Physical change in housing surrounding religious tourism object (Case study Al Mukarromah Mosque, Jakarta, Indonesia)

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Abstract. Al Mukarromah Mosque in Kampung Bandan, North Jakarta, Indonesia, is a religious tourism destination. The Mosque housed tombs of Islamic propagators, Habib Mohammad Bin Umar Al-Qudsí, Habib Ali Bin Abdurrahman Ba'alawi, and Habib Abdurrahman bin Alwi Assyatiri. Pilgrims come to the Mosque to pray, due to its history. Tourism activity causes physical changes in the building of the mosque and the houses around it. Since the surrounding settlement is high-density, the changes in settlement need to be watched to ensure the sustainability of Al Mukarromah Mosque and the settlement. This article aims to observe the physical changes in housing as a result of the existence of the Al Mukarromah Mosque, which developed due to tourism activities. Data collection was carried out through interviews and literature studies. Data collected then translated into house plans before and after transformation. The data obtained were analysed using descriptive interpretative methods. Three aspects to analyse are building area, function, and material. The results show that only adjacent houses to Al Mukarromah Mosque benefit directly from religious tourism. Other parts of Kampung Bandan still maintain the characteristics of kampung or high-density settlement. Kampung Bandan lacks the necessary facilities such as public space to support religious tourism.

1. Introduction
Al Mukarromah Mosque in Kampung Bandan was built in 1879 by Habib Abdurrahman bin Alwi Assyatiri. It also houses the tomb of Habib Mohammad bin Umar Al-Qudsí and Habib Ali Bin Abdurrahman Ba'alawi and its founder [1]. The history and the tombs of Al Mukarromah Mosque promote religious tourism activities such as pilgrims and praying [1]. The mosque is part of DKI Jakarta Cultural Heritage and one of the surviving old mosques in the city [2]. The location is on North Jakarta, DKI Jakarta, Indonesia as shown in figure 1.

Judging from its character, Al Mukarromah Mosque grouped as a religious tourist attraction based on Nolan and Nolan [3] categorization. A religious tourist attraction is a tourism object that draws attention because of the special feature embedded in the object related to religious culture [3,4]. In Al Mukarromah Mosque, the attractions are tombs and the history of the mosque.

Tourism activity physically and non-physically impacts the surrounding area, especially if it is a settlement [5]. The establishment of a religious tourism object promotes commercial activities shown by the appearance of small business such as souvenirs shop, lodging, etc. [3-8]. All visiting tourists need
certain services such as basic amenities like toilets to full commercial services like shops etc. [3,9]. In the settlement area, these needs are facilitated using part of housing around tourism objects.

Elmia and Pratiwi [5] state that physical impacts of tourism on surrounding settlements depend on the number of tourists, the scale of tourism object, and disruption for local community to access facility caused by externality of tourism activity. In most cases of tourism objects located in settlement, housing function is reduced to accommodate service for tourists. Existing houses converted into lodging tourists or workers in tourism industry and second homes [5,10]. The impact of tourism on settlement comes in many aspects. Notable benefit comes from economics aspects, but there are also adverse side effects [8]. The development of tourism needs to be supported with relevant resources and planning. Incompatibility between resource and tourism activity may cause several problems like the stall of tourism activity or overcapacity of environment [10].

In this article, religious tourism specifically happened only at Al Mukarromah Mosque. The Mosque is located in Kampung Bandan, a high-density settlement. The need to observe the impact of religious tourism surrounding Al Mukarromah arises from the character of Kampung Bandan itself. Kampung Bandan occupies 11 hectares and has 70% of built blocks [11]. Most of its residents work as labourers, drivers, food sellers (stall), or workers [11,12]. Kampung in Jakarta is considered as high-density settlement as a result of the lack of means from society to afford proper housing [11]. Therefore, Kampung is considered as an informal settlement in urban structure, especially Jakarta.

Informal settlements have several characteristics. They usually occupy leftover land, the ambiguity of land tenure, designed and constructed individual, and using temporary material [11,13,14]. These characteristics consistent with Kampung Bandan, which located on the edge of railway thus confirm its informality status. Design, construction, and material on Kampung were picked based on the economic affordance of its occupant [11]. Kampung Bandan prone to uncontrolled development due to its negligent of regulations or urban planning. This factor, combined with religious tourism caused by Al Mukarromah Mosque is alarming for Kampung Bandan. The impact of religious tourism needs to be monitored so it will not clash with the characteristics of Kampung Bandan as a high-density settlement.

2. Methods
In order to observe the change in Kampung Bandan, the study will focus more on physical change in houses surrounding Al Mukarromah Mosque. This study aims to observe the physical changes in housing as a result of the existence of the Al Mukarromah Mosque as religious tourism object. The research requires physical data of surrounding house of Al Mukarromah Mosque. Data obtained through 3 study cases of house. The selection of case studies is limited to the boundaries of the research area. Research area consist of one block area behind The Mosque. The location of each study according related to Al Mukarromah Mosque are explained in Figure 1.

Figure 1. Location of research.
Each study case will provide its physical alteration. The alteration will be documented and collected through interviews with the occupants. The outcome of the data is the original house plans and house plans after transformation. This method is similar with method used by Lissimia and Ratna [15] which compared house plans before and after transformation. Analyzing data will be using descriptive interpretative methods. Original house plans will be compared with house plans after transformation using interpretation. The interpretation will discuss house's physical attributes such as area, material, and function. The result further analyzed through literature study and resulting in a conclusion of physical impact on housing because of Al Mukarromah Mosque.

3. Results

3.1. Case study 1

The first case study was on the street east of Al Mukarromah Mosque. The location of the house related to the Mosque explained in Figure 1. The first case study served as a residence when it was originally built. It had a total area of around 36 meters square. A small family of parents and two children lives in this house. In the initial occupancy, there are 3 bedrooms, a living room, family room, dining room, two toilets, and a kitchen. The detail of the plan can be seen in Figure 3. Meanwhile the current building façades are shown in Figure 2. This building currently serves as residence for the original occupants and there are additional commercial functions on the front part of the building as shown in the façade.

![Figure 2. Facade of case study 1.](image1)

![Figure 3. House plan before and after transformation.](image2)

This house undergoes several changes, including addition of floor level, room, and function. This building changes its form to accommodate commercial function. The change consists of renovation of the façade and addition of second floor. The changed area covers 65% of the total building area. The living room and a bedroom on the front part of first level change into commercial function, which is a shop and automotive repair. The shop sells grocery or everyday things instead of things related to religious tourism. The second floor consists of 3 bedrooms, so this house in total has five bedrooms after transformation. The bedroom on second floor was added to accommodate family growth. Another notable change, the addition of second floor use material wood, which is considered non-permanent or temporary. This might be due to economic limitation of the occupants to expand their house using permanent materials.

3.2. Case study 2

The second case study located directly on the west of Al Mukarromah Mosque, inside the Mosque's complex. It was built in 2000 and was built on land owned by the family of mosque officials, the late Habib Ali bin Alwi Bin Abdurrahman Asy-Syathri. After he died, this house was inherited by his son, namely Habib Alwi bin Ali Asy-Syathri. Habib Alwi still occupies the house because he served as
chairman of the Jami Al Mukarromah Mosque. Jami Al Mukarromah Mosque is a foundation established based on the community loyal to Al Mukarromah Mosque. This building functioned as a residence.

Several years later, this residence had an addition in the form of a large room beside the original house. This additional area is to house a shop (Figs. 4 and 5). The placement of the building next to the mosque has the potential to become a place to sell the needs of Muslim worship, such as prayer tools, Muslim clothes, Islamic books, etc. Also, the selection of glass material will make it easier for mosque visitors to see merchandise inside. This expansion occupies 40% of the total house area.

![Figure 4. Facade of 2nd house (left: house, right: shop).](image)

![Figure 5. House plan before and after transformation (case study 2).](image)

3.3. Case study 3

The third case study located west of Al Mukarromah Mosque, next to second case study. The house was built around 1990. This house is owned by the younger brother of Habib Ali bin Alwi bin Abdurrahman. The house going through vertical expansion. The second floor still served as residential function since the expansion needed to accommodate the growing family. There is no additional or change of function in this house (Figs. 6 and 7). This house serves as residence, consistent with the original plan.

![Figure 6. Facade of 3rd house.](image)

![Figure 7. House plan before and after transformation (case study 3).](image)
The second level act as an additional area of building consist of 50% of total building area. Compared to case study 2, this house made an additional level and still remains as a residence. Meanwhile, the expansion of building on case study 2 is purely made to accommodate commercial function and has no direct access to the original house. The third case study uses permanent material concrete for expansion. This is different from the first case study, which uses non-permanent material wood. The second case study also uses permanent material concrete for the expansion of building but for commercial purposes, combine it with glass.

4. Discussion
The first to note is all the case study applied house expansion range 40-65% of the total house area. This expansion is done with two main reasons which are to accommodate a growing family and to open a business or commercial function. Commercial function supporting religious tourism in the form of a shop selling souvenir or things for prayer shows in case study 2. Meanwhile, case study 1 only sells groceries. It indicates that only the adjacent house is impacted directly from religious tourism.

Yuliandari et al. [6] indicate that tourism increases the occupants of surrounding settlement. In their study, the surrounding settlement not only occupied by the existing community but also people who work at the tourism industry. However, the case did not happen in Kampung Bandan. It shows in the term of no case study show function change into lodging. The cause might be the people who work to serve in the religious industry are so few it doesn't create a significant impact on housing in Kampung Bandan.

From observation, most commercial service offered at tourist occurs during special events in Al Mukarromah Mosque in the form of food stall etc. The cause might be the urban character of Kampung Bandan itself. The circulation of kampung made it difficult for tourists to access other parts of the settlement. Compared to its brother Luar Batang Mosque, which has similar characteristics, it has suitable access in the form of a wide street and wide open space, although surrounded by kampung [16]. Those factors make the community thrive better in economic aspects of religious tourism.

Short-term religious tourism, like the event at Al Mukarromah Mosque, needs corresponding infrastructure such as parks, picnic place, restaurant, and religious-related shop [8]. Main transportsations for tourism are car or bus [8,10]. Both transportation modes need significant space to park or drop off. This need is not easily accommodated in Al Mukarromah Mosque. The limitation of public space in Kampung Bandan made it hard for cars or buses to park. This argument also explains why Luar Batang Mosques thrives better than Al Mukarromah Mosque. There is concern for the sustainability of Al Mukarromah as religious tourism due to the unsuitabiltiy of the environment.

An additional function that is commercial happens both in case study 1 and 2. But only case study 2 change because of religious tourism activity. Case study 1 change because of its location on the main road of Kampung Bandan. Physical change only happens in houses adjacent to Al Mukarromah Mosque.

There are two types of material used for expansion in three case studies: permanent and non-permanent or temporary. Two houses adjacent to Al Mukarromah Mosque use permanent material while case study 1, which is further from the Mosque, use temporary material. Religious tourism may be beneficial economically for the community, but physically it only benefits adjacent house. The other part of Kampung Bandan still maintains the physical characteristics of Kampung, as stated before, by using temporary material [11,13,14].

5. Conclusion
This study observes physical changes in housing surrounding Al Mukarromah Mosque. The result shown in the form of building function, total building area, and expansion material. Some houses use the opportunity provided by religious tourism to open commercial facilities. This commercial facility sells things that support religious activity. In terms of function, there is a shift from only residential to both residential and commercial.

Every case study improves their house by expansion. The expansion varied from 40% to 65 % of the total house area. Nevertheless, not all of the expansion is caused directly by religious tourism. The
connection between house expansion and religious tourism needs to be observed further. The houses adjacent to Al Mukarromah Mosque use permanent material concrete for their expansions. Case study 1, located further from the Mosque uses non-permanent material wood for the expansion. It proves that religious tourism support adjacent house economically although maybe indirectly. Other houses in Kampung Bandan further from the Mosque show the characteristic of Kampung housing by using temporary material.

References
[1] Ashadi A and Anisa A 2019 Relation of Architectural Function and Form of Mosque Jami'Al Mukarromah Kampung Bandan North Jakarta International Journal of Built Environment and Scientific Research 3(1) 21-30
[2] Heuken S J A 2003 Masjid-Masjid Tua di Jakarta (Jakarta:Yayasan Cipta Loka Saraka)
[3] Nolan M L and Nolan S 1992 Religious sites as tourism attractions in Europe Annals of tourism research 19(1) 68-78
[4] Terzidou M, Stylidis D and Szivas E M 2008 Residents' perceptions of religious tourism and its socio-economic impacts on the island of Tinos Tourism and Hospitality Planning & Development 5(2) 113-29
[5] Elmia A S and Pratiwi W D 2019 Physical Impact of Theme Parks Existence on Settlement Area in Lembang Subdistrict ASEAN Journal on Hospitality and Tourism 17(1) 59-72
[6] Yuliandari Y R D, Martha L F and Widodo D R 2014 Analisis geospasial dampak perkembangan kegiatan pariwisata terhadap permukiman kumuh wilayah Sarbagita, Bali Jurnal Kesejahteraan Sosial 1(02)
[7] Loza C E M and Cárdenas R M 2019 Impact of Religious Tourism in a Rural Community International Journal of Recent Scientific Research 10(04) 31689-96
[8] Rinschede G 1992 Forms of religious tourism Annals of tourism Research 19(1) 51-67
[9] Tălă M L and Pădurean A M 2008 Dimensions of religious tourism Amfiteatru Economic 242-53
[10] Getz D 1981 Tourism and rural settlement policy Scottish Geographical Magazine 97(3) 158-168
[11] Alzamil W S 2018 Evaluating Urban Status of Informal Settlements in Indonesia: A Comparative Analysis of Three Case Studies in North Jakarta Journal of Sustainable Development 11(4) 148
[12] Ashadi A, Anisa A and Lissimia F 2018 Perubahan Bentuk Arsitektur Masjid Bersejarah Almukarromah Kampung Bandan di Jakarta Prosiding Semnastek 1-9
[13] Alzamil W 2017 The urban features of informal settlements in Jakarta, Indonesia Data in brief 15 993
[14] Dovey K 2015 Sustainable informal settlements? Procedia-Social and Behavioral Sciences 179 5-13
[15] Lissimia F and Nur’aini R D 2019 Transformasi Fisik dan Teritori Hunian Sekitar Kawasan Industri Pulogadung Prosiding Semnastek 1-9
[16] Ashadi A, Anisa A and Nur'aini R D 2017 Fungsi masjid bersejarah luar batang, jakarta utara, dan pengaruhnya terhadap pola permukiman di sekitarnya NALARs 16(2) 169-178