

# A study on the direction of improvement by analyzing the characteristics of Goshiwons for urban regeneration in deteriorated residential blocks

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## ABSTRACT

The purpose of this study is to propose a direction for improvement by analyzing the characteristics of Goshiwon, non-dwellings. For this purpose, before analyzing the policy alternatives and plans for improvement, this study classifies the highly density area of Goshiwons by analyzing the characteristics of its residents. First, this study derived the process and limitations of the related laws by analyzing the policies and regulations about the domestic Goshiwons. Second, this study analyzed the precedent research and case studies about domestic Goshiwons. Third, the types of Goshiwons were classified according to the distribution of resident types. Finally, this study proposes a policy alternative by analyzing the planning characteristics of the representative cases by types.

## ARTICLE HISTORY

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## KEYWORDS

Goshiwon; supported housing; affordable housing; social housing; urban regeneration

## 1. Introduction

### 1.1 Background and purpose of research

As interest in the Goshiwon<sup>1</sup> has been heightened because of the recent series of incidents and domestic housing and welfare issues, there is a need for clear legal regulations on Goshiwons, and a survey to improve the residential environment of residents has emerged. It can be confirmed that South Korea's concept of housing in Goshiwons was formed with the start of the state examination in the 1970s. Since then, the relocation of Seoul National University campuses and a schools from the 1970s to the outside of the four main gates of old Seoul naturally formed "Goshi Villages", such as Dongjak-gu and Shillim-dong, and in the 1990s have become a type of housing for college students, with the weight of the IMF, the spread of online lectures, and the introduction of the law-school system.<sup>2</sup> Although many accidents and problems have arisen from the 70s to the present day, the number of high-school students has steadily increased, to about 11,800 nationwide, with 80 per cent of them concentrated in Seoul.<sup>3</sup>

The purpose of this study is to analyze the background and status of the Goshiwons and to suggest ways to improve them according to the characteristics of each type in future projects for improving the

Goshiwons in South Korea by classifying cases by type according to the type of residents.

Figure 1 describes the backgrounds and changes of the Goshiwon since the 1970s. It also describes the situation at that time through some articles in the newspaper.

To that end, First, we looked at the policies and current status of the Goshiwons in South Korea. Second, prior research related to Goshiwons was analyzed. Third, the areas where the Goshiwons are concentrated were analyzed according to the characteristics of the residents. In order to typology of Goshiwons, the residents of Seoul visited many Goshiwons in Seoul through the cooperation of the city's residential officials and conducted interviews with residents, actual measurements of space, and analysis of programs. and fourth, the planning characteristics of the common Goshiwons were analyzed. Finally, we propose policy and planning improvements. Although this study categorized Goshiwons by region and proposed improvement strategies for each type, the study focused on analyzing and categorizing the current situation of Goshiwons. As a result, the proposed improvement strategy is rather general.

### 1.2 Previous studies

For the purpose of this study, a prior study in South Korea was analyzed. Recent domestic studies have been

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<sup>1</sup>A "Goshiwon" is a space not intended for residential use but in which people are living. The term originated from the reading rooms that were originally study places in which test takers could take a nap for effective learning. In the wake of the 1997 foreign-exchange crisis, however, the Goshiwons gradually began to turn into lodging places for low-income people, and the low rent rather than the poor facilities or environment, makes one-person poor households vulnerable to social and economic conditions.

<sup>2</sup>Jin Mi-yun, Choi Sang-hee (2018), Supply of Goshiwon, Status of Operations Management, and Future Policy Direction, *Land Housing Research*, Vol. 26, no. 3, pp. 5–35.

<sup>3</sup>National Emergency Management Agency, 2017 National Emergency Management Agency Statistical Yearbook.

Year	Evenement	Aspect of transition
1970s	• National Exam	• The student gathered in the suburbs of Seoul, shabby vinyl houses and rural houses
1980s	• Cram school has been moved out of the four main gates of old Seoul • Relocation of Seoul national University campuses on Shillim-dong	• The Gosichon was naturally formed around Shillim-dong and Noryangjin . • There are various types of boarding houses, academy, reading rooms, etc.
1990s	• Currency Crisis	• Inflow of general public official and repeater • Start inflow of general low-income group
2000s	• Change of the national examination	• The number of students is decreasing, but it has been taken up by the office workers
2010s	• Spread of Online lecture, Implement of Law school	• The number of students in Goshiwon is constantly decreasing.

Data : 3siot (<http://www.3siot.org/>)

Data : Shindonga (2006)



Data : Infostock Daily (2018)



Data : KBS (2018.04.23)

**1970s**  
Seoul National University moved to Shillim-dong, Gwanak-gu, at the start of the national exam.

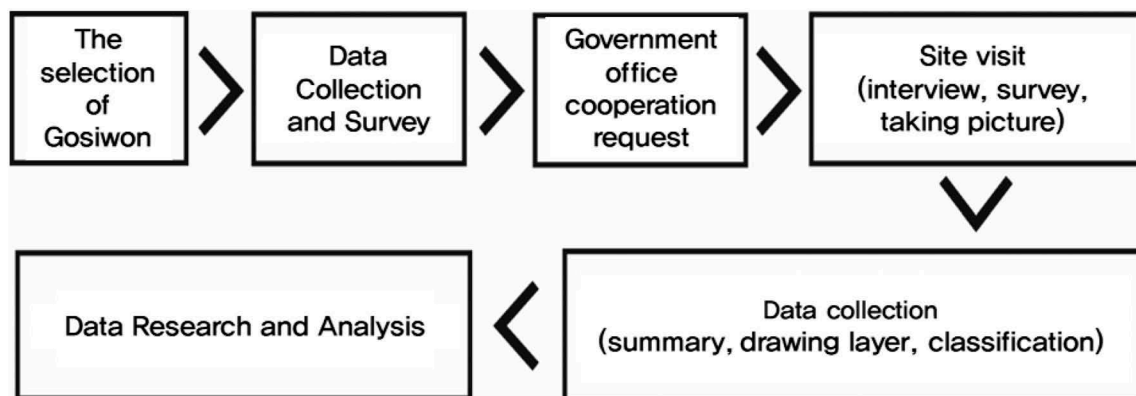
**1980s**  
As cram schools moved out of the four main gates of old Seoul, Goshichon were formed in Noryangjin and Shillim-dong.

**1990s**  
An increase in the proportion of ordinary low-income group, general public servant, and repeater.

**2000s ~**  
The introduction of law school and the spread of online lectures have reduced the proportion of students.

**Figure 1.** The background and change process of Goshiwon.

(Source: 3siot, Shindonga, InfostockDaily, KBS, Modern History Digital Archive, A Study on the Conditions of Provision and Management of Goshiwons and Future Policy Direction (2018))



**Figure 2.** Process of the study.

mainly conducted in three aspects. First, plan related to Goshiwons (Lee Jong-won, Lee Ho-young, Hong Won-hwa, 2009; Seok Ho-tae, Yang Jeong-hoon, Kim Jin-ho, 2009); Second, factual survey related to Goshiwons (Cheong So-yi, Park Joon-young, 2010; Gwon Jeong-hyun, 2013); Third, related policies and regulations (Jin Mee-youn, Choi Sang-hee, 2018; Park Hyung-joo, 2008; Shin Sang-young, 2015; Lee Jung-yeon, 2014). Research is being conducted on various aspects, but studies suggesting directions for improvement by typifying test sites according to residence characteristics are insufficient. Therefore, this is a basic study for classifying public sources according to the type of residents, suggesting a direction of planning and supporting policies by type.

Table 1 summarizes the preceding research in this study.

## 2. Domestic Goshiwon policy

### 2.1 Laws relating to Goshiwons

The problems of accidents and safety in Goshiwons have long been concerns. Accordingly, provisions on Goshiwon safety standards have been revised over the years. However, Goshiwons built before the year of revision show limits, in that active improvements are not being made the policies are not legally effective. For example, the Special Act on the Safety Management of Multi-use Facilities, revised in 2009, mandates the installation of simplified sprinklers to prevent fires in Goshiwons, but previous buildings are not regulated by sprinklers.

Table 2 contains changes of laws related to the Ghoshiwon.

**Table 1.** Advanced research.

Division	Author(Year)	Main Contents
Plan	Lee, Jong-Won, Lee, Ho-Young, Hong, Won-Hwa (2009)	A Research on Actual Condition for Fire Fighting Environment in Various Plan Types of Goshiwon and a Study on the Improvement in Fire Safety Capacity
	Seok, Ho-Tae, Yang, Jeong-Hoon, Kim, Jin-Ho(2009)	A Study on the Evacuation Time according to the Width of Corridor, Emergency Exit and Staircase in Study room's Fires
Factual Survey	Cheong, So-Yi, Park, Joon-Young(2010) Gwon, Jeong-Hyun(2013)	A Study on the Management Status Problems of "Goshiwon" Usage Status and Improvement Direction of Goshiwon
Regulations/Policy	Jin, Mee-Youn, Choi, Sang-Hee(2018)	A Study on the Conditions of Provision and Management of Goshiwon and Future Policy Direction
	Park, Hyung-Joo, Shin, Dong-Cheol(2008)	A Study on Fire Safety Regulatory Codes for Boarding Occupancy Facilities used as KOSIWON through an Investigation to the Yong-In KOSIWON's Fire Case of with Global Fire Performance Code
	Shin, Sang-Young(2015) Lee, Jung-Yeon(2014)	The Actual Situation and Policy Direction of quasi dwelling in Seoul A Study on the Classification and the Utilization Improvement Alternatives of Studio Type Public Facilities

**Table 2.** Laws of Goshiwon.

Law(Year)	Main contents	Abstract
Regulations on safety management of multiplex available premises (2009)	- When changing the inner structure, it is required to report in advance and use incombustible material. - It is required to install a simplicity sprinkler in Multiplex Available Premises.	Fire Safety Enhancement
Enforcement Decree of Building Law (2009)	- Restrictions on facilities that interfere with fire prevention.: Facilities such as medical facilities, elderly care facilities, creche infant and apartments cannot be installed in the same building as the Goshiwon. - Finishing materials for buildings shall be made of materials that do not interfere with fire protection.	Restrictions on the installation of Goshiwon depending on the situation, Guidelines for finishing material
Enforcement Decree of Building Law (2010)	- Mandatory installation of windows or facilities for lighting and ventilation. - The criteria setting of boundary walls between rooms and ground between floors standards.	Enhancement fire and evacuation safety standard
Enforcement Decree of Building Law (2011)	- Prevent illegal accommodation from being built in residential areas. - The floor area of the Goshiwon, which The second neighborhood living facilities, is reduced from 1,000 square meters to less than 500 square meters.	Intensified regulation of utilization
Enforcement Decree of Building Law (2012)	-To prevent illegal renovations of the interior of a house, such as the illegal increase of the number of households in a house, an increase in fines for buildings that add to or break up without reporting.	Increase the fine of illegal renovations.
Enforcement Decree of Building Law (2015)	- Restrictions on the Location of Undergrounds in Goshiwon - Regulations for minimum corridor width 1.2 m and 1.5 m - For six stories or higher, it is mandatory to install a smoke eliminating equipment. - The Goshiwon and the maternity hospital cannot be installed in the same building. - The mandatory installation of boundary walls as refractory structures. - Reinforced Concrete Thickness 10cm, Plain Concrete Thickness 10cm, not less than 19cm in Concrete Block Structure.	Comfort of Residential Environment, Evacuation and Fire Protection Criteria
Enforcement Decree of Building Law (2018)	- The second neighborhood living facilities (Total floor area less than 500m <sup>2</sup> ) - Accommodation apartments (Floor area 500m <sup>2</sup> or higher) - Quasi-housing (apartments that do not belong to the second neighborhood living facilities)	2018's Goshiwon legal justice

(Source: The Legislative Office (2018), A Study on the Conditions of Provision and Management of Goshiwon and Future Policy Direction(2018))

## 2.2 Laws and systems related to quasi housing

To prevent non-dwellings such as Goshiwons and to provide a minimum living environment and space, the government has proposed various housing welfare policies since 2006, as shown in the table below. However, because non-dwellings residents often want to live near their jobs, legal standards are limited and the policies are not actively enforced.

Table 3 describes changes in housing welfare policies and systems since 2006.

## 3. The classification of highly density area of Goshiwon by resident type

Goshiwons are divided into three main types of residents in the area.

**Table 3.** Housing welfare policy and system.

Police/Law (Year)	Main contents	Abstract
Emergency Aid and Support Act (2006)	- A system that provides quick support for the cost of living for one month to those in need of help in times of crisis such as difficulty of living.	Immediate support in case of emergency
Seoul Housing Voucher Program (2010)	- If the rent for low-income households exceeds a certain level of income, some of the rent is provided as a coupon-type exchange voucher.	Partial subsidy for rent and monthly rent for low-income households
homeless welfare law (2012)	- Protection by Homeless Welfare Facilities. - Protection by social welfare facilities and protection by other laws. - Support for the supply/temporary housing costs of rental housing. - Other housing support provided under the Presidential Decree.	Appropriate housing support for the homeless
monthly rent loan (2015)	- monthly rent loan for the Stability of Low-income Households	lower-income group housing assistance
Low income homeowners Support (2017)	- Support comprehensive housing improvement by assessing the level of old age of a house, such as structural safety, facilities and closures, among households with low economic income	lower-income group improvement of living conditions
housing allowance system revision (2018)	- Provide housing expenses for all households with median income of 43% or less based on income recognition regardless of their working capacity or age.	lower-income group improvement of living conditions

(Source: The Legislative Office, Ministry of Land, Infrastructure and Transport, Seoul youth housing portal Re-edit)

First, it is a busy area of Goshiwons (Gangnam) centered on office workers. Starting with Teheran-ro, the main road in Gangnam-gu, Seoul, there is a concentration of Goshiwons along both sides of the Seocho-gu. Also, a new form of Goshiwons has been found near some large hagwons. It has the highest monthly rent in Seoul,<sup>4</sup> with 22.1 percent of the total number of public institutions opened before 2009,<sup>5</sup> which is significantly lower than the Seoul average of 31.6 percent, indicating that there are many public places in the new good environment.

Second, Goshiwons tend to be in a busy area centered on job seekers. Dongjak-gu is a huge cluster of educational facilities, related facilities, and Goshiwons for national tests, with the Noryang district and large academies. Affordable retail stores, restaurants, and cultural life tailored to students create a complex Goshi-village atmosphere. The number of Goshiwons stands at 498, the second largest area in South Korea after Gwanak. Also, the ratio of Goshiwons that opened before 2009 is 36.9 percent, with the portion of the aged Goshiwons being significantly higher. Third, Goshiwon is a busy district (Dongdaemoon) centered on day laborers. It is concentrated around subway stations, such as the Sindang-dong Station, Jegi Station, and Seomyeon Station on Line 1. The Goshiwon monthly rent is the lowest in Seoul (average of 230,000 won), and facilities are often poor. The proportion of low-income and foreign workers among Goshiwon residents is high.

Table 4 describes the location of the Goshiwon's areas in Seoul. It contains the population change by regions, geographical features and sociocultural characteristics.

Table 5 summarizes the analysis of main cases by regions.

## 4. An analysis of the characteristics of the Goshiwon's planning by type

### 4.1 Characteristics of highly density area of Goshiwon and residents

For two months between January and February 2019, we conducted an on-site survey of residents of Goshiwons, and interviewed managers for the purpose of surveying the actual condition of the residential environment and analyzing the planned characteristics.<sup>6</sup>

The details of the survey of the areas visited are presented in Table 5, which summarizes the four cases in which there are implications among research cases, as well as the characteristics of unit-generation units and key spaces.

Figure 2 represents the research procedure.

We found that Goshiwons in Dongjak-gu, which has a high percentage of job seekers, had a relatively good residential environment and that public facilities were equipped. In Dongdaemun-gu/Seodaemun-gu, monthly rent was relatively lower than in Dongjak-gu, and the aging residential environment and lack of public space was found. In addition, as the residents were mainly employed, it was urgent to improve the living environment and expand the community space to secure the quality of life.

### 4.2 Characteristics of Goshiwon operating methods

Goshiwons are not a legally defined type and therefore exist in various forms and operate in a way that avoids legal restrictions. The Goshiwons are largely operated in four ways: multiple houses, illegal multi-family houses, one-room houses, and ordinary houses.



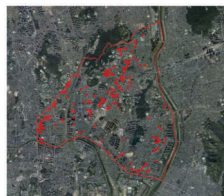



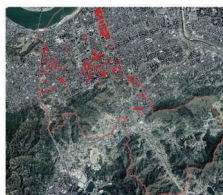





<sup>4</sup>Kookmin Bank (2011), A Study on the Trend of Housing Price in South Korea.

<sup>5</sup>National Human Rights Commission of Korea (2018), A Study on the Actual Conditions of Non-Housing and the Improvement of the System.

<sup>6</sup>Interviews and surveys of Goshiwon dwellers were conducted through consultation with Seoul Metropolitan Government officials.




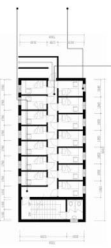

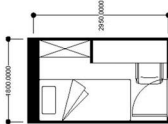
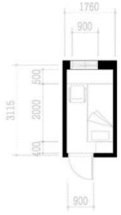







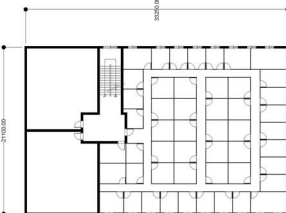
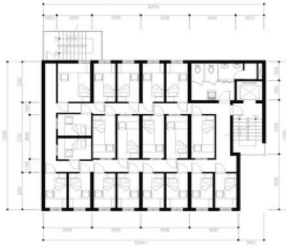

**Table 4.** Classification of highly density area of Goshiwons according to resident type.

District	Gangnam-gu	Dongjak-gu	Dongdaemun-gu
Distribution			
Population Density (people/km <sup>2</sup> ) <sup>a</sup>	13,859	25,032	25,630
Map			
Regional Characteristic	- Located near a large private educational institute and main street (Teheran-road)	- Large institutes, related facilities, and Goshiwons are concentrated to form town	- Concentrating around a Sinseol-dong Station, Jegi Station, Cheongnyangni Station, Hoegi Station
sociocultural characteristic	The average monthly rent for a Goshiwon is 410,000 won. the highest monthly rent of an Goshiwon in Seoul. (National Housing Price Trend Survey(2011))	- Affordable prices for test student - A variety entertainments and restaurants aimed at the younger generation create the exclusive culture of Noryangjin	-The average monthly rent for a Goshiwon is 230,000 won. the lowest monthly rent of an Goshiwon in Seoul.(National Housing Price Trend Survey(2011)) - Poor facilities - The percentage of low-income earners and foreign workers among Goshiwon residents is high.(A study for the provision of housing support plan for non- dwellings households (2013))
District	Seocho-gu	Gwanak-gu	Seodaemun-gu
Distribution			
Population Density (people/km <sup>2</sup> )	9,326	17,587	18,331
Map			
Regional Characteristic	- Located near a large private educational institute and main street (Teheran-road)	- There are 901 Goshiwon in the area. It is the largest Goshiwon area in the country. There are 74.3 Goshiwon per 10000 houses. It is the most densely populated area of Goshiwon in the country. (Identification of non- dwellings situation and improvement plan,2018)	- Concentrating around a Hongik Univ Station, Sinchon Station, Ewha Womans Univ Station, Kyonggi University and Myongji University.
sociocultural characteristic	-There are 21.7 Goshiwon per 10000 houses. The number of Goshiwons in the area is smaller than the average in Seoul. (Identification of non- dwellings situation and improvement plan, 2018)	- In the 1970s, the Goshiwon town which in Daehak-dong, Gwanak-gu was established with the relocation of Seoul National University campus and its impact is still ongoing	-The largest room area in Seoul with an average of 10.3 square meters -The average monthly rent for a Goshiwon is 360,000 won. It is second most expensive area for Goshiwon monthly rent in Seoul. (National Housing Price Trend Survey(2011))

(Source: Current State and Policy Direction for Gosi-Housing Establishments in Seoul (2010))

<sup>a</sup><http://data.seoul.go.kr/>, 2018.

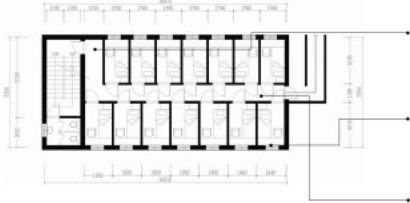

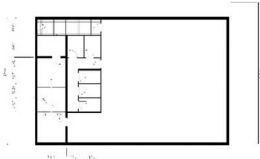
**Table 5.** Residential environment analysis of Gangnam, Dongjak, Dongdaedmoon.

Case	Danbee House		Han Teut Goshiwon		Winwin Goshiwon	
Site	31, Teheran-ro 14-gil, Gangnam-gu, Seoul, South Korea		38, Noryangjin-ro 16-gil, Dongjak-gu, Seoul, South Korea		411, Gosanja-ro, Dongdaemun-gu, Seoul, South Korea	
Characters of Site	<ul style="list-style-type: none"> <li>- Located near large private educational institute</li> <li>- Share housing type</li> </ul>		<ul style="list-style-type: none"> <li>- Located in a residential area</li> <li>- Located in a narrow alley</li> </ul>		<ul style="list-style-type: none"> <li>- Commercial facility on the first floor</li> <li>- Located near subway station</li> </ul>	
Plan						
Room Plan						
Room Image						
Common Space						
Characteristics of Plan	shared bathroom Corridor width: 1000mm Number of rooms on one floor: 7 ~ 10 Number of exits on one floor: 2		rooftop Corridor width: 1235mm Outside window size: 900 × 900 Percentage of public space: 0% Number of rooms on one floor: 14 Number of exits on one floor: 2		communal kitchen Corridor width: 1030mm Internal window size: 500 × 600 Percentage of public space: 3.17% Number of rooms on one floor: 32 Number of exits on one floor: 1	
Name	Soho Goshiwon		Sejong Goshiwon		Jiseong Goshiwon	
Site	212, Apgujeong-ro, Gangnam-gu, South Korea		60, Manyang-ro 14-gil, Dongjak-gu, Seoul, South Korea		25, Cheonho-daero 35-gil, Dongdaemun-gu, South Korea	
Characters of Site	<ul style="list-style-type: none"> <li>- Located in a residential area</li> </ul>		<ul style="list-style-type: none"> <li>- Commercial facility on the first floor</li> <li>- Located in the Noryangjin housing maintenance area</li> </ul>		<ul style="list-style-type: none"> <li>- Commercial facility on the first floor</li> <li>- Located in a residential area</li> </ul>	
Plan						

(Continued)



**Table 6.** Building and floorplans characteristics.

Division (Case)	Plan	Characteristics	entrance
Middle corridor type (Han Tteut Goshiwon)		- All rooms have windows	2
Rotation type (Winwin Goshiwon)		- Some rooms have windows - Dangerous in case of fire escape.	2
Isolation type (Winwin Goshiwon)		- Illegal rooftop house - Dangerous in case of fire escape. - Poor housing conditions	2

First, it is a legal operation method to use multiple houses. Multiple houses, a type of single-family homes, do not have a complete residential form and can have a bathroom for each room, but cooking is considered illegal. The kitchens are jointly run. This case can be seen as a legal form of residence in the high court.

Second, it is illegal operation using multiple houses. Because a Goshiwon is vulnerable to fires, many of the Goshiwons' cooking facilities are set up to attract residents, even though it is illegal to set up an indoor cooking facility inside the Goshiwon.

Third, it is an illegal operation method that uses one-room housing. The method is to register buildings as Goshiwons and operate one-room residences equipped with cooking facilities illegally. The main reason for this is to maximize rental income by reducing the parking area, using the fact that one-room housing is legally required to have 0.6 parking area per household, but one parking area per 134 m<sup>2</sup>.

Fourth, it is illegal to rent a small room in an ordinary house, which is generally referred to as a gibang.

In addition, the Goshiwons are illegally operated for various purposes, with 70 percent of the Goshiwon buildings in each region being used as second-class residential facilities, with 2.4 percent being working facilities, 2.2 percent being educational facilities, and 1.2 percent being accommodation facilities.

### 4.3 Characteristics of planning according to Goshiwons building

#### 4.3.1. Planning of buildings and floor plans

Goshiwons' building plans and typical plans could largely be characterized into three types: duplicated corridor, corridor, and single type.

In the duplicated corridor type, the most favorable residential environment of the high-level plan is to secure light and ventilation by placing windows in all individual rooms, in the form of sills located on both sides of the central corridor.

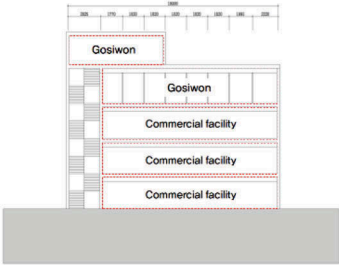
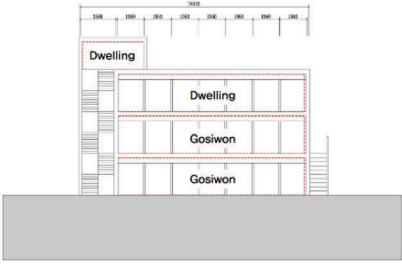
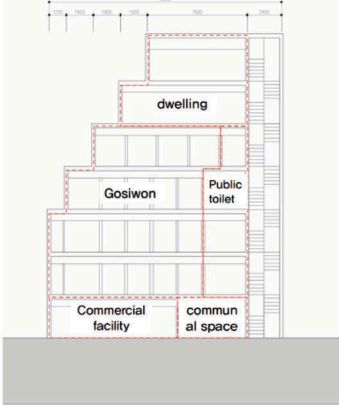
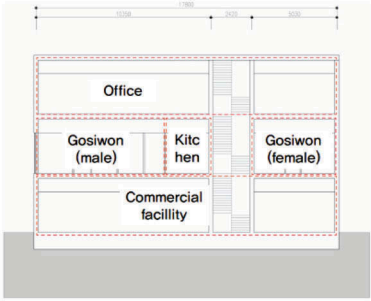
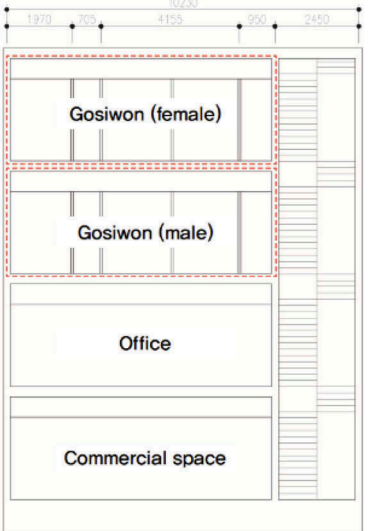
The corridor type creates a rotating corridor inside a high-sill circle and places threads in the outer and center sections. As a floor plan to secure more yarn, the interior of the building will have poor windowless threads, which will be leased at a lower price than windowed ones.

A single type is a form of securing additional threads through illegal alteration of the water tank chamber located on the roof of the Goshiwon building or by installing an illegal building. Because it is not a normal method of building, it provides poor housing environment and safety.

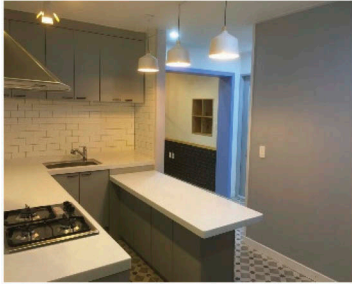


The three types of corridors are 800–1000 mm wide, which is narrower than in normal buildings and can cause considerable inconvenience for circulation. The narrow corridor width was thought to require legal restrictions, in that it was hard to escape in case of fire and that noise generated from the chamber would be transmitted to the side rooms, thereby reducing the quality of the residential environment.



**Table 7.** Vertical circulation characteristics.

Division (case)	Section	Characteristics
Mixed with commercial facility (Winwin Goshiwon)		-Included Commercial Facilities on Each Floor
Mixed with dwelling (Han Tteut Goshiwon)		- Residential Facilities and Goshiwon
Mixed with commercial facility,dwelling (Sejong Goshiwon)		- Included Commercial Facilities and Communal Spaces - Mainly located on the main street
Dividing zone by gender (Jiseong Goshiwon)		- Facility classification by gender on each floor -Discomfort in using public space
Dividing gender by floor (Jang won Goshiwon)		- Advantageous to security and living

**Table 8.** Communal space's characteristics.

Division (Case)	Office workers (Dan bee House)	Students (Han Tteut Goshiwon)	Day workers (Jiseong Goshiwon)
Communal bathroom	o	o	o
Communal shower room	o	o	o
Kitchen	o	o	o
Utility room	X	X	o
Storage	X	X	o
Entrance	o	o	o
Image			
	Kitchen	Communal bathroom	Entrance

**Table 9.** Community space's characteristics.

Division (Case)	Office workers (Soho Goshiwon)	Students (Sejong Goshiwon)	Day workers (Winwin Goshiwon)
Library		o	
Lounge	o	o	
Maintenance		o	
Rooftop	o	o	o
Image			
	Lounge	Library	Rooftop

Table 6 summarizes the characteristics of the building plans and features.

#### 4.3.2. Vertical circulation plan

The vertical circulation of Goshiwons could be largely grouped into five types: commercial- residential, commercial, residential, separated, and male and female.

The commercial mixed type is the type of commercial facility planned for the upper or lower floors of the building.

Mixed-use housing is divided into layers of Goshiwons and ordinary houses in the building, and movement to the rooftop, which is used as a smoking, laundry, and public space, may be encountered by both the high-ranking residents and the average resident.

A commercial-residential complex is when nearby living facilities, housing, and public information centers are divided into floors. It is a type that is often seen on the side of the boulevard where commercial facilities are usually located.

The two-sided separation type uses some layers in the building as a test source, but divides them into two

directions around the vertical core. Since the kitchen, which is a common space, exists only on one side, it has been confirmed that there is inconvenience in the wires caused by the separation of space, such as having to pass through the core space to use it.

The vertical division of men and women is the type that separates the layers according to the sex of the Goshiwons' residents, and is designed for the security of the residents and their convenience in life.

Table 7 describes the cross-sectional conceptual diagrams and the characteristics of the spatial composition.

#### 4.3.3. Public space plan

Both types of public offices showed similar views in planning public spaces. Public toilets, showers, kitchens, and front doors (including new ones) were used together, except for core spaces such as elevators and stairs for vertical movement and management. Other public spaces were difficult to find.

Table 8 analyzes the characteristics of the Communal Spaces.

#### 4.3.4. Community space planning

There was a difference in community space by region. In the Goshiwon mainly used by Office workers, the restroom, small community space, and canteen were checked, whereas in the Goshiwon mainly used by students was operating a library or lounge for the students who were the main residents. Compared to the above two regions, it was difficult to identify community spaces in most Goshiwon mainly used by day workers, where monthly rent is low and the environment is poor. All three types of apartments had rooftops, but the physical environment was not so good that they were not used as community spaces and were used for smoking, laundry drying, and baggage storage. The rooftop environment of the apartments surveyed in this study was not good, but the rooftop can be used as a community of residents if the environment is good.

Table 9 is an analysis of the characteristics of Community Spaces.

## 5. Conclusion

Policies have also changed and research has been under way recently as interest in domestic housing welfare and Goshiwons has increased. The purpose of the plan is to identify the background and status of the high-ranking officials and to categorize the Goshiwon types according to the type of residents in order to suggest a direction for planning and policy improvement by type.

Depending on the residents' characteristics, Goshiwons in Seoul can be classified into Gangnam/Seocho-gu with a large number of workers, Dongdaemun/Seodaemun-gu with a large number of students, and Dongdaemun/Seodaemun-gu with a concentration of low-income and daily workers.

First, the Gangnam/Seocho-Gyeong-gu area had relatively high monthly rents and a pleasant residential environment because of the characteristics of high-income workers.

Second, in Dongjak-gu/Gwanak-gu, large-scale hagwon students are concentrated, showing the local characteristics of preparing for college entrance exams or public-service entrance exams. In the Goshiwon district, for a college student who is not preparing for job, the living conditions were relatively good with the financial support of his parents. In particular, various entertainment facilities and restaurants tailored to those in their 20s and 30s are creating a unique culture in the region.

Third, Dongdaemun/Seodaemun-gu, Seoul, has the lowest monthly rent in areas where low-income people and day laborers are concentrated. However, the residential environment is relatively poor.

The investigation and analysis of these sources resulted in the following problems and limitations.

First, the Goshiwon system is largely operated in four ways: as multiple houses, illegal multiple houses, one-room houses, and general houses. As

such, it is not clearly part of the legal code and thus operates as an illegal residence in various forms. In the future, tougher legal sanctions and continuous inspections and management will be needed to resolve them.

Second, in common, problems such as lack of public space, obsolescence of facilities, and lack of openings and closures in individual rooms were recognized. Depending on the characteristics of the residential area, Goshiwons where students and job seekers reside can propose a space for daily workers, such as libraries, sports spaces, rest areas, and, finally, a space for psychological healing and community formation, and Goshiwon, where office workers reside in general can offer a space for joint meetings and devices.

Studies have shown that, depending on the type of resident, the programs and facilities of the public spaces that should be proposed in the Goshiwon-congested area should be diversified. In addition, the priority of policy support was given, indicating the urgency for policy training based on local and resident characteristics, not on uniform institutionalization.

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