.
88. In 1955, the minshuku were formally given permits by the Iiyama Health Center.

89. According to interviews with M. Kohno, "Tourists for hot spring cures came to this spa from the end of March to early July, i.e., at the end of the skiing season."
90. H. Ishii, op. cit., note 6, p. 615.
91. For example, a certain company, K, with a large investment planned to begin operations in the skiing ground, but it had difficulty in obtainings land, and thus had to abandon the project.
92. Nozawa Onsen is one of the settlements within the greater area of Nozawa Onsen-mura.
93. It was according to the conditions of the transfer of jurisdictions that the village authorities was to support the ski club and other related tournaments. The subsidy amounted to about ¥8 million in 1974.
94. The author classifies the skiing grounds in Japan as follows:

Type of Skiing Grounds	Characteristics			Names of Skiing Grounds
	Extension of Ski Lifts	Possible Period of Skiing	Other Features	
National	more than 12,000 m	more than 120 days	Skiers come from all over the country. Nation-wide tournaments are held every year.	Nozawa Onsen Shiga Kogen Naeba Zao Hakuba Tsugaike Kogen Myoko Kogen
Regional	between 4,000 and 12,000 m	between 90 and 120 days	Skiers come from within the region.	Teine-Olympia Inawashiro Sugadaira Kusatsu Onsen Makino Mount Daisen
Local	less than 4,000 m	less than 90 days	Located near regional cities. Skiers are mainly one day visitors.	Iizuna Kogen (near Nagano-shi) Takayu Onsen (near Fukushima-shi)

95. According to interviews conducted by the author at the Tourist Association of St. Anton.
96. In an average year, it is just around April 20th.
97. According to interviews, the off-season is May, June, October, and November in St. Anton, because of the changeable weather. These months serve as vacations for the seasonal labourers, and as the period for equipment maintenance. Permanent and seasonal populations were as follows: St. Anton, 2,080 and 800; Zermatt, 3,200 and 2,500; Chamonix Mont. Blanc, 8,500 and 2,000.
98. According to the 1970 World Statistical Yearbook for Agriculture and Forestry, there were 219 (72.2%) farm households with less than 0.7 hectares out of a total of 303 households. Full-time farmers numbered only 11 (3.6%).
99. From a total of 95 households, 85 were farmers. Twenty-five minshuku were operated by farmers as a supplementary source of income.
100. This skiing ground was opened in 1962 with two ski lifts (940 meters). Resources were provided locally and from a Tokyo private school.
101. Table 2 includes industrial workers from the villages.
102. These include daily rated labourers.
103. The operation of a ski area is difficult when the season is less than 80 days and when the snow does not fall by the end of the year. Such conditions occur in the western parts of Japan.

104. According to the Annual Weather Report of Nagano Prefecture (1968), there was a large number of snow-days in Nozawa Onsen, Nojiri and Minami-Otari. Between January and March, the number of days with over one meter of snow was 39 for Nojiri, and 71 for Minami-Otari. At Nozawa Onsen, there were 75 days. At the Nozawa Skiing Grounds, the snowfall generally increases with elevation. Consequently, it is possible to ski until the holidays in May.
105. The inclination for each skiing slope is as follows:
Hikage, $13^{\circ} - 13^{\circ}30'$; Utopia, $22^{\circ} - 22^{\circ}40'$;
Nagasaka, $11^{\circ} - 11^{\circ}10'$; Mukaibayashi, $8^{\circ} - 8^{\circ}55'$;
Karasawa, $7^{\circ} - 7^{\circ}05'$; Uwanotaira, $9^{\circ} - 9^{\circ}35'$;
Yunomine, $10^{\circ} - 10^{\circ}45'$; Uwanotaira in the National Forest, $11^{\circ} - 11^{\circ}10'$.
106. Differences in daily wages are based on experience. In 1974, they varied between ¥2,280 and ¥3,050. Village authorities based the wages according to income earned by the neighbouring settlements' inhabitants who perform similar work during the winter.
107. Only three inns were managed by outside people. They come to the resort occasionally to oversee their business.
108. Before 1951, when the Nozawa-gumi made drillings for hot springs, the organization borrowed funds from the Nagano Electric Railway Co. Ltd.. A hotel was opened by the railroad company and allocated 16 shares of the thermal water in return for this financing. A share of the thermal water, determined by the Nozawa-gumi, is about 9 liters per minute and costs ¥10,000 per month.

109. In remodelling, the inn keepers often invested between ¥100 to ¥200 millions. Normally, operators were able to raise less than 20 percent of the needed funds. (Interviews with the Nozawa Agricultural Co-operative Association.)
110. Each minshuku receives one-half of a share, i.e., 4.5 liters per minute (Fig. 6)
111. The Nozawa Agricultural Co-operative Association used to provide the minshuku with funds. After 1966, prospective operators could borrow all the needed funds from the co-operative.
112. In order to repay the loan, the minshuku are obligated to operate during the summer as well. Previously, these lodges were opened only during the winter.
113. In 1975, there were 9 mini-buses in the village.
114. According to the association of the Minshuku in Nozawa Onsen, 10 minshuku employed over 3,000 man-days, about 100 minshuku employed 500 to 3,000 man-days, and another 200 minshuku employed less than 500 man-days.
115. The scale of agricultural operations and the individual farmers' perceptions are reflected in the farms; "minshuku serves as the main occupation, and the farming serves as a subsidiary occupation" (The B₁ type); and "farming serves as the main line, while minshuku serves as a subsidiary occupation (The C₁ type).

116. There are minshuku with lodging facilities for their temporary employees.
117. Full-time minshuku operators generally cultivate only 30 ares of their arable land, and lease the rest to other farmers.
118. Beginning in the 1970's, "minshuku for sport" increased all over the country. In 1975, there were four gymnasiums for judo and Japanese fencing, and six tennis courts owned by the minshuku, and a Japanese archery court run by the inns at Nozawa Onsen. About 500 square meters is necessary for the construction of a tennis court. Since the agricultural land is expensive, about ¥200,000 and ¥400,000 per 3.3 square meters around the settlement, the author believes that sports facilities will not increase in number in the future. The high real estate value, the small scale, and the low productivity of farms, are believed to be the main causes. On the other hand, the village-operated gymnasium and playground, began in 1972, were intended to improve summer operations for the entire settlement.
119. At Nozawa Onsen, there were 40 to 50 persons engaged in the gathering of wild plants.
120. This Act was enforced in 1974 and allows the Forestry Agency to develop skiing grounds in the national forests.
121. It must be understood that though the term "national skiing ground" is used, there is no such institution. Such skiing grounds are so termed because they are located in national forests. The skiing ground

paraphernalia are managed by private business enterprises.

122. The vast communal forests are suitable for the development of skiing grounds. According to a study of 219 skiing grounds in Japan, 187 (85.4%) were established in leased mountains and forests. These are rented at annual rates of ¥10 to ¥50 per 3.3 square meters, i.e., about ¥30,000 to ¥50,000 per hectare. Rental costs for the ski lifts and buildings are two or three times higher than for open land. Ski resorts have been developed on former forests, pastures and meadows.
123. Tobacco continued to be cultivated in the 1970's, but by 1975, a remarkable decrease had been registered, i.e. only 5 hectares had been planted by 23 households.
124. In 1960, 4 households cultivated 50 ares, but by 1975, the corresponding figures were 60 and 13.5 hectares, respectively. During the latter date, 1 hectare of tomatoes was grown, but the area of this crop has shown a sustained growth.
125. In 1960, asparagus was cultivated by 11 households, amounting to a total of 1.0 hectare, but by 1975, it had increased to 62 households, cultivating 19 hectares.
126. Beginning in the late 1960's, with the increase of minshuku business, labour became scarce. As a result, farmers who operated minshuku during the summer decreased the area of vegetables cultivated for their own consumption.

127. In 1975, 3.0 hectares of cherry trees, 2.0 hectares of chestnut, and 4.0 hectares of walnut were planted.
128. The Wago-kai was established in 1929 to manage the Shiga Plateau's communal forest. As of 1976, the association was made up of 470 members. Legal rights would be automatically lost, if members moved elsewhere.
129. The Nagano Electric Railway Co. Ltd. paid attention to and took advantage of the opportunity to further develop the tourist trade in the Shiga Kogen.
130. The present name is Maruike Hotel. The administrator of Maruike Hutte was Jiromatsu Kodama, a farmer whose was in Kutsuno. The Maruike Hutte could accomodate only 75 persons.
131. The total capacity for Asoh Hutte was 15. For Kohzu Cottage the limit was 25.
132. Kidoike Kanko Hotel was formerly named Shiga Hutte. The owner was Nobuyoshi Kobayashi, who worked as a roofer during the summer.
133. The International Tourist Bureau designated the whole neighbourhood which included Shiga Kogen, Myoko and Sugadaira Kogen as the international skiing grounds. Hotels were opened at Shiga Kogen and Akakura Onsen. Moreover, the Ministry of National Railways had published an English guidebook, "Winter Sports in Japan". This booklet was used to developed the ski resorts. Although Shiga Kogen had been designated for the Winter Olympic Games, it was later decided that the games were to be held at Sapporo. However, because of the Japan-China incident, the activities were cancelled.

134. Skiers, mostly students, came mainly from Tokyo.
135. Maruike Hutte (the present Maruike Hotel) was opened in 1930. Between 1930 and 1935, the hotel number of visitors increased to 500. By 1940, according to Sanai Kodama, Maruike Hutte provided a good income for its owner.
136. The chalets of Nihon University, Tokyo Girls' Normal School, Bungei-Shunju Publishing Co. Ltd., Bank of Fuji, Asahi Newspaper Co. Ltd., were opened during the 1930's. In 1937, the cottage at Kumanoyu was opened to tourists by the Ministry of Railways. As a result, the number of skiers to the plateau increased.
137. Presently, this ski area is called Maruike Skiing Ground (ski lift No. 5 in Fig. 13). According to an interview with Kinzaburo Seki, who played an important role in the development of the resort, the lift was completed in January 1947 with the technical expertise provided by the Kajima Construction Co. Ltd..
138. The area of this plateau used for tourism was allotted by the Welfare Ministry. After the division was made, there was a group of people who needed more land for expansion.
139. The Wago-kai owned two thirds of this company's shares. The settlers of Shiga Kogen profited from the operation of lifts, and from the tourist accommodations. However, the members who lived in Kutsuno did not share in the profits. Therefore, when Kutsuno members discovered the situation, they became very dissatisfied. The Wago-kai then arranged

for its members to own shares on a per capita basis. This action was intended to block the entry of large outside capital and to enable the participation of second or third sons of Wago-kai members in the development of the resort. During the latter half of the 1950's, large investors were invited to develop the area. Large resorts were developed in manza Onsen by Seibu Company, one of the largest investors. The Tokyu company, also a large investment company, built a ski area at the foot of Mt. Shirouma. The development of Mt. Yakebitai, near Shiga Kogen, owned by the Kyoeki-kai was contemplated by Seibu Company.

140. Fast through train service was begun in 1962 between Tokyo and Yudanaka.
141. The Hoppo Onsen was opened by S. Seki in 1802, while that at Kumanoyu was opened about 1850.
142. The innkeepers of Kusatsu and Manza Onsen closed their inns during the winter and returned to their home village. The winter base was called "Fuyuzumi" [冬住み].
143. They were engaged in cultivation at Shiga Kogen until 1960. Their land in Kutsuno (300 square meters of paddy fields and 600 square meters of land for other crops) were sold in the 1920's when they decided to remain at Hoppo Onsen during the winter, waiting for the skiers' return to the plateau.
144. During the latter half of the 1920's, "The Shiga Kogen Guide's Union" had already been formed. Members were engaged in transporting the skiers'

luggage. There were about ten members registered in 1939. After 1936, according to M. Takebushi, they used sleighs to transport the luggage.

145. According to K. Seki, during the winter of 1931, a total of 2,000 skiers stayed at Tengunoyu (one of the inns at Hoppo Onsen).
146. The cottage of the Department of Engineering, Nihon University, was opened in 1934, while Takamagahara Hutte of Bungei-Shunju Publishing Co. Ltd. was opened in 1937. Both were near Hoppo Onsen.
147. These hot spring were used from May to October. Even before World War II, the greatest number of visitors were from Tokyo. Local tourists came mainly from north of Nagano-shi. There were only a few visitors from Niigata Prefecture. In the 1940's, summer visitors came from the Tokyo area. Nearly 70 percent of visitors did not do their own cooking. During the 1950's, very few of those who prepared their own meals came to the hot springs. Prior to the 1960's, kitchen utensils were found at the Tengunoyu inn.
148. In the post World War II period, as the number of members who wanted to begin the business exceeded the Wago-kai's means, it could not accept all the proposals. In 1956, in an effort to satisfy the members' demands, the Wago-kai subdivided the communal forest adjacent to Kumanoyu (also called Suzurikawa). Lots were intended for the construction of inns and company rest houses. Ichinose, one of the area, was to be divided into 38 plots. Each plot averaged 1,640 square meters. Since there were about 43 members, it was proposed that lots be allocated by drawing a lottery. In the future, it

will be impossible to expand and develop this area for any type of accomodation.

149. In relation to 1955 (1955 = 100), the 1972 tourist figure for Shiga Kogen increased to 589, while the corresponding figure for Yamanouchi Onsenkyo was 130. Tourists came to Shiga Kogen in increasing numbers as each winter approached.
150. During the same period, the total population of Yamanouchi-machi decreased.
151. Figure 13 shows, including Okushiga, the northern part of Mt. Yakebitai. This area represented the forest of Yamanouchi-machi, and the seven ski lifts operated by the Nagano Electric Railway Co. Ltd..
152. These enterprises were established by influential members (7 to 8 persons) of the Wago-kai.
153. The land rental cost fixed by the Wago-kai was as follows: At Kumanoyu, Tengunoyu, Suzurikawa, Kidoike, Sun Valley, Maruike and Hasuike, it was set at ¥200 per unit area of 3.3 square meters. At Hoppo Onsen, Takamagahara, and Ichinose, the corresponding figure was ¥150. At Kawaharagoya, Nishi-Hoppo, Bunadaira, Hiratoko and Mt. Yokote, ¥100. In addition to this, company rest houses and inns, excepting members, were charged a uniform price of ¥350 per unit area. Ski lift companies were charged ¥300 per 3.3 square meters. The rent for a hot spring was ¥3,500 per month per share. Charges were to be revised every three years.
154. Depth of snow cover increases with elevation. On

an average, January to March snowfalls are fine. Therefore, at high altitudes, the snow becomes powdery.

155. Since ski grounds are at heights of between 1,350 and 2,300 meters above sea level, the skiing season is long. In the past, skiing became difficult when the snow depth was less than one meter. Today, however, 50 centimeters may be sufficient since ski areas have improved. Consequently, the season can also be stretched. In Japan, though, the number of skiers decrease toward the end of March, even if there is enough snow. On the other hand, skiing in Europe lasts until mid-April or Easter.
156. The operation of a ski lift requires four to five workers. For example, Shigayama Lift Co. Ltd. owns 10 ski lifts, and employs 50 full-time workers. The company also hires seasonal labourers during the winter season. Thirty-three percent of these come from the town of Yamanouchi. Nagano-shi, adjacent to the plateau, supplies 12 percent. Twenty-nine percent travel from as far as Akita Prefecture. Only twenty-three percent of student workers come from Tokyo. Since the resort is distributed over a wide area, workers must cover an extensive terrain.
157. Aside from Wago-kai members, 11 other operate hotels and inns. The Shiga Kogen Kanko Hotel (at Maruike opened in 1937), Kokutetsu-Yamanoie (Suzurikawa, 1937), Maruike Kanko Hotel (Maruike, 1952), and Kokuminshukusha (Biwaike, 1966) were permitted by the Wago-kai since they were believed to be the most appropriate for developing the Shiga Kogen. On the other hand, other hotels and inns were able to lease land before World War II, because the Wago-kai then had not

decided on any set policy. Initially, they managed tea-houses, but with an increase in tourism, the main activity shifted to the management of hotels and inns.

158. Loans for the construction of hotels, inns, and other buildings were limited to ¥40 million. Since the Nokyo could lend funds to only two persons per household, a family could borrow only ¥80 million. The Federation of Nagano Agricultural Co-operative Union limited their loans to ¥100 million. Repayment period of such funds was limited to a maximum of 13 years, with a maximum annual interest rate of 11 percent.
159. The author's interviews were based on 25 percent of the inhabitants of Yamanouchi-machi. Among those surveyed, 17 percent were student workers from Tokyo. A similar figure was obtained in 1975, when 245 teachers who had come to ski were interviewed.
160. In Japan, like that of pre-industrial revolution England, there is the practice of dividing the estate of a land owner (whose family constitutes the "main family") between his sons. Normally the first-born son inherits the whole estate, i.e. to economically enable the existence of the main line of the family. The younger sons, at the time of the break up of the family estate, whether receiving a share of it or not, came to be called the "branch families".
161. For example, an inn at Kawaharagoya was very busy from December to early April. Workers used to return to Kutsuno by the middle of May. Soon after returning to the village, residents began to raise plants in a seed bed. Seedlings were set in paddy fields by late June and early July. Then, inhabitants returned

to their business in mid-July to carry on their work until early September. A second sojourn to Kutsuno was necessary for the rice harvest, before returning to the plateau to prepare for the next ski season.

162. These workers live in the Shiga Kogen and still own their homes at Kutsuno. The owner and his family used to inhabit their home, i.e., *Hontaku* at Kutsuno. The *Hontaku* is now used by the owners' parents and their family. We must not overlook the psychological aspects that kept the bonds that existed between the operators and their native village. Annual festivities are usually held at the *Hontaku*.
163. Special areas were allocated for the development of rest houses by private companies in Suzurikawa (1956), Takamagahara (1960), Ichinose (1963), and Hiratoko (1964). The practice of companies building rest homes for their employees has been terminated since 1973 (Fig. 13).
164. There was a micro-bus that operated only during the summer months. Actually it was a four passenger car that took one hour and thirty minutes to go from Yudanaka to Maruike. This took place before 1955, when a regular bus service was started on a seasonal basis.
165. In 1959, the 11 ski lifts' operators came to be known as "The Cableway Association of the Shiga Kogen". The Nagano Electric Railway Co. Ltd. was one of the participating members.
166. The Wago-kai's membership numbered 293 in 1927, and 470 in 1975.

167. Usually the local people made chopsticks during the winter, and gathered bamboo shoots during the summer. Prior to 1950, most of the Wago-kai members used their common forest for the exploitation of the flora.
168. Only four persons were still gathering bamboo shoots in 1976.
169. The land use plan was changed by the Environmental Agency. The total recreational area of the region in 1975 was 1,474.6 hectares. They were used as follows: 96.5ha. (6.4%) for hotels and inns; 38.9 ha. (2.6%) for company rest houses; 801.4 ha. (54.3%) for skiing; 60.4 ha. (4.1%) for camping; 145.9 ha. (9.9%) for parks; 4.4 ha. (0.4%) for public establishments; and 238.0 ha. (22.2%) were reserved as a conservation area. It is unlikely that the present land use will be changed in the near future.
170. If changes resulting from toll road operations are added to that of the tourist industry, 82 percent of the total income in 1975 would have been generated from tourism.
171. Maruike is located 1,460 meters above sea level, while Hoppo Onsen, Ichinose, Takamagahara and Kumanoyu including Suzurikawa are at elevations of 1,580, 1,640 and 1,660 meters respectively.
172. Sh. Yamazaki, *The History of Skiing in Japan*, Hobundo, Tokyo, 1936, pp. 26-30. (J)
173. Skiing was originally introduced into Japan for the training of army personnel. The rapid diffusion of the activity throughout the country was in large part

due to the systematic guidance provided by the Army's 13th. Division in Takada-shi (present-day Joetsu-shi), Niiga Prefecture.

174. The development occurred in the following order: Otaru (Hokkaido), Goshiki Onsen (Yamagata Prefecture), Ohwani Onsen (Aomori Prefecture), Nuniba (Niigata Prefecture), Nozawa Onsen and Ohmachi (Nagano Prefecture), and Mt. Kannabe (Hyogo Prefecture).
175. G. Satoh, *The Chronological Table of Skiing in Goshiki Onsen, Azuma, Bandai, Goshiki and Numajiri, Yurindo, Fukushima, 1931*, pp. 49-50. (J)
176. Prior to World War II, the ski slopes were mowed only before the snowfall, to provide ideal conditions.
177. The First Japan Students' Ski Tournament was held at Ohwani Onsen in 1928, and Japan participated in the Winter Olympic Games for the first time during the same year.
178. Makino Skiing Grounds in Kansai, was also developed as a joint venture by the local people.
179. In those days, silkworm rearing rooms that were free during winter were used for accommodations. However, only dwellings with wide rooms and matting could lodge skiers. Therefore, minshuku were operated mainly by wealthy farmers.
180. In many cases, spas were developed by the local people as skiing grounds. Local entrepreneurs, i.e., the innkeepers, played a major role in the development of winter resorts.

181. Innkeepers made up for the income lost during the slack season in winter when few visitors came for health cure baths by taking in paying guests.
182. Interview with the late T. Tamura. Innkeepers who visited the lift at Maruike Skiing Ground in Shiga Kogen in 1948, learned to build the lift's wooden underpinnings by acquiring timber from the Local Forest Service Station.
183. The National Railways abolished the restriction on ski transport except for eight trains, i.e., two on the Joetsu Line, five on the Shinetsu Line, and one on the Chuo Line.
184. The ski resorts along the Joetsu Line were developed initially from Tsuchitaru (developed in 1933; the first ski lift was built in 1955). The developments ended during the first half of the 1960's; subsequently, existing skiing grounds tended to expand only in the scale of operations.
185. In the case of Togari Skiing Grounds, local inhabitants developed the resort and built the first ski lift through a joint venture with some sports goods shop in Tokyo. The development occurred in response to dull side jobs, and the lack of employment opportunities in other parts of country. The making of straw raincoats was a very popular supplementary employment during the winter, but its market was lost when man-made fibers appeared. As a consequence, the winter income decreased sharply. The decline of possibilities for supplementary income generation by manufacturing straw raincoats, Akebi ware, and Japanese paper, was one of the contributing factors for the increase of minshuku.

186. Manza Onsen (developed by Kokudo Keikaku Company in 1952), Korakuen of Ishiuchi (by Korakuen Company in 1958), Happo-One (by Tokyu Company in 1958), Echigo-Nakazato (Kokudo Keikaku in 1961) were among them. The Echigo-Nakazato Skiing Grounds had already been developed in 1931 by the local inhabitants.
187. Madaro Kogen was developed by the Fujita Kanko Co. Ltd. in 1972. Similarly, in the European Alps, especially in France, large ski resorts were developed as a result of a national policy to improve the economic conditions of people inhabiting mountains between 1,500 and 2,000 meters above sea level.
188. The natural conditions for the development of ski resorts include the length of snowfall, quality of snow, wind, position above sea level, and type of surface. In the present study, the snowfall period and snow depth are seen as variables in the establishment of winter resorts.
189. In those days, skiers preferred to have resorts near large cities, so that they could go skiing on sundays and national holidays. Mt. Rokko, near Kobe, and the foot of Mt. Fuji are such examples.
190. The Seibu Company developed an artificial snow skiing ground at Karuizawa in 1961, but the slopes were closed only after two seasons.
191. There are skiing grounds developed with funds from Tokyo. These resorts were created mainly in Hokkaido, especially Sapporo, with a population of more than one million.

192. It is impossible to approach Mt. Gassan and Chokai for general skiing. Therefore, skiers visit these places only between spring and summer.
193. Author's estimate.
194. P. Lavery states that more than three months of snow cover is necessary to develop a ski area (op. cit., note 56, p. 241). This writer believes that a longer period is necessary for commercial enterprises to be economically viable.
195. The standard difference in Olympic Games is over 800 meters in downhill races.
196. Examples are Mt. Taisetsu, Mt. Bandai, Hachimantai, Mt. Gassan, Mt. Naeba, Kirigamine, Mt. Kurihime, Mt. Myoko, Mt. Shirane (Nikko and Kusatsu), Mt. Daisen and Mt. Kannabe.
197. There are both types of surfaces at Shiga Kogen. Therefore, this plateau has an excellent variety of ski slopes.
198. The required slope is 6° to 9° for the beginner, 11° to 24° for the intermediate, and 16° to 30° for the advanced skiers. Since 90 percent of skiers belong to the first two categories, slopes for advanced skiers are few.
199. Slopes facing the southeast and northwest are unfavourable for skiing. The direction of solar incidence and the general wind direction interfere with the snow conditions.

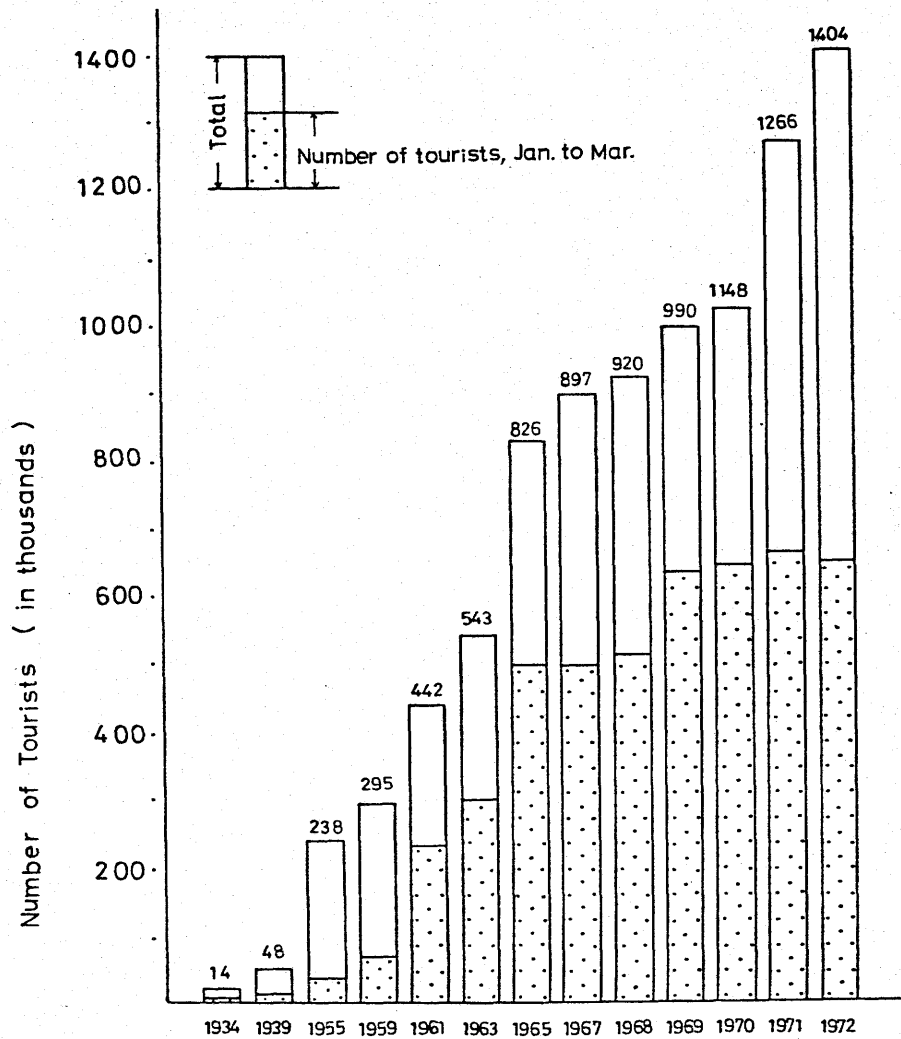
200. Businesses in the Ishiuchi-TBS Skiing Ground along the Joetsu Line and the Hakuba-Minekata Skiing Ground along the Ohito Line have declined in contrast to the neighbouring areas. This has been primarily due to poor access.
201. In general, Europeans have paid holidays of two to three weeks. For example, in West Germany, even office workers are allowed to take four weeks of vacations per year, and receive additional allowances. Therefore, despite the fact that good slopes are available in the Bavarian Alps, many of them go to ski in Switzerland and Austria. One may say that existing socio-economic conditions play important roles in the location and development of skiing grounds. In Finland, a ski holiday is provided for by law.
202. One instance is the Madarao Kogen Skiing Grounds in Iiyama-shi, developed by Fujita Kanko Co. Ltd..
203. The French government provided financial assistance to develop ski resorts, in order to prevent skiers from going to neighbouring countries and spending the valuable foreign exchange.
204. Spas were closed for winter when settlers returned to their village. Similarly, settlers at the Kusatsu Onsen, used to return to their mother village. Such communities were called "fuyuzumi" [冬住み].
205. T. Ichikawa and Sh. Shirasaka, "A Geographical Study of the Foot of Norikura Volcano in General Japan", *Shin-Chiri*, Vol. 26, 1978, No. 1, p. 17. (J-E)

206. There were 34 accomodations in 1976. Innkeepers came from the villages of Bandoko and Ohnogawa.
207. Skiing was introduced to Kirigamine in 1923, but as late as 1977, there were only 13 accomodations on this plateau. Although the bulk of the visitors in the 1940's were made up of skiers, only 20 percent of all visitors today come to ski because of the poor natural conditions.
208. In 1973, according to interviews conducted, there were accomodations for 13,000 tourists, i.e., 5,000 in hotels and pensions and 8,000 in rental apartments. Zermatt is one of the largest ski resorts in the European Alps, with a total lift and ropeway length of 53,808 meters.
209. There were only three inns in 1960, but these increased to a total of 54 by 1975. The population also increased from 10 to 203 between 1960 and 1975.
210. This is the official figure according to the latest French census. The census had been carried out irregularly, but it was enforced after 1975. Results from the latest census was not available yet at the time of this writing.
211. This figure includes the accomodation capacity for apartments and country homes. There is a small airport at an elevation of 2,000 meters which can be used even during the winter.
212. According to *Rural Problems in the Alpine Region*, F.A.O., 1961, and other publications, the population of the Alpine region has been decreasing. For example, in France, the alpine population in 1861 consisted of

2.8 percent of the total, but the figure decreased to only 2.1 percent in 1951. Demographic decline despite the development of tourist and manufacturing industries. In general, the population of the area below 700 meters has been increasing in response to the establishment of manufacturing industries. Population in the region between 700 and 1,000 meters has shown a marked decline, and those areas above 1,000 meters has been increasing because of the tourist industries. These tendencies have been noted in the alpine regions of France and Italy. In the regions where tourist industries are active, it is common to see the population double or even triple.

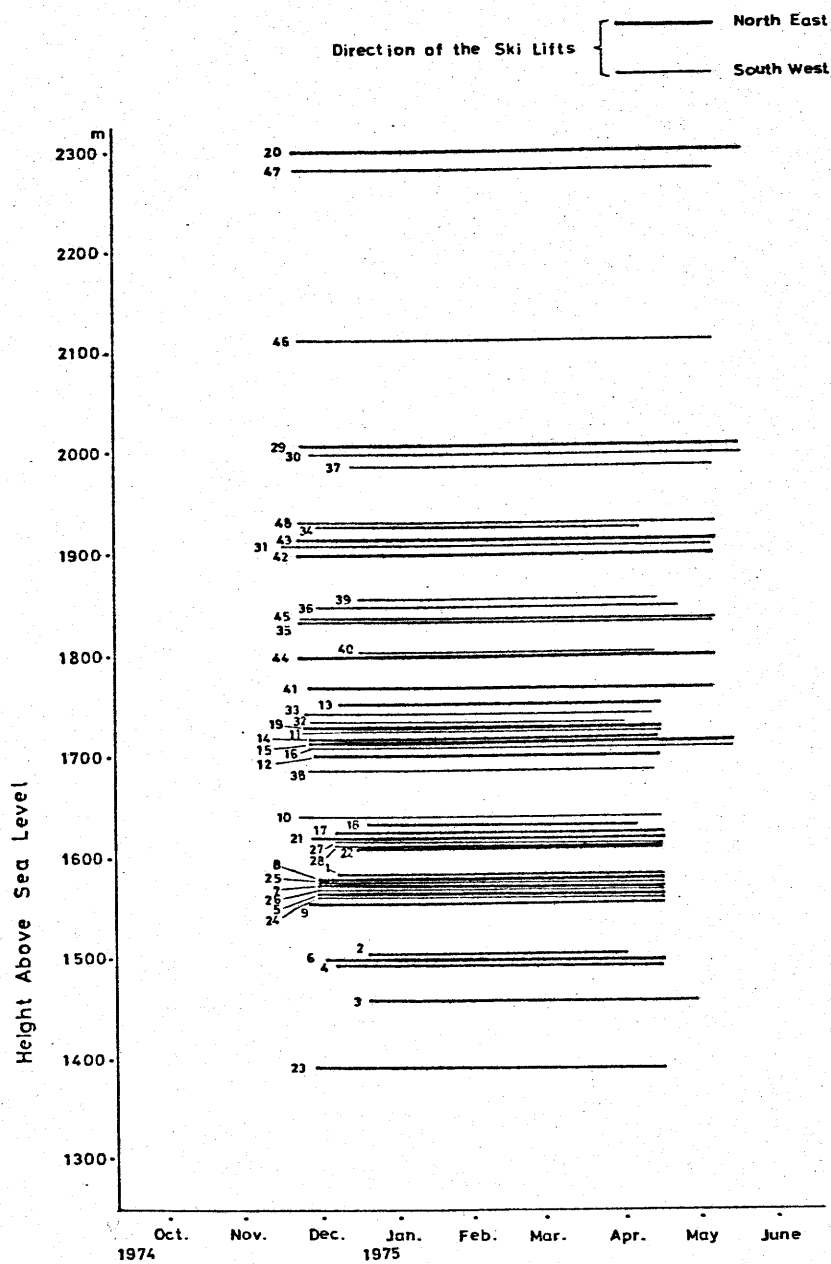
APPENDIX

FIGURES AND TABLES



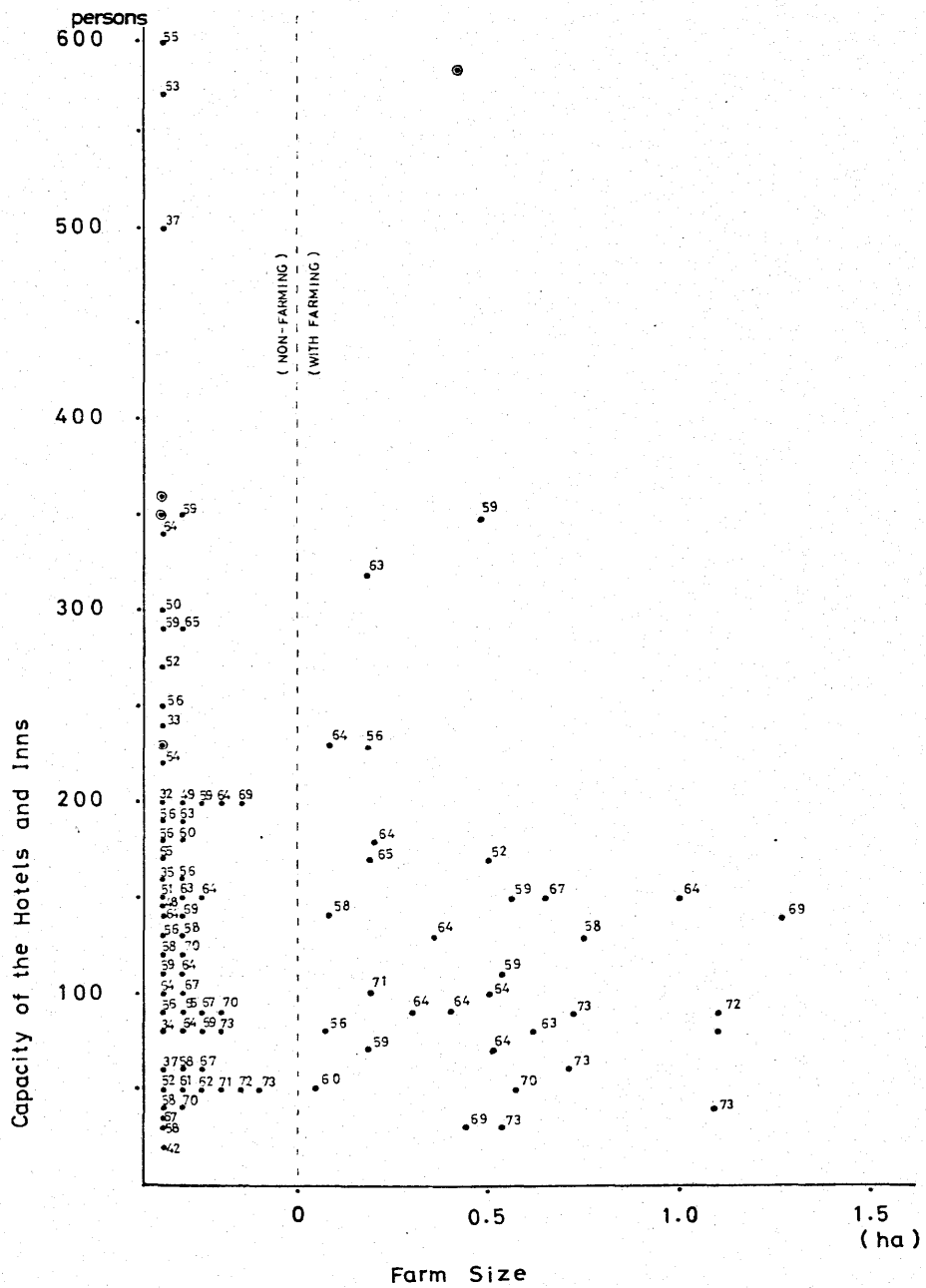
Appendix Figure 1. Tourists to Shiga Kogen

- Source : (1) *Statistical Yearbook*, Nagano-ken, 1932.
 (2) *Nippon Onsen Taikan*, Nippon Onsen Kyokai, 1932.
 (3) *Statistics of Tourism*, Department of Statistics,
 Yamanouchi-machi, 1955 - 1972.



Appendix Figure 2

The Height above Sea Level and the Operational Period of Ski Lifts at Shiga Kogen



Appendix Figure 3.

Farm Size and the Scale of Operations of
Hotels and Inns, 1976

Source : Interviews, Feb. 1976.

Appendix Table 1.

The Development Process of the Ski Grounds in Nozawa Onsen

Items Year	SKIING DEVELOPMENTS	TRANSPORTATION DEVELOPMENTS	OTHER DEVELOPMENTS
1883			
1911		The opening of the Shinetsu Line.	The coming of Major Lerch (An Austrian Army Officer). The beginning of the use of the spas at Akakura, Seki and Goshiki by the foreign community in Japan.
1912	The introduction of skiing to Nozawa Onsen (by the students of Iiyama Middle School).		The founding of Etsushin Ski Club (the forerunner of the Japan Ski Club). The founding of Iiyama Ski Club.
1921		The opening of the Iiyama Railroad between Nagano and Iiyama.	
1923	The founding of Nozawa Onsen Ski Club.	The opening of the prefectural ferry boat between Kamisakai and Hirabayashi.	The first All Japan Ski Competition in Otaru
1924	The opening of Hinokage Skiing Ground (23 ha) with 2 practice jump-slopes.		
1925			The founding of the All-Japan Ski Association. The peak of the winter movement of workers from Nozawa.
1928	The construction of a 50-meter ski jump-slope. An increase of skiers to about 2,500 per season.		The 1st All Japan Student Ski Competition in Ohwani.
1929	The arrival of Lieutenant Olav Helset at Nozawa Onsen. The beginning of tour skiing in Mt. Kenashi (1,460 meters).	The completion of the Iiyama Railroad.	

Items Year	SKIING DEVELOPMENTS	TRANSPORTATION DEVELOPMENTS	OTHER DEVELOPMENTS
1930	<p>The 5th Meiji Jingu Ski Competition (the first national competition to be held at Nozawa Onsen).</p> <p>The arrival of Hannes Schneider (a famous Austrian skier) at Nozawa Onsen.</p> <p>The number of ski visitors in the 1930-31 season increased to about 3,000.</p> <p>The 4th All Japan Middle Schools' Ski Competition.</p> <p>The 10th All Japan Ski Competition.</p> <p>The 6th Meiji Jingu Ski Competition.</p>	<p>The opening of the Nagano Electric Railway Co., Ltd. running between Nagano and Yudanaka.</p>	<p>The founding of Sugadaira Ski Club.</p> <p>The opening of 7 minshuku in Sugadaira.</p> <p>Formal permission granted for the opening of Hosono Minshuku.</p> <p>The 1st ski instructors' examination was held (in Goshiki Onsen, Yamagata).</p>
1932	<p>The 12th All Japan Students' Ski Competition.</p>	<p>The completion of the suspension bridge at Kamisakai.</p>	<p>The founding of Hakuba Ski Club.</p> <p>The running of the national defence ski trains.</p>
1937	<p>The 13th All Japan Students' Ski Competition.</p>		
1938	<p>The Nagano Ski Competition (attracting about 4,000 spectators).</p>		
1939	<p>The 3rd National Ski Meet.</p>		
1940	<p>The 26th All Japan Ski Competition.</p>		
1941	<p>The 1st ski lift (of wood) was constructed.</p>	<p>The introduction of snowmobiles for the transportation of ski visitors.</p>	
1946			
1947			
1948			
1950			
1951			

Items Year	SKIING DEVELOPMENTS	TRANSPORTATION DEVELOPMENTS	OTHER DEVELOPMENTS
1952		The use of bulldozers to clear the road between Kijima and Nozawa Onsen for buses in winter.	
1953		The beginning of Minshuku operation.	
1954	The 9th National Ski Meet. The construction of a metal jump slope at Hinokage Skiing Ground.		
1955	The construction of the 2nd ski lift. The opening of a ski school.	The introduction of diesel engines by the Iiyama railway line.	
1956	The construction of the 1st metal ski lift.		Formal permission was granted for the opening of Minshuku in Nozawa Onsen.
1957	The 35th All Japan Ski Competition.		
1959	The 34th All Japan Students' Ski Competition. The construction of the 3rd ski lift.		
1961	The 36 All Japan Ski Competition. The opening of a 30-ha ski slope at Uwanodaira. The permission was granted for the establishment of skiing ground in the national forests.		
1962	The construction of the 4th ski lift.	The running of the "Nozawa-go" local express between Nagano and Echigo-Kawaguchi.	
1963	The 38th All Japan Students' Ski Competition. The beginning of the management of skiing grounds by the village authorities. The construction of the 5th, and 6th and 7th ski lifts.	The beginning of the running between Togari and Nozawa by buses in winter.	

Items Year	SKIING DEVELOPMENTS	TRANSPORTATION DEVELOPMENTS	OTHER DEVELOPMENTS
1964	The 1st Chunichi Cup Ski Competition.		The distribution of the use of hot spring waters to 5 Minshuku of Nozawa Onsen.
1965	The construction of the 8th ski lift and ropelift.		The construction of an electric generator in Nozawa Onsen-mura.
1966	The 1st Nozawa Onsen Ski Festival. The construction of the 9th ski lift.		
1967	The 1st Ski Thankgiving Festival. The construction of the 10th ski lift. The enactment of the Public Corporation Act for Skiing Grounds.		
1968	The construction of the jet- lift.		The founding of The Ski Instructors' Association.
1969	The construction of the 11th, 12th and 13th, Stemag and Pomagal lifts.		
1971	The 1st Schneider Cup Alpine Competition. The 14th and, Karasawa 1st and 2nd ski lifts.		The establishment of Sister-City relationship between St. Anton and Nozawa.
1972	The construction of a 70-meter jump-slope. The establishment of the training center of the Ski Association of Japan. The opening of playing ground and a gymnasium by the village authorities.		
1973	The 1st Kneissl Cup All Japan Slalom Competition.		
1975	The opening of a 5-kilometer long distance ski course.		

Source : 1) Sh. Yamazaki, *The History of Skiing in Japan*, 1934, 2) K. Ogawa, *The History of Skiing in Japan*, 1956,

3) T. Fukuoka, *The development of Skiing in Japan*, 1970 4) T. Katagiri, *Selected History of Nozawa Onsen Skiing Grounds*, 1971, 5) Interviews by the author.

Appendix Table 2.

Inns Ownership and Management Types in Nozawa Onsen

Year	Before 1930	1931 - 1945	1946 - 1960	1961 - 1974
Number of Inns Operated	18	6	5	1
Agreement With	Registered by Government	Registered by Nikkanren	Japan Travel Bureau	Nil
	1	24	7	6
Place of Origin of the Inn Operators	Nozawa Onsen	Nagano-shi	Others	
	26	1	3	
Capacity of the Inns	Below 50	51 - 100	101 - 150	
	8	18	4	
Permanent Employees	Below 5	6 - 10	11 - 15	
	21	8	1	
Extension and Rebuilding after 1961	1961 - 1965	1966 - 1970	1971 - 1975	
	4	5	15	
Hot-Spring Ownership	A : Private	B : Leased	C : A + B	
	9	15	16	
Buses	With	Without		
	2	28		

Source : Interviews, Oct., 1974.

Appendix Table 3.

Changes in the Use of Agricultural Land
in Nozawa Onsen

Agricultural Land Law	Article 3*		Article 4**		Article 5***	
	Number	Area	Number	Area	Number	Area
Year		m ²		m ²		m ²
1969	26	19,273	6	5,368	26	13,554
1970	53	65,693	18	6,452	35	41,618
1971	43	34,177	23	13,908	27	8,833
1972	26	21,842	10	2,813	24	8,366
1973	11	6,803	12	5,322	26	5,924
1974	18	15,258	8	3,401	16	3,817

Source : *Records of Land Use Conversion Applications*, Department of
Agriculture, Nozawa Onsen-mura.

* Article 3

" ... the sale of all agricultural and common grazing land must have
prior approval of the Prefectural Governor "

** Article 4

" ... prior approval of the prefectural Governor must be obtained
before conversion of agricultural land to some other use can be
carried out "

*** Article 5

" ... the sale of all agricultural land, to be converted for some
often use, must have the prior approval of the Prefectural
Governor "

Appendix Table 4.

The Development Process of the Ski Grounds in Shiga Kogen

Items Year	SKIING DEVELOPMENTS	TRANSPORTATION DEVELOPMENTS	OTHER DEVELOPMENT
1916 1921	The advent of German skiers in Kanbayashi Onsen. The Shinetsu Ski Competition was held at Junisawa.		
1923	The 1st Shinetsu Ski Competition was held at Hirao.		
1925 1927	The founding of the Hirao Ski Club.		
1928		The opening of the Nagano Electric Railway Line between Yudanaka and Nagano.	The founding of the Wago-kai.
1929	The Jyoshinetsu Ski Competition was held at Kanbayashi. Maruike was named " the St. Moritz of the East " by Lieutenant Olav Helset, a Norwegian Army Officer.	The opening of the bus system between Yudanaka and Kanbayashi.	The opening of resthouses at Bohdaira and Maruike. 660,000 square meters of land leased to Nagano Electric Railway Company by the Wago-kai with the first 20 years of the lease being free of rent.
1930	The development of Yakushinoyu spa into an all-year round spa. The opening of Asahi-yama ski course. The opening of Giant ski course.		The advertising of Shiga Kogen.
1932	The opening of Maruike Hutte by Nagano Electric Railway Company. The opening of Shiga Hutte at Kidoike.		
1933	The opening of Shimizugoya as a station for cross-country skiers. The opening of Asoh Hutte at Maruike.		The opening of a tea-house at Kawaharagoya.

Items Year	Skiing Developments	Transportation Developments	Other Developments
1935	<p>Hirao Ski Club became the Shiga Kogen Ski Club. First ski lesson was conducted at Kumano-yu. The opening of Maeyama ski course. The opening of Kohzu Hutte at Maruike. Shiga Kogen was designated an international skiing ground by the International Tourism Division of the Railroad Ministry.</p>		<p>The opening of the path between Shiga and Ohnuma. The bid was made for the 12th Winter Olympics. 66,000 square meters was leased to Nagano Prefecture at Ikenotaira and Nishi-Hoppo Onsen for free.</p>
1937	<p>The Wago-kai made-over to the National Railway land for the construction of their rest house.</p>	<p>The opening of the bus route between Yudanaka and Maruike during summer only. The National Railway began a through service to Yudanaka via Yashiro.</p>	
1938	<p>The advent of German and Italian skiers into Maruike.</p>		<p>The beginning of electricity generation in Maruike.</p>
1939			<p>The designation of Shiga Kogen as a scenic zone.</p>
1940	<p>The completion of the National Railway Rest House.</p>		
1941	<p>The 1st Yokoteyama Ski Competition.</p>		
1942		<p>The opening of the road between Kumano-yu and Yudanaka. The opening of the National Railway Line " Kogen-Ressha " between Ueno and Yudanaka.</p>	
1945			
1947	<p>The construction of a ski lift at Maruike by the American Occupational Forces.</p>		<p>The taking over of the Shiga Kogen Hotel by the American Occupational Forces.</p>

Items Year	Skiing Developments	Transportation Developments	Other Developments
1948		The re-opening of the bus route between Yudanaka and Maruike. The opening of the bus route between Yudanaka and Kumanoyu.	The moving of K. Igaya (a famous Japanese skier) to Shiga Kogen.
1949	The opening of Jyoshinetsu Kogen National Park.	The opening of the regular bus service between Yudanaka and Maruike.	The opening of Kidoike Camping Village.
1950		The opening of the bus route between Hoppo Onsen and Maruike.	
1952	The handing over to Nagano Electric Railway Company of the Maruike Skiing Ground by the American Occupation Forces.	The opening of the all-season bus route between Yudanaka and Kutsuuchi.	The zoning of Shiga Kogen for tourism purposes by the Ministry of Public Welfare.
1953	The opening of the direct bus service between Tokyo and Shiga Kogen.		
1955	The establishment of Hosaka Ski Lift Company.	The extension of the all-season bus route from Yudanaka to Sun Valley.	The establishment of Shiga Kogen Tourism Association.
1956	The completion of the down-hill course at Mount Higashitate, the giant slalom course at Mount Nishitate and the slalom course at Mount Shiga. The establishment of Shigayama Ski Lift Company.		
1957	The 35th All Japan Ski Competition. The establishment of Bunadaira skiing ground. The completion of the Kumanoyu Ski Lift.		The zoning of Hosaka for the construction of inns.
1958	The 36th All Japan Ski Competition. The completion of the Yokoteyama Ski Lift.	The opening of the limited express train service between Nagano and Yudanaka. The extension of the all-season bus route from Sun Valley to Kumanoyu.	The opening of the Maruike ski lift for use in summer.

Items Year	Skiing Developments	Transportation Developments	Other Developments
1959	The opening of the ski school at Maruike. The 37th All Japan Ski Competition.	The opening of the Shiga Kogen bus service by Nagano Electric Railway Company.	The establishment of the Shiga Kogen Kanko Kaihatsu Company. The piping of hot spring waters from Nishi-Hoppo to Maruike.
1960	The 15th National Winter Sports Meet at Maruike. The establishment of the Shiga Kogen Ropeway Company after the completion of ropeway between Hasuike and Mount Higashitate via Hoppo Onsen.	The opening of limited express bus service between Ueno and Yudanaka.	The zoning of Takamagahara for the construction of company rest houses. The opening of Maeyama ski lift for use in summer.
1961	The 39th All Japan Ski Competition.	The opening of the express train service between Ueno and Yudanaka by the National Railway.	The 4th National Park Conference at Hiratoko.
1962		The extension of the bus service between Maruike and Takamagahara during summer only.	The piping of lots for the construction of inns at Ichinose. The establishment of Shiga Kogen Association of Inns.
1963		The extension of the bus service between Takamagahara and Ichinose during summer only.	
1964	The application to the Ministry of Welfare for new construction of ski lifts and extension to the existing lifts.	The opening of the bus route between Shiga Kogen and Kusatsu Onsen	
1965		The opening of the all-season bus service between Maruike and Hoppo Onsen.	
1967			The establishment of the National Minshuku at Lake Biwa by the Nagano Prefectural Corporation.

Items Year	Skiing Developments	Transportation Development	Other Developments
1970		All road surface were paved in Shiga Kogen. The opening of the all-season bus service between Yudanaka and Oku-Shiga.	
1971			The establishment of monkey park at Jigokudani. The opening of the Shiga Kogen National Service Centre. The establishment of land rights at Oku-Shiga.

Source : 1) Sh. Yamazaki, *The History of Skiing in Japan*, 1934, 2) K. Ogawa, *The History of Skiing in Japan*, 1956,
 3) T. Fukuoka, *The Development of Skiing in Japan*, 1970, 4) Wago-kai, *The History of Wago-kai*, 1975,
 5) Interviews of the author.

Appendix Table 5.

The Opening of Company Rest Houses in Shiga Kogen

Year	District								TOTAL
	Biwaike	Maruike	Hasuike	Hiratoko	Suzurikawa	Hoppo	Takamagahara	Ichinose	
1933	-	-	-	-	-	-	-	-	-
1934	-	-	-	-	-	1	-	-	1
1935	-	-	-	-	-	-	-	-	-
1936	-	-	-	-	-	-	1	-	1
1937	-	-	-	-	-	-	-	-	-
1938	-	-	-	-	-	1	-	-	1
1939	-	1	-	-	-	1	-	-	2
1940	1	-	1	-	-	1	-	-	3
1941	-	-	1	-	-	-	-	-	1
1942	-	-	1	-	-	-	-	-	1
1943	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-
1950	-	-	-	-	-	-	-	-	-
1951	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-
1953	-	-	1	-	1	-	-	-	2
1954	-	-	1	-	-	-	-	-	1
1955	-	-	1	-	1	-	-	-	2
1956	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	1	-	-	1
1958	-	-	-	-	1	-	-	-	1
1959	-	-	-	-	1	-	1	-	2
1960	-	-	-	-	3	-	3	-	6
1961	-	-	-	-	1	-	6	-	7
1962	-	-	-	-	1	-	1	-	2
1963	-	-	-	-	-	-	1	2	3
1964	-	-	-	3	1	-	1	3	8
1965	-	-	1	1	-	-	-	-	2
1966	-	-	-	-	-	-	-	-	-
1967	-	-	-	3	-	-	-	1	4
1968	-	-	-	2	1	-	-	-	3
1969	-	-	-	2	-	-	-	2	4
1970	-	-	-	1	-	-	-	-	1
1971	-	-	-	1	-	-	-	-	1
1972	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	1	1
1974	-	-	-	-	-	-	-	-	-
TOTAL	1	1	7	13	11	5	14	9	61

Source : Interviews, April, 1975.

Appendix Table 6.

Ski Lift Construction in Shiga Kogen

Company Year	Nagano Electric Railway Co., Ltd.	Length in Meters	Sosaka Ski Lift Co., Ltd.	Length in Meters	Shigayama Lift Co., Ltd.	Length in Meters
1951		-		-		-
1952	Maruike 1st	284		-		-
1953		-		-		-
1954	Maruike 2nd	148		-		-
1955		-	Hosaka 1st	529		-
1956	Maruike 3rd	280		-	Hoppo Giant 1st	1,121 866
1957		-		-		-
1958		-		-		-
1959		-	Hosaka 2nd	283		-
1960		-		-	Bunadaira 2nd	519
1961		-		-		-
1962		-		-		-
1963		-	Hosaka 3rd	317		-
1964		-		-		-
1965		-		-		-
1967	Maruike 5th	285		-	Bunadaira 1st	540
1968		-		-	Giant 2nd	949
1969	Okushiga 1st	863		-	Giant 3rd	247
	Okushiga 2nd	628		-		-
	Okushiga 3rd	536		-		-
	Okushiga 4th	391		-		-
1970		-		-	Higashitate 1st	739
1971		-		-		-
1972		-	Hosaka 4th	320	Higashitate 2nd	349
		-		-	Bunadaira 3rd	514
		-		-	Hoppo 2nd	1,044
1973	Okushiga 5th	768		-		-
	Okushiga 6th	664		-		-
	Okushiga 7th	517		-		-
1974		-		-		-
1975		-		-		-
TOTAL		5,364		1,449		6,888

* Whole-year round operation.

Company Year	Yokoteyama Lift Co., Ltd.	Length in Meters	Shiga Kogen Kanko Kaihatsu Co., Ltd.	Length in Meters	Kumanoyu Lift Co. Ltd.	Length in Meters
1951		-		-		-
1952		-		-		-
1953		-		-		-
1954		-		-		-
1955		-		-		-
1956		-		-		-
1957		-		-		-
1958	Yokoteyama 1st	1,161		-		-
1959	Yokoteyama 2nd	1,143	Maeyama	310*		-
1960		-	Takamagahara 1st	890	Kumanoyu 2nd	925
1961		-	Takamagahara 2nd	301		-
1962		-		-		-
1963	Yokoteyama 4th	367	Ichinose 1st	570		-
		-	Takamagahara 3rd	923		-
1964	Yokoteyama 3rd	384*		-		-
1965		-		-		-
1967		-	Ichinose 2nd	628		-
1968		-		-	Kumanoyu 3rd	895
1969		-		-		-
		-		-		-
		-		-		-
1970		-	Ichinose 3rd	449		-
1971		-	Ichinose Pair	415		-
1972		-		-	Kumanoyu 1st	339
		-		-	Kumanoyu 4th	679
		-		-		-
1973		-	Takamagahara 2nd (b)	-		-
		-		-		-
1974		-	Ichinose 5th	722		-
1975	Yokoteyama 1st (b)	1,122		-		-
	Yokoteyama 2nd (b)	1,156		-		-
TOTAL		5,333		5,550		2,838

Company Year	Shiga Kogen Ropeway Co., Ltd.	Length in Meters	Others	Length in Meters	Cumulative Total	Length in Meters
1951		-		-		0
1952		-		-		284
1953		-		-		284
1954		-		-		432
1955		-	Kidoike	312		1,273
1956		-		-		2,674
		-		-		3,540
1957		-		-		3,540
1958		-		-		4,701
1959		-		-		6,437
1960	Takamagahara	301*		-		9,072
1961		-		-		9,373
1962		-		-		9,373
1963	Ichinose 1st	458		-		11,085
		-		-		12,008
1964		-	Kasagoshi	419		12,811
		-	Hasuike	412		13,223
1965		-	Shibutoge	651*		13,874
		-	Ishinoyu	489		14,363
1967	Nishitate 1st	802		-		16,618
1968		-		-		18,462
1969		-		-		19,752
		-		-		20,200
		-		-		20,736
		-		-		21,127
1970	Nishitate	252		-		22,567
1971	Ichinose 2nd	431		-		23,413
1972		-		-		24,421
	Ichinose 3rd	491		-		26,105
		-		-		27,149
1973	Ichinose 4th	336		-		28,595
		-		-		29,259
		-		-		29,776
1974		-		-		30,498
1975		-		-		31,620
		-		-		32,776
TOTAL		3,071		2,283		32,776

Source : Shiga Kogen Sakudo Kyokai, 1976.

Appendix Table 7.

Full-time Employees of Hotels and Inns in Shiga Kogen

District Number of Employees	District													TOTAL
	Sun Valley	Biwaik	Maruik	Hasuik	Kawaharagoya	Kidoik	Ishinoyu	Kumanoyu	Yokoteyama	Hoppo	Bunadaira	Takamagahara	Ichinose	
0	-	-	1	-	4	-	-	-	1	-	4	1	4	15
1	-	-	-	-	1	-	-	-	-	1	-	-	1	3
2	-	-	-	2	-	-	2	1	-	3	-	-	2	10
3	-	1	-	1	-	-	1	2	1	-	-	-	5	11
4	1	-	1	2	1	-	-	1	2	1	-	2	3	14
5	3	-	1	1	-	-	-	3	-	-	-	-	1	9
6	1	-	-	-	-	-	1	-	-	1	-	2	3	8
7	-	-	-	1	-	-	-	1	-	-	-	-	-	2
8	-	-	1	-	-	1	-	-	-	-	-	-	1	3
10	1	-	-	-	-	-	-	-	-	-	-	-	3	4
12	1	1	1	-	-	-	-	-	-	1	-	-	-	4
18	-	-	-	-	-	-	-	-	-	1	-	-	-	1
22	-	-	-	-	-	-	-	-	-	-	-	1	-	1
30	-	-	-	-	-	-	-	1	-	-	-	-	-	1
42	-	-	1	-	-	-	-	-	-	-	-	-	-	1
44	-	-	-	-	-	-	-	1	-	-	-	-	-	1
49	-	-	-	-	-	-	-	-	-	1	-	-	-	1
56	-	-	1	-	-	-	-	-	-	-	-	-	-	1
60	-	-	1	-	-	-	-	-	-	-	-	-	-	1
TOTAL	7	2	8	7	6	1	4	10	4	9	4	6	23	91

Source : Interviews, April, 1975.

Appendix Table 8.
 Characteristics of the Administrators of Company Rest Houses

Character	District									TOTAL	
	Biwaik and Maruik	Hasuik	Hiratoko	Suzurikawa	Hoppo	Takamagahara	Ichinose				
Number of Company Rest House	2	7	14	11	5	14	9			62	
* Native Village	Kutsuno		Outside Kutsuno								41
	2	6	6	8	3	11	5			21	
* Occupation of Administrator's Home	Principally Agriculture		Principally Forestry		Others						12
	2	1	1	3	1	2	2			21	
	-	4	3	4	1	6	3			8	
	-	1	2	1	1	3	-			41	
Total	2	6	6	8	3	11	5			41	
* Family Ranking	The Eldest Son		Secons Sun		Third Son		Son-in-Law				12
	-	1	2	1	1	5	2			14	
	-	-	3	2	2	5	2			6	
	-	2	-	3	-	-	1			9	
	2	3	1	2	-	1	-			41	
Total	2	6	6	8	3	11	5			17	
* Branch Family	Used by Family Member		Existent but Vacant		Leased Out		Non-Existent				16
	2	3	2	1	2	4	2			4	
	-	2	-	-	-	2	-			1	
	-	-	-	1	-	-	-			3	
	-	1	-	2	-	-	-			24	
Total	2	6	2	4	2	6	2			5	
Engaged in Agriculture as well	-	-	2	2	-	1	-				

* The number of persons who came from Kutsuno.

Source : Interviews, Feb., 1976.

Appendix Table 9.

A Chronological Table of Ski Developments in Japan

Items Year	Ski Matters	The Development of Skiing Grounds	Transport	Other Related Matters
1891				
1893			The opening of the Tohoku Line.	
1909			The opening of the Shinetsu Line.	The establishment of a ski club by Europeans in Japan.
1911	The coming of Major Lerch (an Austrian army officer) to Japan.	Mount Kanaya in Takada (presently Joetsu-shi)	The opening of the Chuo Line.	The beginning of ski manufacturing in Japan.
1912		The opening of skiing grounds in Akakura, Seki and Goshiki by foreigners in Japan.		The founding of the Etsushin Ski Club.
				The establishment of the Kansai Ski Club at Ibukiyama.
				The founding of the Hokkaido University Ski Club.
1921		Ohwani Skiing Ground.	The opening of the Iiyama Railway Line between Nagano and Iiyama.	
1923	The 1st All Japan Ski Competition at Otaru.	Nozawa Onsen Skiing Ground. Kannabeyama Skiing Ground.		A rapid development of skiing grounds in other parts of Japan.
1924		Onogawa Skiing Ground in Yamagata Prefecture.		
1925	The establishment of the Ski Association of Japan (S.A.J.).	Nunoba Skiing Ground in Yuzawa. Ohmachi Skiing Ground.	The opening of the Kusatsu -Karuizawa railway line.	The 1st Winter Olympics in Chamonix-Mt-Blanc.

Items Year	Ski Matters	The Development of Skiing Grounds	Transport	Other Related Matters
1927			The opening of the railway line between Nagano and Yudanaka By Nagano Electric Railway Company.	The founding of Wago-kai
1928	The 1st All Japan Students' Ski Competition at Ohwani. The first Japanese participation in the Winter Olympics (at St. Moritz).			An increase of skiers to Hakuba between 1929-1930.
1929		Maruike and Nikko-Yumoto Skiing Grounds.		
1930	The coming of Hannes Schneider (a famous Austrian skier) to Japan.	Sugadaira and Seki Onsen Skiing Grounds. Iwappara Skiing Ground.	The opening of the Jyoetsu Line.	
1932		Kirigamine Skiing Ground.	The opening of railway line between Matsumoto and Hakuba.	The opening of 7 minshuku and establishment of the Ski Club at Sugadaira. A rapid increase of skiers.
1935		Makino Skiing Ground (by the local people).		
1937		Mount Ibuki Skiing Ground.		Formal permission was granted for the running of Hosono minshuku.
1938	Ski Meets in Korakuen (Tokyo) and Koshien (Kobe).			

Items Year	Ski Matters	The Development of Skiing Grounds	Transport	Other Related Matters
1939	The designation of a National Ski Day. The 1st Ski Instructors' Examination in Goshiki and Nozawa Onsen.	Tsuchitaru Skiing Ground.		With the over-rapid increase of skiers numerous problems were created in the trains.
1940		Hachi Kogen Skiing Ground.		The establishment of Hakuba Ski Association. The running of the national defence ski train.
1941				
1942				
1947		The construction of ski lifts at Maruike and Mount Moiva by American Occupational Forces for their exclusive use. This lift was opened to the public in 1948.		
1948	The running of ski-bus services from Kyoto to the various skiing grounds in Japan.			
1949		Kusatsu Skiing Ground.		The first advertisement made by skiing grounds in the newspapers.
1950	The opening of the bus service between Tokyo and Kusatsu.	The construction of ski lifts at Nozawa Onsen and Sugadaira.	The opening of the direct train service between Ueno and Yudanaka, and the bus service between Yudanaka and Hoppo Onsen.	

Items Year	Ski Matters	The Development of Skiing Grounds	Transport	Other Related Matters
1951	The start of night skiing at Tsuchitaru,	The construction of ski lifts at Hakuba-mura and Zao Onsen.		The relaxation of rules for skiers in all national railway trains except for 2 on the Jyoetsu Line, 5 on the Shinetsu Line and, 1 on the Chuo Line.
1952	With the relinquishment of Shiga Kogen by the American Occupational Forces, there was an increase in the ski lifts and increased capacity of the inns.			
1955		Mount Akagi Skiing Ground. An increase in the construction of ski lifts all over Japan.	The opening of the all-season bus service between Yudanaka and Maruike.	Till now the idea of a skiing ground was " a hot spring area where snow falls " .
1956	The 7th Winter Olympics (at Cortina d'Ampezzo)			With the widening of the concept of skiing more than hotels were built in many of the skiing grounds. The " ski-boom " in Japan resulting in a new concept of skiing.
1957		Manza Onsen Skiing Ground by Kokudo Keikaku Company.		

Items Year	Ski Matters	The Development of Skiing Grounds	Transport	Other Related Matters
1958	<p>The opening of Ishiuchi Professional Ski School.</p> <p>The coming of Rudi Matt (a famous Austrian skier) to Japan.</p>	<p>Ishiuchi-Korakuen Skiing Ground.</p> <p>Happo-one Skiing Ground by Tokyu Company.</p>	<p>The construction of a cablecar system at Hakuba by Tokyu Company.</p> <p>The opening of the all-season bus service between Kumanoyu and Yudanaka.</p>	<p>An increase in the opening of new skiing grounds through outside investments.</p>
1959		<p>Sayama Indoor Skiing Ground (by Seibu Company).</p> <p>Togari Skiing Ground.</p>		<p>4 minshuku were opened at Togari.</p> <p>The opening of Hakuba student's village (summer only).</p>
1960		<p>Togakushi Skiing Ground.</p> <p>Tanigawa-Tenjindaira Skiing Ground.</p> <p>Echigo-Nakazato Skiing Ground (by Kokudo Keikaku Company).</p> <p>Kokusetsu-Inawashiro Skiing Ground.</p> <p>The Karuizawa Artificial Skiing Ground (by Seibu Company) which was closed after only 2 seasons.</p> <p>Naeba Skiing Ground (by Kokudo Keikaku Company).</p> <p>Hokuryuko Skiing Ground in Iiyama.</p>	<p>The opening of the direct train service between Shinjuku and Hakuba.</p>	<p>An increase of skiing grounds along the Jyoetsu Line.</p>
1961				

Items Year	Ski Matters	The Development of Skiing Grounds	Transport	Other Related Matters
1963	The coming of Stefan Kuruckenhauser (an Austrian ski instructor from the Austrian Ski School) to Japan.		The abandonment of the Abt railway system on the Shinetsu Line with the electrification of the trains.	The beginning of the management of the ski lifts by the village authorities in Nozawa Onsen-mura.
1964		Ishiuichi-TBS Ski Ground.	An additional line was built on the Jyoetsu Line.	
1967		Mount Aso Artificial Skiing Ground (managed by the town authorities).		
1968	The founding of the All Japan Professional Ski Instructors' Association.	Oku-Shiga Skiing Ground. Madarao Kogen Skiing Ground (by Fujita Kanko Company). Kunizakai Skiing Ground (by Kokudo Keikaku Company). The " Members Only " skiing ground in Hakuba (Toyku Company).		
1969				
1972				

Source : 1) Sh. Yamazaki, *The History of Skiing in Japan, 1934*, 2) K. Ogawa, *The History of Skiing in Japan, 1956*,

3) T. Fukuoka, *The Development of Skiing in Japan, 1970*, 4) Interviews by the author.

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