

# Analysis on the Actual Status of Users of Public Nature Burial and Cremated Bodies Using the Public Cremation Facilities in the Capital Area through the Funeral Information System and the Activation Plan of the Public Nature Burial

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## Abstract

*In the study, we suggest that the activation plan of the public nature burial in the capital area through funeral information system as follows. First, according to the report on the social survey announced by the National Statistical Office in December 2017, the Korean people's preference of nature burial was 43.6% while the actual utilization rate of national nature burial in 2017 was only 8.8%, which showed a huge gap between preference and utilization rate of nature burial. Therefore, through the activities to improve the awareness of nature burial by performing the national promotion and education, and also the investment for the expansion or improvement of nature burial facilities in the level of central government and local government, the preference of nature burial should be led to the actual demand. Second, during the period from 2011 to 2018, the utilization rate of public nature burial in the capital area was annually increased by average 26.9%, which showed the huge increase of demand for nature burial. Thus, each local government should carry forward the policies for expanding the supply of public nature burial focusing on the woodland burial showing the high preference of users of public nature burial. Third, even though the public cremation facilities are installed or operated by local governments in the capital area, Seongnam City without the public cremation facilities should install the public nature burial for the enhancement of users convenience by providing the One Stop Total Funeral Service.*

**Keywords:** Funeral Information System, Capital Area, Public Cremation Facilities, Cremated Bodies, Public Nature Burial.

## 1. INTRODUCTION

The "nature burial" means holding a funeral by burying the bone-dust of cremated remains under or around a tree, flower, or grass [1]. For the spread of environment-friendly funeral culture, Korea has enforced the

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nature burial system since May 26<sup>th</sup>2008 through the revision of 「Act on Funeral Services, etc」. However, out of the national cremated bodies (241,665) in 2017, the users of nature burial were only 21,220(8.8%) [2].

In order to understand the actual state as above, this study selected the research scope from 2011 to 2018 when the Ministry of Health and Welfare enforced the Funeral Information System in the national which was established to operate the whole national cremation facilities in the unified reservation system [3]. This study also aimed to suggest the measures for vitalizing the public nature burial by comparatively analyzing the users of public nature burial and cremated bodies using the public cremated facilities through the Funeral Information System out of corpses (open tomb remains and stillborn babies excluded) of each local government in the capital area, and also analyzing the effects of the increase of users of public cremation facilities on the increase of users of public nature burial.

In this study, the cremated bodies using the public cremation facilities through the Funeral Information System mean the cremated people using the Online Cremation Reservation Service in Funeral Information System in which users could use the cremation service at desired time and place due to the establishment/operation of the unified cremation reservation system in the national under the 「Act on Funeral Services, etc」 [4].

## 2. Current operation status of public cremation facilities and public nature burial in the capital area

In the capital area, total six public cremation facilities are installed or operated by total five local governments such as two facilities in Seoul Metropolitan City, one of each Suwon City, Yongin City, and Seongnam City in Gyeonggi-do jurisdiction area, and one in Incheon Metropolitan City. Out of them, the local governments operating the public cremation facilities and public nature burial together are total four cities such as Seoul Metropolitan City, Suwon City, Yongin City, and Incheon Metropolitan City, except for Seongnam City without the public nature burial facilities.

Regarding the opening of public nature burial of each local government in the capital area, Incheon Metropolitan City opened the public nature burial for the first time in August 2008, which was followed by Seoul Metropolitan City in November 2008 [5,6], Suwon City of Gyeonggi-do in September 2009, and Yongin City in April 2014 (Table 1) [7,8].

**Table 1. Three Current status of concurrent installation of public cremation facilities and public nature burial sites of each local government in the capital area.**

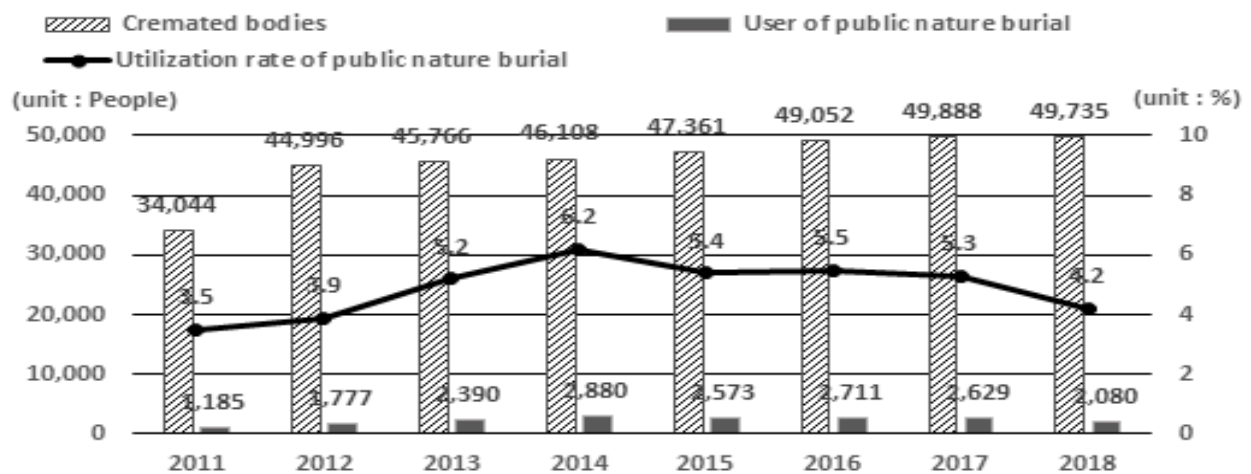
Sort	Seoul Metropolitan City	Gyeonggi-do		Incheon Metropolitan City
		Suwon City	Yongin City	
Public cremation facilities	2 places	1 place	1 place	1 place
Opening date of public nature burial	November 2008	September 2009	April 2014	August 2008

### 3. Analysis on the actual utilization status of public cremation facilities and public nature burial of each local government in the capital area

#### 3.1 Seoul Metropolitan City

The cremated bodies using the public cremation facilities in Seoul Metropolitan City through the Funeral Information System are continuously increasing every year. Also, the 34,044 cremated bodies in 2011 were increased by 15,691(46.1%) to 49,735 in 2018, which showed the 6.6% average increase rate a year.

After showing the growing trend every year till the peak (2,880) in 2014, the users of public nature burial in Seoul Metropolitan City were decreased and then showed the repetition of increase and decrease irregularly. Also, the users of public nature burial were increased from 1,185 in 2011 to 2,080 in 2018 by 895(75.5%), which showed the 10.8% average increase rate a year compared to 2011 (Figure 1) [9].



**Figure 1. Trend of users of public nature burial and cremated bodies using the public cremation facilities in Seoul Metropolitan City.**

#### 3.2 Gyeonggi-do (Suwon City, Yongin City)

The cremated bodies using the public cremation facilities in Suwon City and Yongin City through the Funeral Information System are continuously increasing every year since 2014 after opening the public cremation facilities in Yongin City. Also, the 10,340 cremated bodies in 2011 were increased by 8,800(85.1%) to 19,140 in 2018, which showed the 12.2% average increase rate a year.

The users of public nature burial in Suwon City and Yongin City are increasing every year. The users of public nature burial were increased from 91 in 2011 to 1,045 in 2018 by 954(1,048.4%), which showed the huge increase rate as high as average 149.8% a year compared to 2011. Especially, it was largely increased after opening the public nature burial in Yongin City in 2014 (Figure 2) [10, 11].

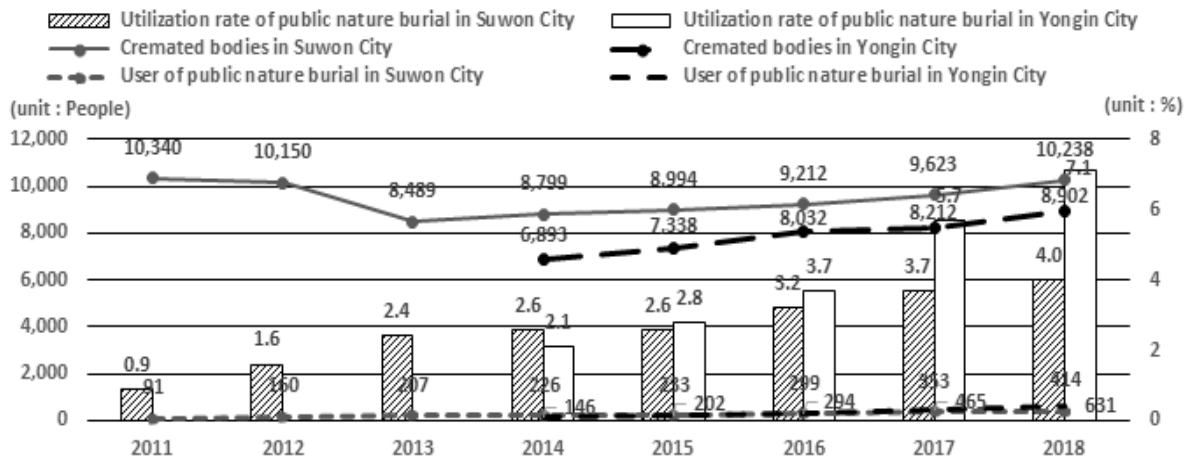


Figure 2. Trend of users of public nature burial and cremated bodies using the public cremation facilities in Suwon City and Yongin City.

### 3.3 Incheon Metropolitan City

The cremated bodies using the public cremation facilities in Incheon Metropolitan City through the Funeral Information System are continuously increasing every year. Also, the 15,319 cremated bodies in 2011 were increased by 6,546(42.7%) to 21,864 in 2018, which showed the 6.1% average increase rate a year.

The users of public nature burial in Incheon Metropolitan City are increasing every year. The users of nature burial were increased from 231 in 2011 to 1,219 in 2018 by 988(427.7%), which showed the huge increase rate as high as average 61.1% a year compared to 2011 (Figure 3) [12].

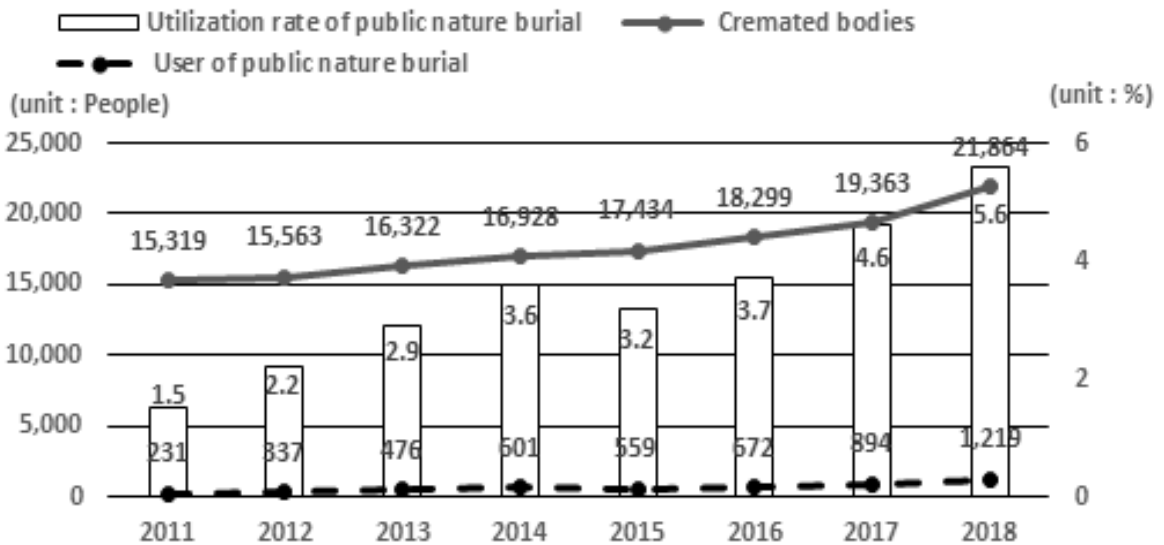


Figure 3. Trend of users of public nature burial and cremated bodies using the public cremation facilities in Incheon Metropolitan City.

## 4. Synthesis integrate analysis result

### 4.1 Current status of cremated bodies using the public cremation facilities in the capital area

With the continuous increase of cremation rate every year in Korea, the users of public cremation facilities through the Funeral Information System are also continuously increasing [13]. Also, due to the increase of the dead by the increase of elderly population when having the entry to the super-aged society ahead, the users of public cremation facilities have been continuously increasing [14]. Thus, the cremated bodies using the six public cremation facilities of five local governments including Seoul Metropolitan City operating the public cremation facilities in the capital area, Suwon City, Yongin City, and Seongnam City in Gyeonggi-do jurisdiction area, and Incheon Metropolitan City, were increased from 72,415 in 2011 to 104,618 in 2018 by 32,203(44.5%), which showed the 6.4% average increase rate a year (Figure 4).

The cremated bodies using the public cremation facilities in the capital area through the Funeral Information System were highly shown in the order of Seoul Metropolitan City, Incheon Metropolitan City, Seongnam City, Suwon City, and Yongin City, which showed the continuous growing trend every year.

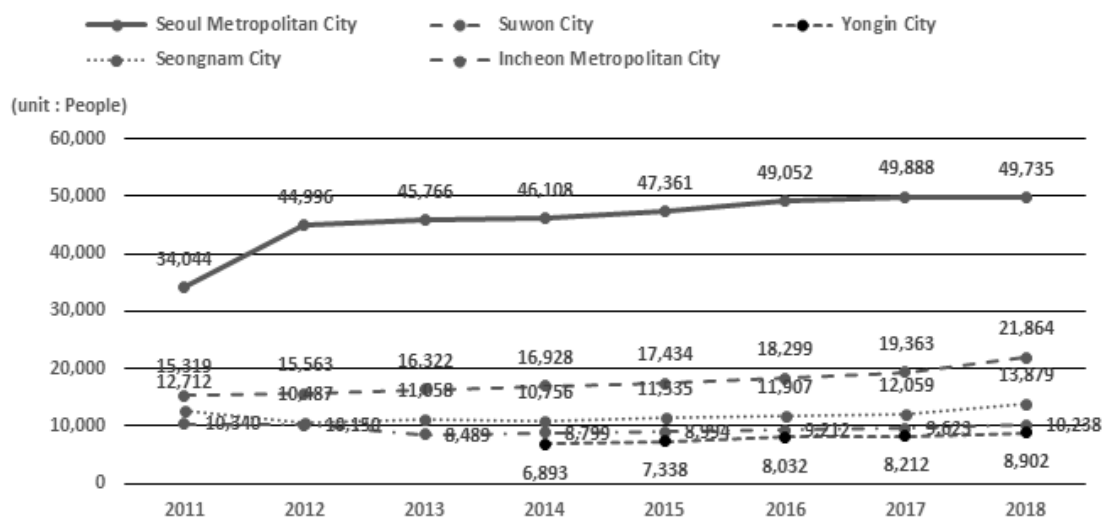


Figure 4. Trend of cremated bodies using the public cremation facilities in the capital area.

### 4.2 Current status of user of the public nature burial in the capital area

The users of public nature burial operated by four local governments such as Seoul Metropolitan City in the capital area, and Suwon City and Yongin City in Gyeonggi-do jurisdiction, and Incheon Metropolitan City, were increased from 1,507 in 2011 to 4,344 in 2018 by 2,837(188.3%), which showed such a huge increase rate as high as average 26.9% a year (Figure 5).

The users of public nature burial were highly shown in the order of Seoul Metropolitan City, Incheon Metropolitan City, Yongin City, and Suwon City, which showed the continuous growing trend every year.

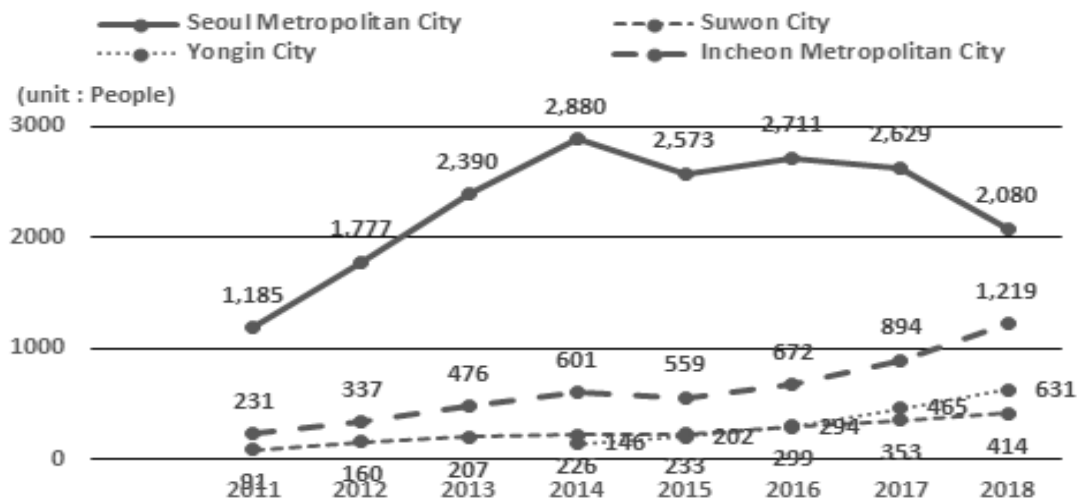


Figure 5. Trend of user of the public nature burial in the capital area.

### 4.3 Current status of utilization rate of public nature burial the national and the capital area

Regarding the utilization rate of national nature burial, the utilization rate of public nature burial was relatively higher than the utilization rate of private nature burial because of the cost reduction and convenience of utilization. Also, the utilization rate of public nature burial in the capital area compared to the national was about average 0.8% increased a year from 2011 to 2013 while it was about average 1.6% decreased a year from 2014 to 2017 (Figure 6). Therefore, recently, the annual average utilization rate of public nature burial in the capital area was relatively lower than the annual average utilization rate of national public nature burial [15].

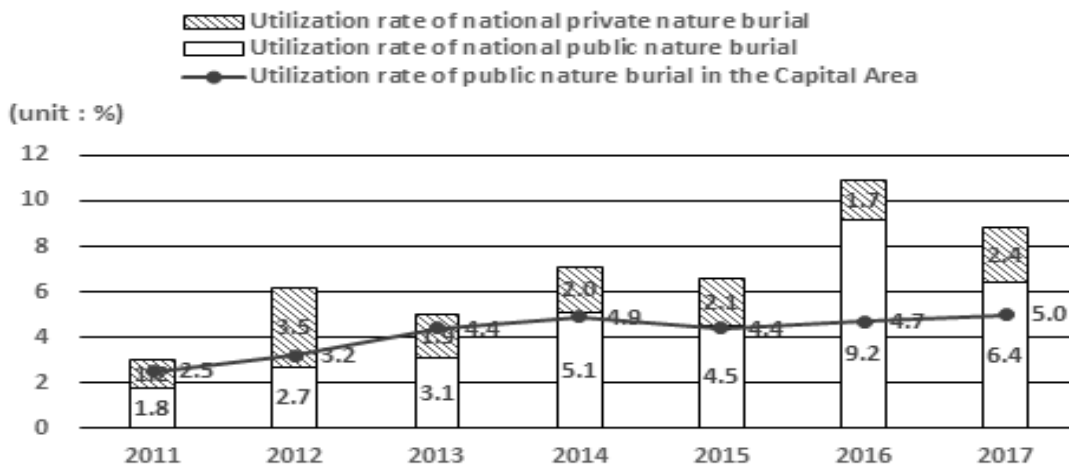


Figure 6. Trend of of utilization rate of public nature burial in the national and the capital area.

## 5. Conclusion

Based on the comparative analysis and the results of the research on the users of public nature burial and

cremated bodies using the public cremation facilities in the capital area through the Funeral Information System, the activation plan of the public nature burial could be suggested as follows.

First, in the results of research on the preference of funeral method targeting Korean people in 19 years old or up in accordance with the report on the social survey announced by the National Statistical Office in December 2017, the 43.6% of the whole respondents preferred the nature burial, which showed such a high preference [16]. On the other hand, the actual utilization rate of national nature burial in 2017 was only 8.8%, so that the huge gap between preference and utilization rate of nature burial is pointed out as a problem. Through the activities to improve the awareness of nature burial by performing the national promotion and education in diverse methods and the investment for the expansion or improvement of nature burial facilities in order to activate the nature burial as an environment-friendly funeral method in the level of central government and local government, the preference of nature burial should be led to the actual demand.

Second, with the growing trend of national cremation rate and the dead, the cremated bodies using the public cremation facilities in the capital area were increased by average 7.4% a year, and the utilization rate of public nature burial was also increased by average 26.9% a year, which showed the huge increase of demand for nature burial. Therefore, considering the high preference of public nature burial, each local government should carry forward the policies for expanding the supply of public nature burial focusing on the woodland burial showing the high preference of users of public nature burial.

Third, even though the public cremation facilities are installed or operated by local governments in the capital area, Seongnam City without the public cremation facilities should install the public nature burial for the enhancement of users' convenience by providing the One Stop Total Funeral Service.

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