

Reorganization Process of Elementary/Junior High Schools and Actual Conditions on the Operation Form of Closed Schools in Mountainous Regions — Case Study on 5 Municipalities in Yamaguchi Prefecture (1960-2010) —

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Abstract

The aim of this study is to make clear the reorganization process and actual conditions on the operation form of closed school's reuse in Yamaguchi prefecture. Owing to the movement of population, many schools located at mountainous regions and islands were closed down for the past 50 years in Yamaguchi prefecture. In rural areas, populations are aging and decreasing in recent years. And there's a possibility the number of closed school will increase from now on. Therefore the promoting reuse of the school facilities as central facility for local community is the examination subject. In this study, we attempt to make clear the characteristics of closed school's reuse in local government based on the questionnaire survey, the hearing investigation and the field survey in Yamaguchi prefecture. Thereby the reorganization process of elementary/junior high schools may be divided into four types: (1) Natural extinction type; (2) Gradual integration type; (3) Packaged and gradual integration type and (4) Packaged integration type. Moreover we analyze the operation form of school's reuse by the case studies of four types.

Keywords: up to five words; *Closed School's Reuse, Operation Form, School Facility, Facility Usage, Management Body*

1. Introduction

After the high economic growth period in 1960s, social problems such as decreasing birthrate and aging population are getting up speed in Japanese rural community for agriculture, forestry and fishers. In particular, these problems are serious in mountainous areas and island areas of Chugoku District. Owing to the aging and depopulation, more and more elementary schools and junior high schools are being closed down.

In particular, the school facility is the familiar with local residents. Therefore the proactive utilization of closed school will be required. But, the financial base of depopulated area is weak. Thereby, many local governments became a part of city as the result of a municipal merger after 2000. Accordingly the reorganization of schools is essential condition for many broader-based local governments from now on.

In this study, we analyze the reorganization process of

elementary/junior high schools and actual conditions on the operation form of closed school's reuse in Yamaguchi prefecture. First of all, we arrange the status of closed schools in Yamaguchi prefecture. In addition, we take up some local governments where the rate of closed school is especially high. And we verify the reorganization process of closed school and operation form of reuse. Finally, we attempt to make clear the characteristics of closed school's reuse in local government.

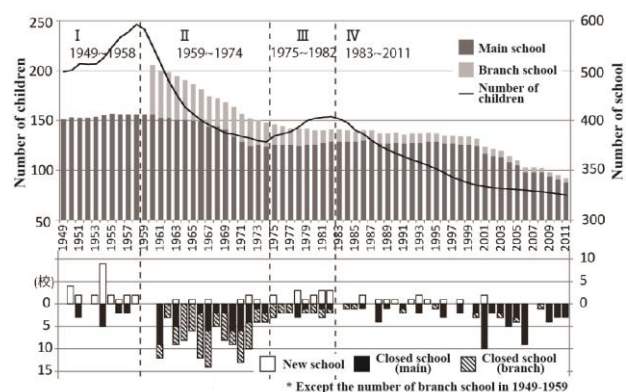


Fig.1. Transition of the number of school, children and closed school

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2. Actual Conditions on Closed schools in Yamaguchi Prefecture

Figure 1 indicates the actual conditions on closed school in Yamaguchi prefecture. In this figure, we decided the four divisions after 1949, depending on increase or decrease of the number of schoolchildren. In the first period, 12 schools were closed, but 24 schools had been newly founded under the influence by the population increase after the World War II.

In the second period, 117 schools were closed under the influenced by decrease of schoolchildren. Specially, branch schools are 72 of 117 schools closed.

In the third period, the number of closed schools decreased under the influenced by the baby boom in Japan.

In the fourth period, the number of schoolchildren is dwindling again. Specially, owing to the boom in municipal mergers, known as the big merger of Heisei, more and more primary schools are being closed down from 2000.

Furthermore, Figure 2 summarizes the rate of closed school by municipalities in each period.

Many primary schools are closed down at northeast areas and island areas in Yamaguchi prefecture, for example, Miwacho, Nishikicho, Kanocho, Atohcho, and Yuyacho.

And the rates of closed school are high at northeast areas, mountainous areas and island areas, for example, Miwacho, Mikawacho, Kanocho, Kawakamimura, Yuyacho, Hiraecho, Kaminosekicho.

3. Case Study

3-1. Character of Examples

In this chapter, we take up 7 municipalities the rates of closed school are very high to select some examples for case study, based on the transition data on population and number of schoolchildren.

Figure 3 and Figure 4 indicate the transition of population and schoolchildren on 7 municipalities. The population of 6 municipalities has been declining from 1960, on the other hand the population of Hiraecho increased due to the baby boom. The number of schoolchildren is also similar. Therefore Hiraecho is regarded as special case. And also Kaminosekicho is greatly difficult other municipalities in geographical condition. Therefore we investigate 5 municipalities except for Hiraecho and Kaminosekicho.

Figure 5 indicate the transition of schoolchildren by municipalities.

In Kanocho, many schools existed until the number of schoolchildren decreased at the minimal. For the reason, we define the type “Natural extinction type”.

In Mikawacho and Kawakamimura, Reorganization of schools was conducted according to the reduction of schoolchildren. We define the type “Gradual integration type”.

In Yuyacho, due to the streamlining of 3 primary schools, a large-scale elementary school was established. After that, some elementary schools are being closed down due to decrease of

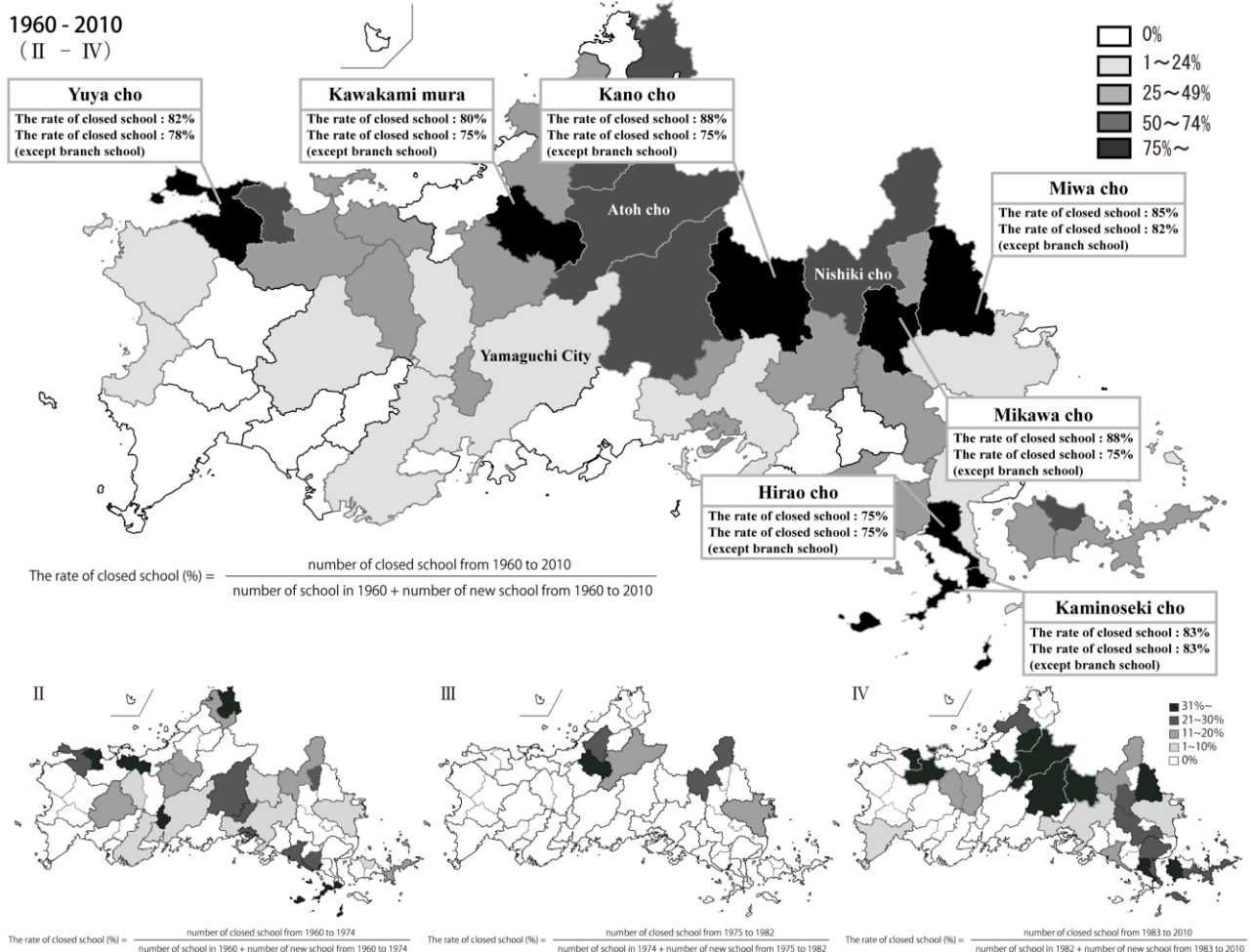


Fig.2. The rate of closed school

schoolchildren. We define the type “Packaged and Gradual integration type”.

Lastly in Miwacho, 9 elementary schools were consolidated at one time in 2000, and 2 still remain. We define the type “Packaged integration type”.

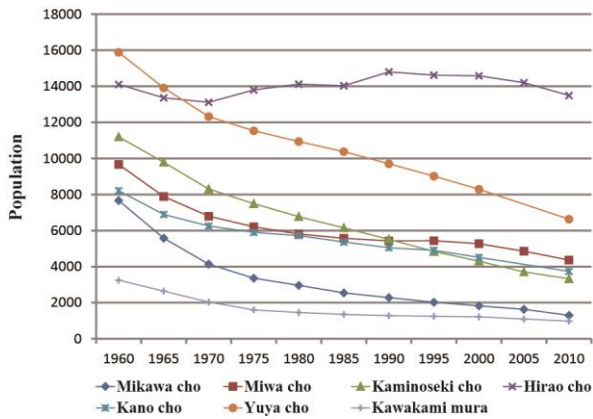


Fig.3. Transition of the number of population

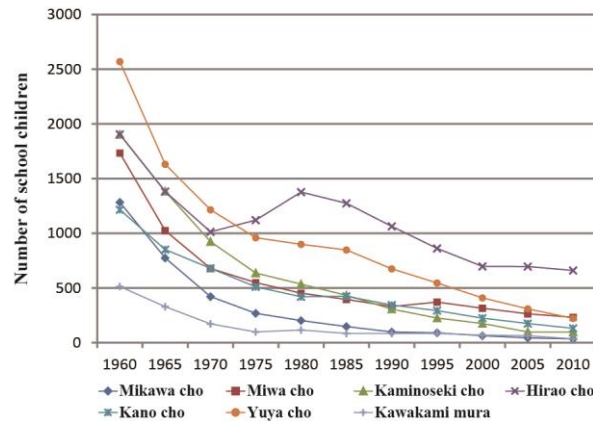


Fig.4. Transition of the number of school children

3-2. Comparison Analysis of the Reorganization Process

Figure 6 indicate the distribution of schools in 1960 and the reorganization process to 2010 on 5 municipalities.

(1) Natural extinction type

In Kanocho, there were 4 elementary schools, 4 branches of elementary school and 1 junior high school in 1960. After that, 3 branches of elementary school were closed down from 1970 to 1977. The remaining branch schools were closed down in 2003, and 3 elementary schools were closed down in 2009.

(2) Gradual integration type

In Mikawacho, there were 3 elementary schools, 4 branches of elementary school and 3 junior high schools in 1960. After that, 4 branches of elementary schools were closed down from 1964 until 1968. Then elementary schools and junior high schools were gradually integrated from 1978, and each elementary school and junior high school were consolidated until 2004, therefore 1 elementary school and 1 junior high school still remain.

In Kawakimura, there were 4 elementary schools, 1 branch of elementary school, 2 junior high schools and 1 branch of junior high school in 1960. After that, 2 elementary schools and 1 branch of junior high school were closed down in

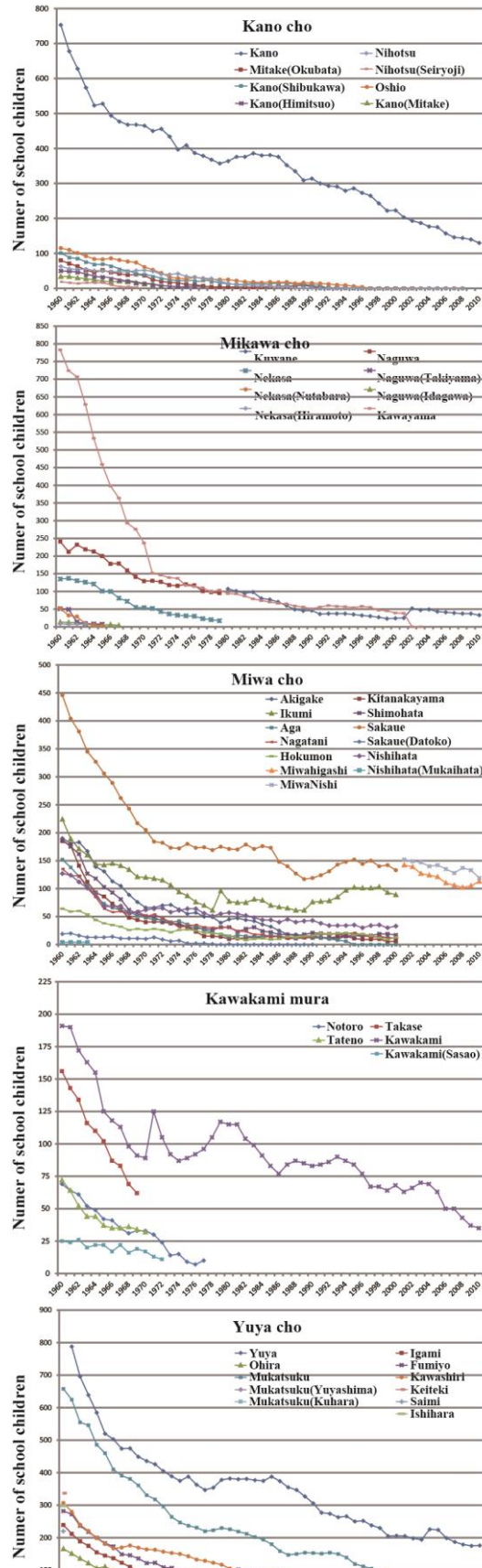


Fig.5. Transition of the number of school children by 5 municipalities

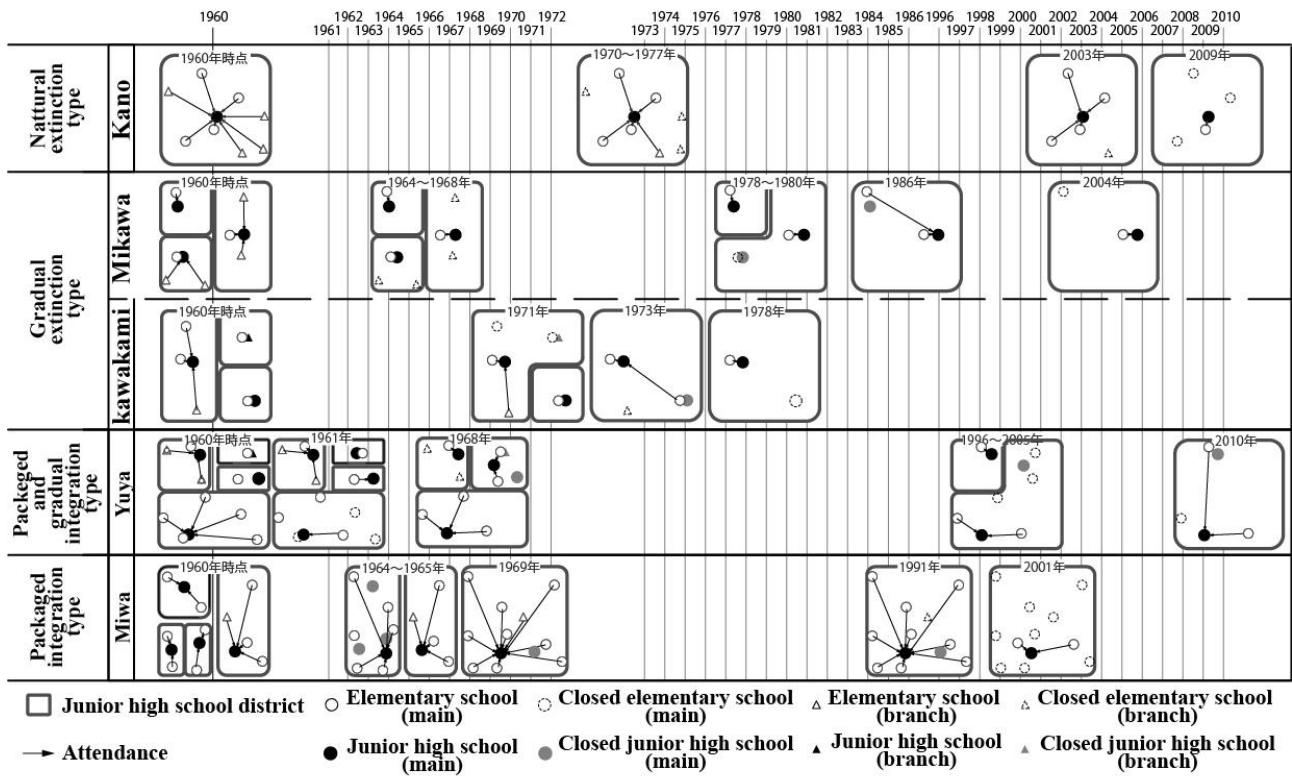


Fig.6. the distribution of schools in 1960 and the reorganization process to 2010 on 5 municipalities

1971, then 1 branch of elementary school and 1 junior high school were closed down in 1973. In 1978, 1 remaining elementary school was closed down, therefore each elementary school and junior high school were consolidated in the early period.

(3) Packaged and gradual integration type

In Yuyacho, there were 8 elementary schools, 2 branches of elementary school, 3 junior high schools and 1 branch of junior high school in 1960. And that, 3 elementary schools were consolidated and 1 new school was established in 1961, then 2 branches of elementary school, 1 junior high school and 1 branch of junior high school were closed down, and 1 new school was established in 1968. Subsequently the integration and abolition of school didn't proceed for the time being. And from 1996 to 2006, 3 elementary schools, 1 junior high school were closed down, therefore elementary school and junior high school were located in 2 areas one by one. And the present time, 2 elementary schools and 1 junior high schools remain. Accordingly, it is highly likely that the remaining elementary schools will be reorganized from now on as well as other municipalities.

(4) Packaged integration type

In Miwacho, there were 9 elementary schools, 1 branch of elementary school and 4 junior high schools in 1960. And that, junior high schools were consolidated and 1 new junior high school was established from 1964 to 1966, then the remaining 1 junior high school was integrated in 1969. Subsequently the integration and abolition of school didn't proceed for the time being. And 9 elementary schools later streamlined to decrease the number of schools to 2 elementary schools at once in 2001.

After all, the premeditated reorganization was executed gradually in Miwacho.

From the above, the reorganizations had taken fixed period in the case of "Natural extinction type" and "Gradual integration type". On the other hand, the reorganization were proceeded in a short period in the case of "Packaged integration type".

On the one hand, the natural extinction and reorganization of schools by decrease in the number of schoolchildren occurred in the municipalities had a few number of schools at 1960, but on the other in the municipalities which had a lot of number of schools at 1960 the premeditated reorganization was executed within a definite period of time.

In short, the number of schools by municipalities influenced the reorganization process. Also, the branch schools were closed down in early stages preceding the main schools.

3-3. Comparison Analysis of the Operation Form of Reuse

Table 1 indicates actual conditions on the operation form of closed school's reuse by municipalities. In this paper, we take up cases of elementary school where many examples exist.

(1) Natural extinction type

In Kanocho, 3 elementary schools and 1 branch school (Mitake) closed down from 2000 are reused as community center, regional exchange facility and so on. All of these are facilities for local residents. One of 3 branch schools closed down at 1970s are reused as community center, but rest of schools aren't utilized.

(2) Gradual integration type

In Mikawacho, 1 elementary school (Nekasa) is reused. All of branch schools are reused as community center, main school

Table 1. Actual conditions on the operation form of closed school's reuse by municipalities

	School name (Branch school)	Year of closed	Remaining facilities S : School building/H : Hall/ M : Facility for providing meals/ P : Play ground/G : Gymnasium B : Boarding-house (Building year*Structure) W : Wood/RC : Reinforced Concrete / S : Steel	Use form	Usage	Management	Operation	Start year	
Natural extinction type	Kano cho	Shibukawa	2009.3	H (1954-W) /M/ P	Use the site of school	Regional exchange facility/Community center	Administration	Neighborhood Council	2011
		Oshio	2009.3	S (1953-W) /H (1956-W) /P	Reuse	Social educational facility	Administration	Neighborhood Council	2009.4
		Nihotsu	2009.3	H (1960-W)/P	Reuse	Community center	Administration	Neighborhood Council	-
		Kano (Mitake)	2003.1	-	Use the site of school	Regional exchange facility	Specified Business	Regional Conference	2005
		Kano (Himitsuo)	1977.3	S (1952-W)	Reuse	Community center	-	-	1977.4
		Mitake (Okubata)	1973.3	-	Unused	-	-	-	-
Gradual integration type	Mikawa cho	Naguwa	1980.3	G (1978-S)	Use the site of school	Another school	Administration	Administration	1981.3
		Naguwa (Idagawa)	1968.3	S (1952-W)	extension and reconstruction	Community hall/garage for fire engines	Administration	Neighborhood Council	-
		Naguwa (Takiyama)	1966.3	-	Use the site of school	Community hall	Administration	Neighborhood Council	-
		Nekasa	1980.3	-	Use the site of school	Post office	Administration	Administration	1981
		Nekasa (Nutabara)	1966.3	-	Use the site of school	Community hall	Administration	Neighborhood Council	-
		Nekasa (Hiramoto)	1964.3	-	Unused	-	-	-	-
	Kawayama	2004.3	S (1987-RC)/G (1987-RC)/P	Reuse	Commercial and industrial association/Sport facility	Administration	commercial and industrial association	2007.4	
	Kawakami mura	Notoro	1978.3	S/B/P	Reuse	Persons with disabilities welfare center	NPO	NPO	1983
		Kawakami (Sasao)	1973.3	S	extension and reconstruction	Polling place/Agricultural facility	Administration	Administration	-
		Tateno	1971.3	S	Reuse	Agricultural warehouse	Administration	Agricultural production corporation	-
Takase		1971.3	-	Submerge	-	-	-	-	
Packaged and gradual integration type	Yuya cho	Igami	2010.3	S (1985-RC) /G (1977-S)/P	Reuse	Sport facility	Administration	Administration	2010.4
		Kawashiri	2003.3	S (1971-RC) /G (1975-S)/P	Reuse	Sport facility (community use)	Administration	Administration	2004.4
		Fumiyo	2003.3	S (1968-RC) /G (1974-S)/P	Reuse	Sport facility (community use)	Administration	NPO/Private	2008.4(S) 2004.4(G)
		Ohira	1996.3	S (1952-W)/P	Reuse	Studio/Interactive facility	Administration	NPO/Private	-
		Keitaki	1961.3	-	Unused	Public park	-	-	-
		Ishihara	1961.3	-	Use the site of school	Community center	-	-	1966(M)
		Saimi	1961.3	-	Unused	Tennis court for junior high school	Administration	Administration	-
		Mukatsuku (Yuyashima)	1968.3	-	Unused	-	-	-	-
		Mukatsuku (Kuhara)	1968.3	-	Unused	-	-	-	-
		Packaged integration type	Miwacho	Akigake	2001.3	S (1952-W)/H (1952-W)/M/P	Reuse	Community use	Administration
Kitanakayama	2001.3			S (1952-W)/H (1952-W)/M/P	extension and reconstruction	Community use	Administration	Administration	2008.4
Ikimi	2001.3			S (1957-W)/G (1968-S)/M/P	Reuse	Community use	Administration	Administration	2001.4
Aga	2001.3			H/M (1952-W) /P	Use the site of school /One part of reuse	Regional exchange facility	Administration	Regional Conference	2002.10 2001.4(H)
Shimohata	2001.3			S (1959-W)/H (1951-S)/M/P	Reuse	Community use	Administration	Administration	2001.4
Nishihata	2001.3			S (1951-W)/G (1975-W)/M/P	Reuse	Community use	Administration	Administration	2001.4
Nagatani	2001.3			S (1971-RC) /G (1983-S)/M/P	Reuse	Community use	Administration	Administration	2001.4
Hokumon	2001.3			-	Use the site of school	Regional exchange facility	Administration	Regional Conference	2003.4
Sakaue	2001.3			S/G/P	Reuse	Another school	Administration	Administration	2001.4
Sakaue (Dateko)	1991.3			-	Unused	-	-	-	-

is reused as official facilities, public school, post office and commercial and industrial association.

In Kawakamimura, 1 elementary school (Takase) was submerged into dam reservoir. All the rest of schools are reused as the persons with disabilities welfare center, polling place, agricultural warehouse.

(3) Packaged and gradual integration type”

In Yuyacho, all school buildings of 2 schools reorganized at 1960s were dismantled, and the sites of them are reused for other use. One of school (Ishihara) reorganized at 1960s was reused as the nursery school, supply center of school meals and community center just after the school was closed. At present, the school is reused as only community center. Elementary schools closed down from 1989 are reused as the studio, Interactive facility, sport facility and regional exchange facility.

(4) Packaged integration type

In Miwacho, all of branch schools aren't utilized. Elementary schools closed down at one time in 2001 are operated in accordance to that plan to use the closed school.

Regarding actual conditions on the operation form of closed school's reuse, the branch schools are used as community center or unused. The elementary schools closed down in early time aren't used effectively. The other closed schools are used as various facilities in each area.

4. Conclusion

In this study, we analyzed the reorganization process of elementary/junior high schools and actual conditions on the operation form of closed school's reuse in Yamaguchi

prefecture after 1960 until 2010. The following is the knowledge gained from this study.

In Yamaguchi prefecture, the rates of closed school are very high at northeast areas, mountainous areas and island areas. In these areas, the number of school at 1960 has an influence on the type of reorganization process. In the municipalities which had few schools in 1960, Elementary schools were gradually consolidated as “Natural extinction type” and “Gradual integration type”. In contrast, in the municipalities had many schools in 1960, Elementary schools were consolidated within a short period of time as “Packaged and gradual integration type” and “Packaged integration type”.

Regarding the operation form of closed school's reuse, the relationship between the actual conditions on the operation form of closed school's reuse and type of integration and abolishment isn't particularly recognized. And it is typical that the closed schools are reused as the public institution and district facilities at the present time. Especially, many elementary schools closed down at one time in Miwacho. Before schools closed down, the organizations for reuse were formed in each area. The regional organization and administrative organ tackled the problem of abolition or closing of a school as one. Furthermore they draw up the practical use plan for the future. In this case, the more important thing is the role sharing between public and private sectors.

We position this case as effective model to compose many problems about closed school. We consider the local governments are expected to take a more proactive stance to utilize the closed school in many other areas.

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